

How to install LEICA Geo Office in a Network Environment ?

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When the network version of LEICA Geo Office has been purchased it is delivered with a Software Protection Key and corresponding software drivers for the File Server. Please find these drivers inside the folders, e.g. ...\\Lgo\\Dongle\\Driver541\\... and ...\\Lgo\\Dongle\\Server\\....

1) **Possible network environments**

It is possible to run LEICA Geo Office in a network environment. At the moment various different network platforms are supported. The possible constellations are:

Network server software	Workstation software
Novell NetWare 4.xx	Windows 98 / Me / 2000 Windows XP Workstation
Windows 2000 / 2003 Server	Windows 98 / Me / 2000 Windows XP Workstation

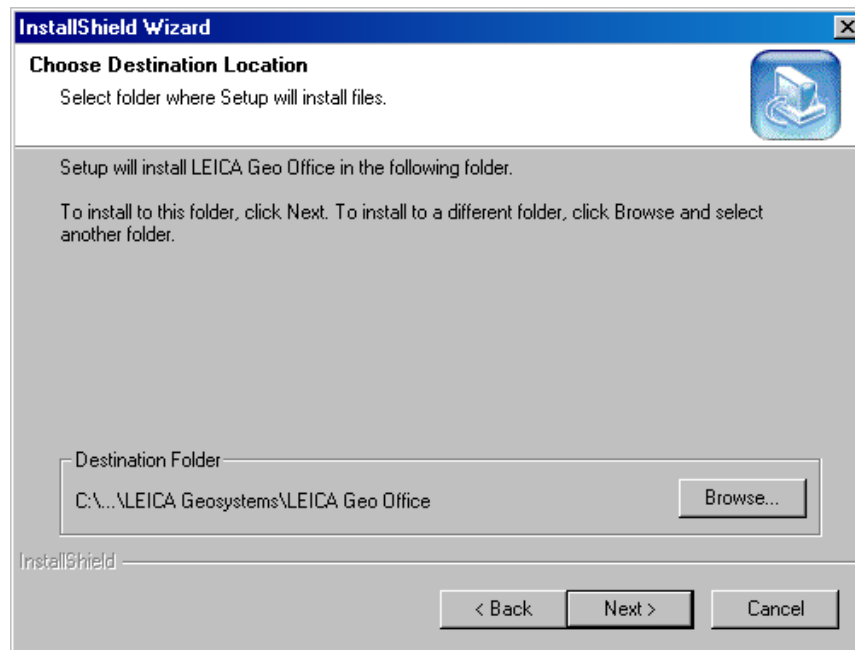
2) **Points to consider when installing LEICA Geo Office on a network**

LEICA Geo Office has to be installed locally on each workstation PC. Install LEICA Geo Office from the **System 1200 Office SW** CD ROM on all PCs, which are intended to run LEICA Geo Office.

Please enter the corresponding local paths during the LEICA Geo Office installation procedure!

There is no difference with the installation of LEICA Geo Office between a single-licence installation and a network licence installation. Only additional dongle drivers have to be installed on the network server, if you are using a network licence of LEICA Geo Office.

- Run the LEICA Geo Office installation program on the PCs connected to the network. Follow the instructions and read the information displayed.
- When the program asks for the application path, make sure that the specified directory is placed on the local hard disk, e.g. C:\Program Files\LEICA Geosystems\LEICA Geo Office.



Now the program and database files will be installed under a local directory on the PC.

Please note that although LEICA Geo Office projects can be created under a network directory, only a **single user** can **access the projects at the same time!** The project database is not designed for a multiple user access.

The appropriate driver for the software-protection key (dongle) has to be installed on the server PC as explained below.

Whenever you disconnect the software-protection key (dongle) physically from the network server, you may have to restart your network server afterwards, to be able to correctly detect the network dongle.

3) **Driver Installation procedure:**

3.1) **LEICA Geo Office in a Novell 4.xx network:**

Network server software: Novell NetWare 4.xx

Workstation software: Windows 98 / Me / 2000 or Windows XP

3.1.1 Steps to be carried out on the Novell server

1. Find the NSRVNI.NLM on your **System 1200 Office SW** CD ROM under ...\\Lgo\\Dongle\\Server\\NW\\... and copy it to your Novell server system directory.
2. Connect the NetSentinel key to a parallel port on the File Server.
3. Load the server program from the command line by typing LOAD followed by the NetSentinel's path name and command options you desire, eg. the following command line loads the NetSentinel from the search path of the File Server, enables strict license time out enforcement and sets the milliseconds before sending out handshaking message:

LOAD NSRVNI / ST / DT:50

For permanent installation integrate this line into the AUTOEXEC.NCF file on your Novell server. This will load the NetSentinel NLM automatically whenever the File Server is booted.

Please note that the NetSentinel security server, NSRVNI.NLM, for NetWare works in OS domain but not OS_PROTECT domain of NetWare V 4.0x.

Because the dongle server program is implemented as a NLM (NetWare Loadable Module), it can be loaded into memory (started) and unloaded from memory (stopped) without rebooting the File Server. This enables the end user to easily restart the dongle service after connecting a new key.

Remember that users cannot access the NetSentinel key if the server program is not running. This will start LEICA Geo Office in 'office module' mode with limited functionality. Thus always restart the security server as soon as possible.

3.1.2 Steps to be carried out on the workstations

After you have installed LEICA Geo Office on a workstation PC, you have to modify the LCHKDGLE.INI file created during the installation process of LEICA Geo Office. This LCHKDGLE.INI file contains the settings required for the network dongle search.

Modify the LCHKDGLE.INI file once and copy it to all workstations, on which you have installed LEICA Geo Office.

The LCHKDGLE.INI file can be found under the LEICA Geo Office installation path, e.g. c:\Program Files\Leica Geosystems\LEICA Geo Office\Combined\Bin\

You can open the LCHKDGLE.INI file with any text editor.

Go to the section (NetDongleSettings) of the LCHKDGLE.INI file and modify the Protocol parameter as follows:

Protocol=x

Please make sure that the **IPX/SPX** protocol is installed on your workstations. This can be done in the Windows operating system under /Settings/Control Panel/Network or /Settings/Control Panel/Network Connections.

3.2 LEICA Geo Office in a Windows 2000 / 2003 network:

Network server software: Windows 2000 / 2003 Server

Workstation software: Windows 98 / Me / 2000 or Windows XP

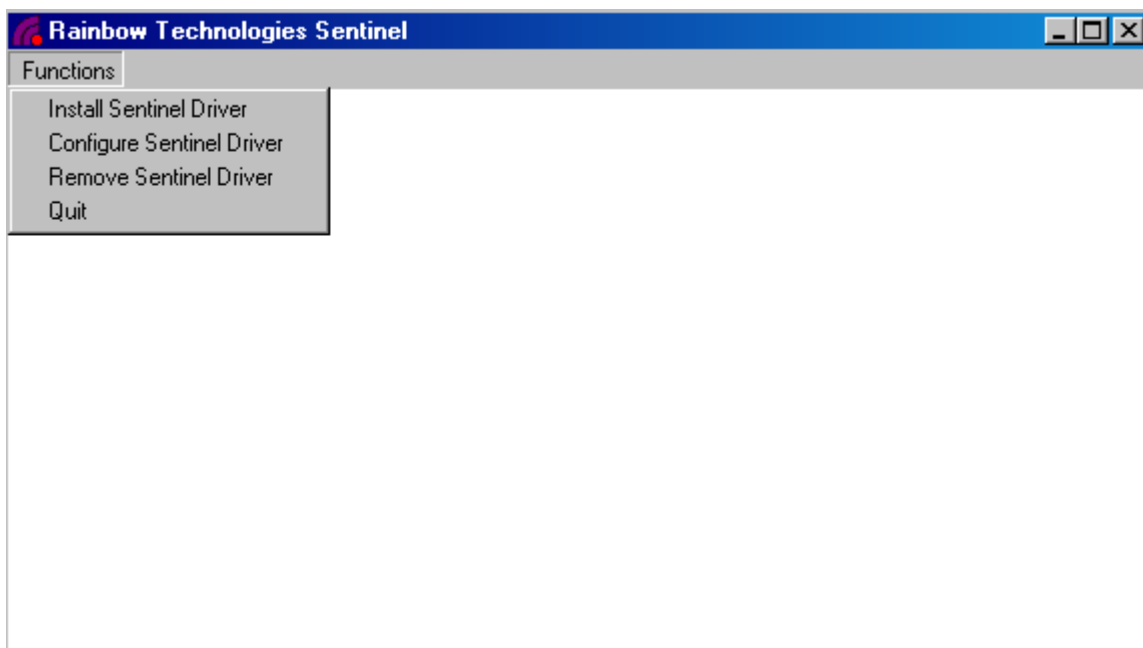
3.2.1 Steps to be carried out on the 2000 / 2003 server

For the installation of the Sentinel drivers on your Windows 2000 / 2003 Server proceed as follows:

1. Insert the **System 1200 Office SW** CD ROM into your Windows 2000 / 2003 File Server.
2. Connect the NetSentinel key to a parallel port on the 2000 / 2003 File Server.
3. Run **Setupx86.exe** from the ...\\Lgo\\Dongle\\Driver541\\Win_nt\\... directory of your System 1200 Office SW CD ROM.

Find more information about the Sentinel System Driver inside the **pdf's** and **readme.txt** file located inside ...\\Lgo\\Dongle\\Driver541\\...

4. Select „Install Sentinel Driver“ from the Functions menu. This will install the Sentinel System Drivers on your Windows 2000 / 2003 File Server:



The Sentinel System Drivers provide the communication path between LEICA Geo Office and the sentinel network dongle.

5. Afterwards, copy the **Nssrvic.exe** file from the ...\\Lgo\\Dongle\\Server\\Win32\\... directory of the System 1200 Office SW CD ROM to the Windows %SYSTEMROOT%\\SYSTEM32\\ directory.

Note, this version of the NetSentinel security server is implemented as a Windows service, which allows the server application to be automatically started whenever the Windows operating system is running. It supports **NetBIOS**, **NetBEUI**, **NWLink** (Microsoft IPX/SPX compatible protocol) and **TCP/IP** protocols.

Make sure that at least one of the above mentioned protocols is installed.

6. To install the service, run the **Nssrvic.exe** executable from the %SYSTEMROOT%\\SYSTEM32\\ directory with the following command:
NSSRVIC /I

By default, the service is now setup to run automatically the next time you reboot the Windows File Server system. No user logon is required, unless desired.

You can obtain more information about Netsentinel from the following files:

- a) Readme.txt from ...\\Lgo\\Dongle\\Server\\... and
- b) Nssrvic.txt from ...\\Lgo\\Dongle\\Server\\Win32\\...

3.1.3 Steps to be carried out on the workstations

After you have installed LEICA Geo Office on a workstation PC, you have to modify the LCHKDGLE.INI file created during the installation process of LEICA Geo Office. This LCHKDGLE.INI file contains the settings required for the network dongle search.

Important:

Make sure that the same type of network protocol is installed on both, e.g. workstation and network file server. This can be either **NetBIOS**, **NetBEUI**, **NWLink** (Microsoft IPX/SPX compatible protocol) and **TCP/IP** protocols

Modify the LCHKDGLE.INI file once and copy it to all workstations, on which you have installed LEICA Geo Office.

The LCHKDGLE.INI file can be found under the installation path of LEICA Geo Office, e.g. under c:\Program Files\Leica Geosystems\LEICA Geo Office\Combined\Bin\....

You can open the LCHKDGLE.INI file with every text editor.

Go to the section (NetDongleSettings) of the LCHKDGLE.INI file and carry out the modifications according to your network protocol settings. If you are not so familiar with networking, use the following setting:

Protocol=LTXY

To increase the search time on larger networks it might be useful to go via the TCP/IP protocol and specify the TCP/IP subnet mask. Specify the subnet mask inside which the server is located. The network dongle is then searched in this subnet only.

Note, you can also directly specify the TCP/IP address of the network server in the LCHKDGLE.INI file, which will be the fastest search mode. An example for specifying the TCP/IP address of the network server is given below:

TCPIPSubnetMask=10.61.13.126

Make sure that the entered TCP/IP address is correct (use the **ipconfig** command at the **server console** to display the TCP/IP address of the network server; or use the **"ping"** command !)

Note for very slow workstation computers:

If some of your older workstations do not find the dongle, whereas the faster workstations do not have problems, please try the following:

Increase the values for the TCPIP RetryCount and TCP/IP TimeOut variables in the LCHKDGLE.INI file, see the example given below:

TCIPRetryCount=5

TCIPTimeOut=25

Please note that only the TCP/IP protocol is affected by these settings!

4.) Practical hints for working with LEICA Geo Office on a network

When working with LEICA Geo Office on a network, it is possible to store raw data and projects locally on the workstation PC's and/or on the File Server PC.

If the raw data and projects are stored locally on a workstation PC then only this PC can access and use the raw data and projects. This may be advantageous if people always use the same PC and do not want other people to access the data and projects.

If raw data and projects are stored on the File Server under special directories (e.g. n:/rawdata, n:/projects) they can be accessed from different PC's. This is advantageous, as a person is not bound to the same workstation. Storage on the server can also be advantageous for general archiving purposes. However, please note that **multi-user access** to projects is not supported.

When not connected to the network projects on the server will be displayed as 'disabled' (grey) in the Project Management component.

For any further information contact your local Leica organisation or

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