



LAERDAL LICENSE SERVER ADMINISTRATOR'S GUIDE



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Laerdal License Server

About the License Server

The Laerdal License Server (LS) is a program used in combination with Laerdal Learning software in network installations.

The License Server has several purposes:

- It manages and distributes licenses in a multi-user environment.
- It reports American Heart Association (AHA) and CME related activity over the Internet to a central Laerdal server. This minimizes the administrative burden involved in issuing AHA Cards and claiming CME credit.
- It keeps track of the reactivation of licenses in MicroSim Curriculum systems.

Installation

The License Server installs as a NT service, which ensures that the License Server is started automatically whenever the computer is rebooted.

It is recommended that you check online for the latest version before installing.

Go to <http://www.laerdal-sophus.dk>. Visit the Download center by clicking "Download center" on the main section of the home page. Once there, click "License Server" to check for the most recent version.

Minimum requirements

- OS: Windows 2000*, Windows XP Professional, Vista, 2003 or 2008. (32bit versions)
- RAM: 128MB
- HD: 30MB free
- Internet access (Used for AHA reporting, vouchers and license activation)
- Internet Explorer 6 or higher

*Win2000 is not supported for Resusci Anne Skills Station

The License Server requires only basic system resources, which means that it can be installed on an existing server in your organization. We recommend installing it on the same server as CMS, HeartCode BLS Part I or HeartCode ACLS Part I Web server if applicable.

Installation steps:

1. Insert CD and start the installation program.
Alternatively if you have downloaded the License Server from <http://www.laerdal-sophus.dk> on the Internet, then you should unzip the file and start "Setup.exe".
2. Choose location for server and click "Next".
3. You have now installed the License Server files.
4. To install the License Server locally or to search for an existing License Server on another computer, go to the program menu and run the Laerdal License Server. (For more information on the option to search for License servers, see the section titled "Remote control" on page 12 of this guide.)
5. You will now have the option to search for existing License servers on the network or install the License Server on the local machine. You also have the option to decide later.

6. If you select the button "Search for License servers" to control the License Server remotely from the educator's or the administrator's PC, you will be asked to type in the IP address of the server. Your installation for this option is now complete.
7. If you select the button "Install License server", the License Server will be installed on your local machine and a pop-up dialogue will show the result.
8. You will be prompted to enter your organization's information. This information is used by the License Server for AHA Cards and CME reporting purposes. It is only relevant for Laerdal software that results in American Heart Association course completion cards or North American CME units. See more information in the report section later in this document.

Note that the information entered will show up on AHA course completion cards exactly as entered. Please review carefully.
9. You now have a running License Server. It will start automatically after reboot.
10. In order to use the License Server, you must enter license keys. This is done by clicking the "Add license" button under the 'License overview' section. See the section "License Key Installation and Handling" below for more information.

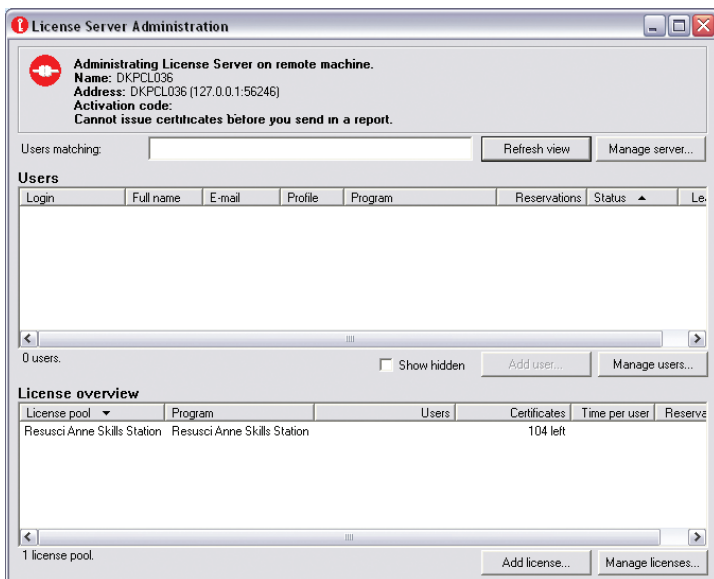
Note: Laerdal Learning Software such as MicroSim, Resusci Anne Skills Station, HeartCode and HeartSaver AED must each be configured to communicate with the License Server during installation. Each program's installation steps are different. See below for more information or consult the applicable program's manual.

Using the License Server

User interface

The User interface is used to administer and maintain an overview of users and licenses in the License Server.

The basic interface for the License Server looks something like this:



License Key Installation and Handling

Overview:

In the License Server Administration screen, you can see general information about available licenses and available users.

Information about the individual keys can be found by clicking “Manage licenses” under “Licenses” and “Status” selections.

Entering Licenses:

Once you have set up the License Server, you can install licenses by clicking the “Add license” under the License overview section. These licenses can then be made available to users of Laerdal Learning software that resides on the local network.

1. Click “Add license” under the License overview section.
2. Type in or paste the license key and click “OK”.
3. Select “Online” and “Next”. *
4. A message should tell you that your key has been activated.

If several license keys with the same content are entered, they will “pool” together in the “Status” view.

** The License Server must have access to the Internet in order to be able to activate licenses and issue AHA Certificates.*

License Administration

The License Server is by default set up to block all requests for licenses. You must set up rules according to how your organization wants the licenses to be distributed.

Setting License Policies

Under the “Manage licenses” options, you can select “Policy” to set up general rules on how you want to handle license distribution. This is recommended in situations where many users will connect to the License Server and minimizes the administrative burden.

Assigning licenses directly

Another way to administer licenses is to allow access to one license by one user at a time. This can be done when you create a new user, by selecting which licenses the user can access.

For existing users, you can reserve or remove reservations by doubleclicking on the user. This option is useful in situations where full control over licenses is required and where users are entered continuously instead of all at one time.

Be aware that the license is not used until the user actually logs in to the program.

HeartCode ACLS licenses

Licenses for Part 1 provide access to the scenarios for 32 hours or 2 years, whichever comes first.

Licenses for Part 2 provide access to the scenarios for 5 hours or 2 years, whichever comes first.

The AHA Guideline documentation is accessible for 2 years.

Upgrading to the new HeartCode ACLS licenses

Laerdal Medical is releasing “HeartCode ACLS System Version 2009”, a new version of HeartCode ACLS where the cognitive content is now served from a web server on an individual PC or through your institution's network.

License Server 3.2.0 and later supports upgrading old licenses from the CD based Client/Server version of HeartCode ACLS.

To upgrade the old licenses, all that is needed is to insert a license key from the new version. License keys for Part 1 Cognitive + Part 2 Skills can be found under the CDs in the DVD cases. These license keys will serve as your upgrade or test licenses.

The License Server will then guide you through the upgrade. Internet access is required to upgrade. See enclosed HeartCode ACLS upgrade letter for more details.

Things to be aware of:

- Users in the middle of certifying in the old system must continue and finish in the old system or start over in the new system.
- Existing users in the License Server cannot log into HeartCode ACLS. They must be created again as "HeartCode ACLS v2009" users and assigned licenses.
- It is possible to select not to upgrade the old licenses. This can be useful for transitioning periods. If you then later wish to upgrade, this can be done from the "Manage licenses" menu.

Please contact Laerdal Technical Support at 1-800-594-9259 or email at heartcodesupport@laerdal.com with questions regarding the upgrade.

MicroSim curriculum licenses

MicroSim licenses act differently than other programs. After a user logs in the first time, he or she will be allocated a license. This license will be exclusive to that user for 3 months. When the 3 months are up, the license will be made available to another user. This is part of the curriculum license agreement.

The license cannot be freed up for another user until the 3 months are up. Deleting the user will not free up the license.

If a longer period than 3 months is desired, this can be changed in the Server Options. This can be helpful if the site's semester is longer than

3 months. This option is universal for all users, and does not come into effect retroactively for users already logged in.

Resusci Anne Skills Station Licenses

A license for Resusci Anne Skills Station is activated when the user logs on to the RA Skills Station client. From this moment, the user has three months to pass the course. If the course is not passed within this period, the license will expire.

In this case the user must acquire a new license and restart the course. If the License Server is set up to allow users to acquire a license on their own, the user will be offered the possibility to do so at the first login after the license has expired.

User Creation and Administration

Creating users in the License Server

The “Add user” button under the “User” section creates a new user. Be aware that this option only is available if there are licenses available in the License Server**.

You can decide which licenses you want the user to have access to by using the checkboxes in the user creation / edit screen.

Basic user administration is possible in the License Server. In the “Manage user” menu you can do the following:

- Edit
Here you can change password and License reservations for each user.
- Remove
This deletes the user from the License Server.
- Details
Here you can see detailed information about the user and his/her progress.
- Policy

Allows you to change the License policies for the user.

- Leases
View which licenses the user can access.
- Progress report
This feature lets you create reports that you can print out for your own record or to report to the AHA.
- Hide
This feature lets you hide old users from the main screen. This also means that they will not show up on reports.

**** This feature only works for Laerdal Learning software newer than 2005.**

Enabling users to be created in the Laerdal Learning software

It can be useful to enable users to be created from the client. This is done by adding a “I am a new user” or “Create user” button to the login screen.

This option is set in different ways depending on the Learning software and the information can be found in the relevant software’s “Administrator’s Guide”.

Using Active Directory

Active Directory is only relevant for MicroSim and Resusci Anne Skills Station.

The Laerdal CMS (Competence Management System) v1.10 and later now supports integration with an existing Active Directory. If an Active Directory is used, it will not be possible to change user details for the users.

Additionally, users should not be created in the License Server as the users will be deleted again next time you log in to the program.

That means that all user management should be done in the Active Directory.

See the CMS manual for more information.

Creating users by script or command line

License Server 3.2.0 and later supports creating and deleting users by command line instructions. In the License Server installation folder a tool named "LicenseServerTool.exe" can be found. Run this tool from the Command Prompt for usage options.

Reports

Sending AHA reports

The License Server has several reporting features aimed at lessening the administrative burden associated with reporting CME and to claim AHA Completion cards. Reports are required to be sent at least every 30 days. The License Server must have Internet access to be able to send the reports.

By default the reports are sent daily. Automatic reporting can be turned off by selecting "Reporting options" under the "Manage server" menu. Select the desired reporting option. The reports must then be sent manually by the administrator.

Note: If reports are not sent at least once every 30 days, users will NOT be able to print certificates and cards will not be issued. To rectify this, a report must be sent by clicking the "Manage server" button and selecting "Send report now".

Institutions can choose to have the Laerdal Training Center process their AHA completion cards. If you want the Laerdal Training Center to send AHA completion cards to your organization, go to "Manage server"; choose "Reporting options" and select "Yes". Your organization will then begin to receive cards issued by Laerdal Medical.

If your organization's information changes or you wish to change the reporting options, you must enter the changes in the "Provider address" screen that displays after selecting "Reporting options".

Note: This is very important as the address provided here is where the AHA cards will be sent. The information entered here will show up exactly as entered on the AHA completion cards issued by the Laerdal Training Center (if this option is selected).

Note: If there is a Proxy server between the License Server and the Laerdal.com site then you must configure the Proxy settings in the "Reporting options" selection above the "Users" section. After changing these settings, you will need to reboot.

Please review the relevant software administration guide for more information on AHA course completion cards and reporting to the Laerdal Training Center.

Progress Reports

It is also possible to create and print reports which can be used for internal administration. The reports can be used to create an overview of who has finished certification, who is in progress and who is coming due for recertification.

This report can be found in the "Manage user" menu by selecting "Progress report".

To print a report with results from Resusci Anne Skills Station, please use the report printing facilities in CMS.

Recertification

Users will be prompted to recertify after a certain period of time. By default the License server is set to prompt for recertification 9 months after completion of the course. The recertification time frame can be changed under "Recertification options" in the License server (For HeartCode ACLS, the default is set to 18 months).

If a user logs into the system after the period has passed, a screen will display indicating that it is time to recertify. If desired, the user can say no and still log in to view old progress, but all progress will be reset once the user agrees to recertify.

If the administrator wants to allow the user to recertify, then a new license must be granted for this user in the License Server. This can be done ahead of time by double-clicking on the user and checking the license checkbox or can be controlled automatically by the License Policy options.

Learning Software setup

At the time of this writing Laerdal Learning software includes MicroSim, HeartCode ACLS / BLS, HeartSaver AED, Laerdal AED Anywhere, and Resusci Anne Skills Station.

After the Learning Software has been installed or during installation, you must set it up to receive licenses from the License Server.

This can be done in different ways but the easiest way is to specify the License Server's IP address during the installation of the Learning software. Specific information can be found in the Learning software manuals.

For more information, see the Learning software section in the Network Administrators Guide. Updated versions can be found at <http://www.laerdal-sophus.dk>

Server administration

Remote control

It is recommended that you install the License Server on an existing server in the organization. This ensures uptime and also that the License Server will be maintained as part of the server. In this case, it can be useful to control the License Server remotely from the educator's or the administrator's PC.

1. Install Laerdal License Server on the educator's PC.
2. When you start the License Server, you must select "Search for a License Server" when the program asks if you wish to install the License Server on the computer.
3. The program will now search for existing License Servers.
 - a. If the search is successful, you can select the server and connect to it.
 - b. If the search is not successful, you will have the option of entering the IP address of the License Server by typing it in.

Network communication

In the default configuration the License Server needs to be able to communicate with the local clients on port 56246 using both UDP and TCP.

License activation requests are sent as an HTTP POST to www.laerdal-sophus.dk on port 80.

Reports are sent to www.laerdal.com as an HTTP POST on port 80. This information is encrypted.

Registry entries and ports

If you have special requirements to network behavior, you can customize the behavior of the License Server.

Entries in the Windows Registry control whether and how the License Server and clients communicate. The License Server uses the entry:

HKEY_LOCAL_MACHINE\SOFTWARE\Laerdal Sophus\License Server\<<version>

Clients have different methods for controlling the configuration; see the relevant software's documentation for specific information.

Proxy server

The License Server service cannot send the report if there is a Proxy server between the License Server and the Internet. You will need to configure the proxy settings to be able to send the reports. This is done like this:

1. Open the License Server GUI.
2. Go to "Manage server".
3. Select "Reporting options".
4. Enter the setting in the "Proxy" field.
5. You will most likely need to reboot the machine.

Backup of License Server

Make sure to perform daily backups of the License Server to avoid losing data. Proper backup is done by copying the complete installation folder to a remote location.

If you only wish to backup the users or move users to a new License Server, go to "Manage server" and select "Administer local server". You can backup and restore users from this section.

To backup users, select "Backup users" in the "Advanced options" on the "Administer local server" screen and save the file.

You can restore the users from this menu as well. This feature can also be used to move the License Server from one server to another.

Be aware that only user information and license policies associated with the users are backed up, not the License keys.

It is not possible to simply copy the database to a new server.

The License Server also creates an automatic backup every time the

service is restarted. This backup can be found in C:\windows\temp\licenseDB.bak and can be sent to Laerdal Tech Support in the event of data corruption. Be aware that all changes since the last service restart will be lost.

Resetting the License Server

If your License Server contains bad data, has become difficult to manage, or you simply want to start again from scratch, you can use the “Reset” feature which erases all information in the License Server.

Note: Be careful with this feature as it is not reversible!

The Reset feature can be found under the advanced options in the “Manage server” menu.

Upgrading

If you have an older version of the License Server (2.7 or older), you must do the following to ensure a successful upgrade:

1. Backup the existing License Server.
2. Uninstall the existing License Server.
3. Install the new version of the License Server.
4. Start the program.
5. If the Server doesn't start automatically, then go to the “Manage server” menu, select “Server options” and start the service in the advanced menu.
6. Install service.

Existing licenses, users and license policies will remain.

For newer versions it is not necessary to manually uninstall the old version and these steps will suffice:

1. Start installation of new version.
2. Follow the prompts.

Password protection

You can set up a password to protect the License Server from unauthorized use. This is especially useful if the License Server is installed on a lab computer or similar, to which others have access, or if you wish to prevent unauthorized people from remotely controlling the License Server.

Note: The password cannot be recovered if lost! Make sure that you write down and keep a copy of the password.

CMS connection (Resusci Anne Skills Station)

The License Server now supports synchronization with the Laerdal CMS. If you want to use the CMS with Resusci Anne Skills Station, this configuration is required.

As of this writing this feature is only supported for the Laerdal Resusci Anne Skills Station program.

Configuring the License Server to use the CMS

Follow these steps to set up the License Server to connect to the CMS:

1. First install the CMS.
2. You must then set up a License Server password in the CMS. This is done in the configuration screen.
3. Now go to the License Server.
4. Click on "Manage server" and select "Server Options".
5. Now select "CMS" to open the CMS configuration.
6. Enter the IP address for the CMS to make the License Server connect to the CMS.
7. Then enter the password which the CMS was configured with in step 2.
8. You can now click the "Resync" to import the CMS database. Be aware that this can take awhile depending on the size of the CMS database.

Note: Configuring the License Server to communicate with the CMS will delete any existing Resusci Anne Skills Station users from the License Server user list. This means that if you intend to use the CMS to administrate users, then it is advisable to do the full installation with CMS from the very beginning.

Users from other programs (i.e. MicroSim and HeartCode) will not be affected by connecting License Server and CMS.

Filtering users

If you have more users in the CMS than you want to import into the License Server you can filter the import by groups, i.e. you can assign all your RA Skills Station users to a group and only import that group.

Synchronize on demand

For large user databases (1,000+), we recommend using the “Synchronize on demand” feature. That ensures that only the relevant user information is synched back and forth instead of synching the full database.

Connecting more than one License Server to a single CMS

Some institutions might want to have a single CMS for record keeping, but have several sites with different license needs. The institution could place a License Server on each location and have those interface with the same CMS over the Internet or VPN. Each location would then need a license key.

Troubleshooting

The Laerdal License Server writes log messages to an error log. This can be accessed through the advance options menu item “Show log” and the default location is: C:\Windows\temp\errors_licserver.txt

Please provide a copy of the log when contacting Technical Support.

Verbose Log

In case of ongoing problems you can turn on the “Verbose log” under “Manage server”. This will enable detailed logging.

General:

Please go through this checklist if you are experiencing problems with the License Server:

- Has the NT service been installed? Is it running?
- Are you communicating with the right License Server?
Do you have more than one Laerdal License Server on the network?
- Have the right license keys been installed?
- Have the license policies been set to allow users to obtain a license?
- Has the Learning Software been set up correctly to communicate with the License Server? Is something blocking the communication?

Reports:

- o Users complain they can't print their certificates after completing the program
 - o *This is most likely because the License Server does not have Internet access or access to the Laerdal report server. Reports must be sent in at least every 30 days.*
Go to the advanced options menu above the Users section and select “Send report now”.
If the report status is not updated, then there is a connection problem. Common problems include proxy servers or firewalls blocking the License Server.
- o License Server can't send reports
 - o *Make sure that you are online and are not blocking www.Laerdal.com by opening this site in Internet Explorer:*

<http://www.laerdal.com/completedCourses.asp>

If you are online and can connect then you will get the message: Err: no data

- o To verify that the License Server is still not able to send the report, send a manual report. In the log file it will say this:
External error when sending report to
<http://www.laerdal.com/completedCourses.asp>
- o Then you should check if there is a proxy server by checking Internet Explorer -> Tools -> Internet Options -> LAN settings
- o If a proxy server is present:
 - Go to Reporting options in the drop down menu above the Users section.
 - Enter the proxy server address and click OK.
 - You will have to restart the PC.
 - If it still doesn't work: You may need to route the License Server machine around the proxy server and/or special firewall restrictions. Perhaps put the License Server in an excluded list or DMZ.

Online Support (FAQs, manuals, and updates)

<http://www.laerdal-sophus.dk>

Customer Support

Americas:

Laerdal Help Desk: 1-800-594-9259

us-techsupport@laerdal.com

Europe, Middle East, Africa: Laerdal.TechService@laerdal.no

Asia-Pacific excluding Japan: Laerdal.CustomerService@laerdal.com.au

Japan: JP-techsupport@laerdal.co.jp



Laerdal
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