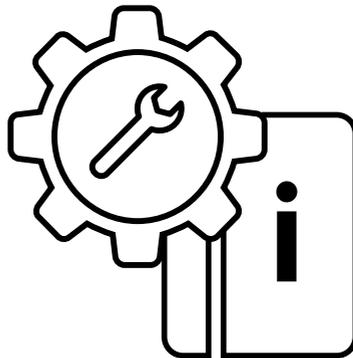


Installation Guide

Advanced VPN Client Windows



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Introduction

The **LANCOM Advanced VPN Client** is a universal VPN software client for secure company access while traveling. It provides mobile employees with encrypted access to the company network, whether they are at their home office, on the road, or even abroad. The application is extremely easy to use; once VPN access (virtual private network) has been configured, a click of the mouse is all it takes to establish a secure VPN connection over the best available connection medium, including cellular networks. Further data protection comes with the integrated stateful inspection firewall, support of all IPSec protocol extensions, and numerous other security features.

The following Installation Guide covers all of the necessary steps for the configuration of a VPN-secured RAS connection via a LANCOM VPN gateway for a remote computer equipped with the LANCOM Advanced VPN Client:

- Installation
- Product activation
- Setting up VPN access with the Setup Wizard
- Manual setup of VPN access (optional)
- Configuring the VPN access

For information on configuring the LANCOM Advanced VPN Client when working with other gateways, please refer to the integrated help.



The latest versions of documentation and software are always available from www.lancom-systems.com/downloads/.

Installation

You can test the LANCOM Advanced VPN Client for 30 days. The product must be activated by means of a license in order to make use of the complete set of features after the trial period has expired. The following variants are available:

- Initial installation and purchase of a full license after no more than 30 days. See "New installation" on page 03.
- A software and license upgrade from a previous version with the purchase of a new license. In this case, all of the new functions of the new version can be used. See "License upgrade" on page 04.

→ A software update purely for bugfixing. You retain your former license.

See "Update" on page 05.

If you are using an older version of the LANCOM Advanced VPN Client, you can find out which license you require from the **License models** table on www.lancom-systems.com/avc/.

New installation

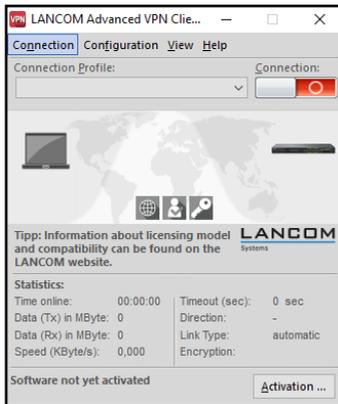
In the case of a new installation, you must first download the client.

Follow this link www.lancom-systems.com/downloads/ and then go to the **Download area**. In the **Software area**, download either the 32-bit (x86) or the 64-bit version (x64) of the Advanced VPN Client for Windows.

To install, start the program you downloaded and follow the instructions on the screen.

You need to perform a system reboot to complete the installation. After your system has restarted, the LANCOM Advanced VPN Client is ready to use.

Once the client has been started, the main window appears.



You can perform the product activation now with your serial number and your license key (page 06). Or you can test the client for 30 days and perform the product activation after you have finished testing.

License upgrade

The license upgrade for the LANCOM Advanced VPN Client permits an upgrade of a maximum of two major versions of the client. Details are available from the **License models** table at www.lancom-systems.com/avc/. If you meet the requirements for a license upgrade and you have purchased an upgrade key, you can order a new license key by going to www.lancom-systems.com/avc/ and clicking **License upgrade**.

Serial number:

(Help → License data and activation)

XXXXXXXXXX

License key:

XXXX-XXXX-XXXX-XXXX-XXXX

Upgrade key:

(included with the Upgrade license)

XXXXX-XXXXX-XXXXX

Send	Reset
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1. Enter the serial number of the LANCOM Advanced VPN Client, your 20-character license key and your 15-character upgrade key into the appropriate fields.



You will find the serial number in the client's menu under **Help > License info and activation**. On this dialog you will also find the **Licensing** button, which you can use to display your 20-digit license key.

2. Finally, click on **Send**. The new license key will then be displayed on the responding page on your screen.
3. Print this page or make a note of the new 20-character license key. You can use the 8-digit serial number of your license together with the new license key to activate your product later.
4. Download the latest Client. Follow this link www.lancom-systems.com/downloads/ and then go to the **Download area**. In the **Software area**, download either the 32-bit (x86) or the 64-bit version (x64) of the Advanced VPN Client for Windows.

5. To install, start the program you downloaded and follow the instructions on the screen.
6. Complete the installation by restarting your system.
7. Carry out the product activation with your serial number and the new license key (page 06).

Update

A software update is intended for bugfixes. You retain your current license while benefiting from bugfixes for your version.

If, for example, you use the version 3.10, you can upgrade to version 3.11 at no charge.

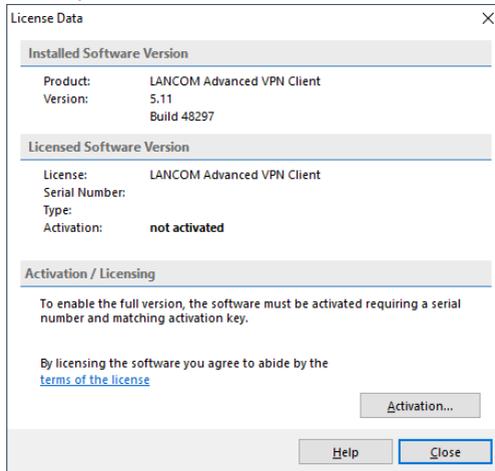
Proceed with the installation as follows:

1. Open the the **Help** menu and click **Search for updates**.
2. Click the button **Search now**.
3. Follow the wizard's instructions for the software update.
4. If an update is found, the wizard downloads it automatically.
5. To install, start the program and follow the instructions on the screen.
6. Complete the installation by restarting your system.
7. Next, the new version requires a product activation with your license (page 07).

Product activation

The next step is to perform a product activation with the license you purchased.

1. Click on **Activation** in the main window. A dialog then appears which shows your current version number and the license used.



2. Click on **Activation** again here. You can activate your product **online** (page 07) or **offline** (page 08).

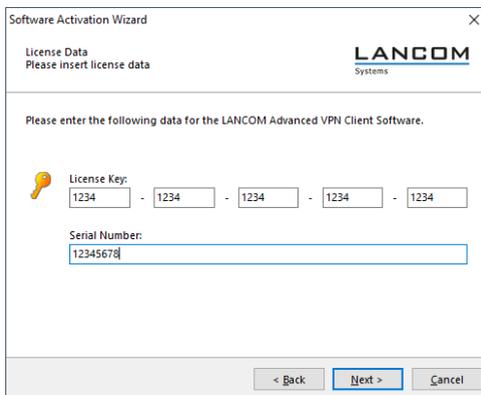


You perform the online activation from within the client, which connects directly to the activation server. In the case of the offline activation, you create a file in the client and upload this to the activation server. You subsequently receive an activation code, which you enter manually into the client.

Online activation

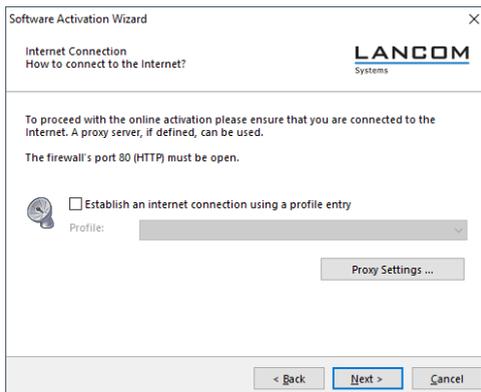
If you choose the online activation, this is performed from within the Client, which connects directly to the activation server. Proceed as follows:

1. Enter your license data in the dialog that follows. You received this information when you purchased your LANCOM Advanced VPN Client.



The screenshot shows the 'Software Activation Wizard' dialog box with the 'License Data' step. The title bar reads 'Software Activation Wizard' and the LANCOM Systems logo is in the top right. The main text says 'License Data Please insert license data'. Below this, it instructs the user to 'Please enter the following data for the LANCOM Advanced VPN Client Software.' There are two input fields: 'License Key:' with a key icon and a text box containing '1234 - 1234 - 1234 - 1234 - 1234', and 'Serial Number:' with a text box containing '12345678'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

2. The client connects to the activation server.



The screenshot shows the 'Software Activation Wizard' dialog box with the 'Internet Connection' step. The title bar reads 'Software Activation Wizard' and the LANCOM Systems logo is in the top right. The main text says 'Internet Connection How to connect to the Internet?'. Below this, it instructs the user to 'To proceed with the online activation please ensure that you are connected to the Internet. A proxy server, if defined, can be used. The firewall's port 80 (HTTP) must be open.' There is a checkbox labeled 'Establish an internet connection using a profile entry' which is currently unchecked. Below the checkbox is a 'Profile:' dropdown menu. To the right of the dropdown is a 'Proxy Settings ...' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

3. No further action is necessary to carry out the activation and the process completes automatically.

Offline activation

If you choose the offline activation, you create a file in the client and upload this to the activation server. You subsequently receive an activation code, which you enter manually into the client. Proceed as follows:

1. Enter your license data in the following dialog. These are then verified and stored in a file on the hard drive. You may select the name of the file freely providing that it is a text file (.txt).
2. Your license data is included in this activation file. This file must be transferred to the activation server for activation. Start your browser and go to the my.lancom-systems.com/avc-activation/ website.

Form for offline activation:

Activation file: No file chosen

Send activation file	Reset
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3. Click on **Search** and select the activation file that was just created. Then click **Send activation file**. The activation server will now process the activation file. You will be forwarded to a website where you will be able to view your activation code. Print this page or make a note of the code listed here.
4. Switch back to the LANCOM Advanced VPN Client and click on **Activation** in the main window. Enter the code that you printed or made a note of in the following dialog.

Software Activation Wizard ×

Activation Code
Insert activation code from the web side **LANCOM**
Systems

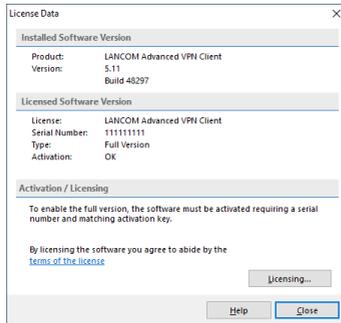
Please enter the received activation code. After a successful verification the software will be enabled as a full version.
If you have received a new license key, please enter it in the appropriate fields below.

 Activation Code:

New License Key:
 - - - -

Once the activation code has been entered, the product activation is complete and you can use the LANCOM Advanced VPN Client as specified within the scope of your license.

The license and version number are now displayed.



Setting up VPN access with the Setup Wizard

VPN access accounts on the LANCOM VPN router are easily set up with the Setup Wizard and exported to a file. This file can then be imported as a profile by the LANCOM Advanced VPN Client. As far as possible, the necessary information is taken from the current configuration of the LANCOM VPN router and is otherwise supplemented with appropriate values.

1. If necessary, download LANconfig and install it. Go to www.lancom-systems.com/downloads/ and then **LANtools**.
2. Start LANconfig, right-click on your device and select the **Setup Wizard** from the context menu.
3. In the Setup Wizard, select the entry **Provide remote access (RAS, VPN)**.
4. Now choose between IKEv1 and IKEv2. We recommend IKEv2.
5. Select the LANCOM Advanced VPN Client for Windows as the VPN client and activate the option **Speed up configuration with 1-Click-VPN**.
6. Enter a name for this access and select the address under which the router is accessible from the Internet.
7. Specify a new IP address range for dial-up access, or select an existing pool.

8. You now select how the access data is to be entered:
 - Save profile as an import file for the LANCOM Advanced VPN Client
 - Send profile via e-mail
 - Print out profile



Sending a profile via e-mail could be a security risk if the e-mail is intercepted en route!



To send the profile via e-mail, the configuration computer requires an e-mail program that is set up as the standard e-mail application and that can be used by other applications to send e-mails as well.

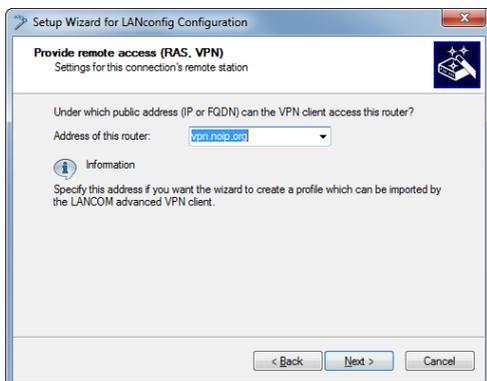
When setting up the VPN access, certain settings are made to optimize operations with the LANCOM Advanced VPN Client, including:

- Gateway: If defined in the LANCOM VPN router, a DynDNS name is used here, or alternatively the IP address
- FQUN: If not defined otherwise, this is a combination of the name of the connection, a sequential number and the internal domain in the LANCOM VPN router.
- VPN IP networks: All IP networks defined in the device as type 'Intranet'.
- Pre-shared key: Randomly generated key 16 ASCII characters long.
- Automatic recognition of connection media.
- VoIP prioritization: VoIP prioritization is activated as standard.
- Exchange mode: The exchange mode to be used is 'Aggressive Mode' (IKEv1 only).
- Seamless roaming Enabled by default (IKEv1 only).
- IKE config mode The IKE config mode is activated, the IP address information for the LANCOM Advanced VPN Client is automatically assigned by the LANCOM VPN router.

Manual setup of VPN access (optional)

If you wish to work with different settings than the default values taken by the Setup Wizard, you have the option to individually specify each of the parameters of the profile.

1. If necessary, download LANconfig and install it. Go to www.lancom-systems.com/downloads/ and then **LANtools**.
2. Start LANconfig, right-click on your device and select the **Setup Wizard** from the context menu.
3. In the Setup Wizard, select the entry **Provide remote access (RAS, VPN)**.
4. Now choose between IKEv1 and IKEv2. We recommend IKEv2.
5. In the following window, select the **LANCOM Advanced VPN Client for Windows** and deactivate the option **Speed up configuration with 1-Click-VPN**.
6. Enable the option **IPSec-over-HTTPS**.
7. Enter a name for this connection.
8. Enter the **address of the router**.



9. Two pieces of information are required for the connection authentication:
 - Enter an e-mail address for the user as the **Fully Qualified Username**; this will be used to identify the client at the VPN gateway.
 - Enter the **Pre-shared key** for this VPN connection. The pre-shared key is used to encrypt the connection between client and gateway.



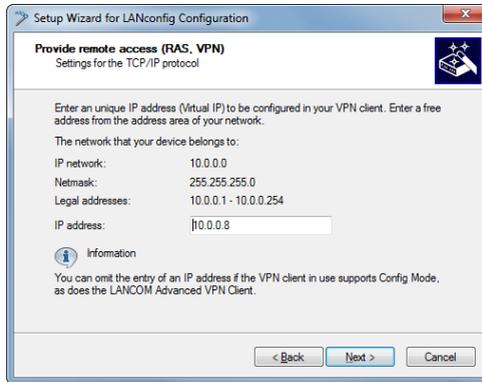
Each user should be assigned their own pre-shared key. Observing this rule will further increase the security of your VPN connections.

10. If a range of addresses was defined for remote access, then follow-up with the next step. Otherwise, to access the remote network, the VPN client requires a valid IP address from the LAN's address range. In the

dialog that follows, enter the IP address that will be assigned to your client when it accesses the LAN.



Make sure that the IP address is available for use. For example, it may not be assigned to other devices by a DHCP server in the LAN.



11. Specify a new IP address range for dial-up access, or select an existing pool.
12. The following window allows you to enter the areas of the local network that the client should have access to. In most cases you can use the default setting **Allow all IP addresses to be available to the VPN client**. If the client should have access that is limited to a particular subnet or a limited range of IP addresses, use the option **The following IP network should be available to the VPN client**, which allows you to define the IP network and netmask.
13. You now select how the access data is to be entered:
 - Save profile as an import file for the LANCOM Advanced VPN Client
 - Send profile via e-mail
 - Print out profile



Sending a profile via e-mail could be a security risk if the e-mail is intercepted en route!



To send the profile via e-mail, the configuration computer requires an e-mail program that is set up as the standard e-mail application and that can be used by other applications to send e-mails as well.

14. Confirm with **Next**. Conclude the configuration by clicking on **Finish**.

Configuring the VPN access

After restarting your system, the LANCOM Advanced VPN Client starts automatically. You can change this behavior in the LANCOM Advanced VPN Client with the menu item **View > Autostart > No Autostart**.

As long as the LANCOM Advanced VPN Client is active, a VPN symbol will be displayed in the lower right-hand corner of the screen.

Now you import the newly created profile using LANconfig. The following steps are necessary for this:

1. Open **Configuration > Profiles**.
2. Click on **Add/Import**.
3. Choose **Profile import**.
4. Here you specify the profile you created.
5. Click **Next**, and then click **Finish**.

In the main window of the LANCOM Advanced VPN Client you can now click on the switch under Connection. This connection is established and you can work with the new VPN connection.

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