

GeNiEnd2End Manual

GeNiEnd2End Documentation

Version 5.3

June 2017

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Installation

1 Installation

This section will guide you through the installation of GeNiEnd2End and the GeNiAgent.

[> Installation of GeNiEnd2End Server](#) ^[5]
[> Installation of GeNiAgent](#) ^[18]

Once you are done with the installation, proceed with the configuration:

[> Configuration](#)

1.1 Installation of the GeNiEnd2End Server

This guide will show you how to do an installation of GeNiEnd2End.

To install the GeNiAgent please refer to the QuickStart Guide:

[> Installation of GeNiAgent](#) ^[18]

Content:

- [Minimum system requirements](#) ^[5]
- [Used Ports & Firewall settings](#) ^[6]
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1.1.1 System Requirements

Please make sure that the computer on which you plan to install GeNiEnd2End 5.3 complies with the following system requirements:

Server OS support

- Windows Server 2008R2
- Windows Server 2012R2
- Windows Server 2016
- Windows 7, 8, 8.1, 10

Minimum Server Hardware Ressources:

- Physical or Virtual Machine
- 2 Cores
- 8 GB RAM
- At least 20GB free disc space. (Depending on the size of your license, you are going to need more space. Please contact us for individual sizing requirements.)

Minimum GeNiAgent Hardware Ressources:

- DualCore 2GHz
- 4GB RAM

- At least 10GB free disc space
- Windows Server 2008R2
- Windows Server 2012R2
- Windows Server 2016
- OS: Windows 7, 8.1, 10

Web interface client access (WebGUI)

- A modern web browser (listed in the order of preference)
 - Chrome
 - Firefox
 - IE ≥ 11
 - Safari

The web interface of GeNiEnd2End version 5 is heavily depending on features only these modern browsers offer. Preferably use the latest stable version available.

Note: The server needs the ports 80, 443 and 5432 to be available prior installation. Currently, it's not possible to configure GeNiEnd2End to use different ports. This configuration option is planned to be included in the near future.

1.1.2 Used Ports / Firewall Settings

GeNiEnd2End Network Server and GeNiAgent need the following ports for communication (all TCP):

- 443 for the communication between the agent and the server and access to the Web GUI
- 80 for the alternate communication between agent and server and access to the Web GUI
- 22222 for the communication between agent and server if port 80 is being used by another application. Typically happens on GeNiAgents which are installed at the GeNiServer.
- 22 for SSH to configure the GeNiJack

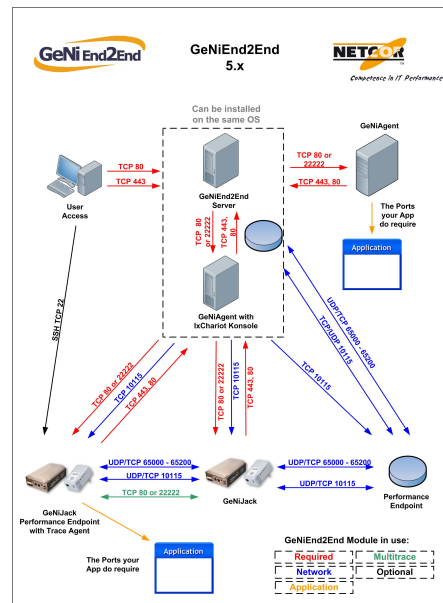
For GeNiEnd2End Network you also need the following ports for IxChariot (both TCP and UDP):

- 10115 + any port for the communication of the Console to the first endpoint and from endpoint to endpoint.
The second port will be automatically chosen by the Console and can be changed in IxChariot
- Random ports for measurement between the endpoints. These ports can be set in IxChariot
- Even port numbers starting from 16384 upward for VoIP. This starting port can be changed in IxChariot.
- When you use the default port range in GeNiEnd2End, ports 65000-65200 are set as default

For the GeNiEnd2End Application CNS option you need the following ports for VitalAgent and VitalApps (if you use the additional Server component):

- TCP port 2474 for the VitalAgent
- TCP ports 3280 and 3375 for the VitalApps

You don't need those ports in case you working "offline" with the VitalAgent, which is the default for most customers.



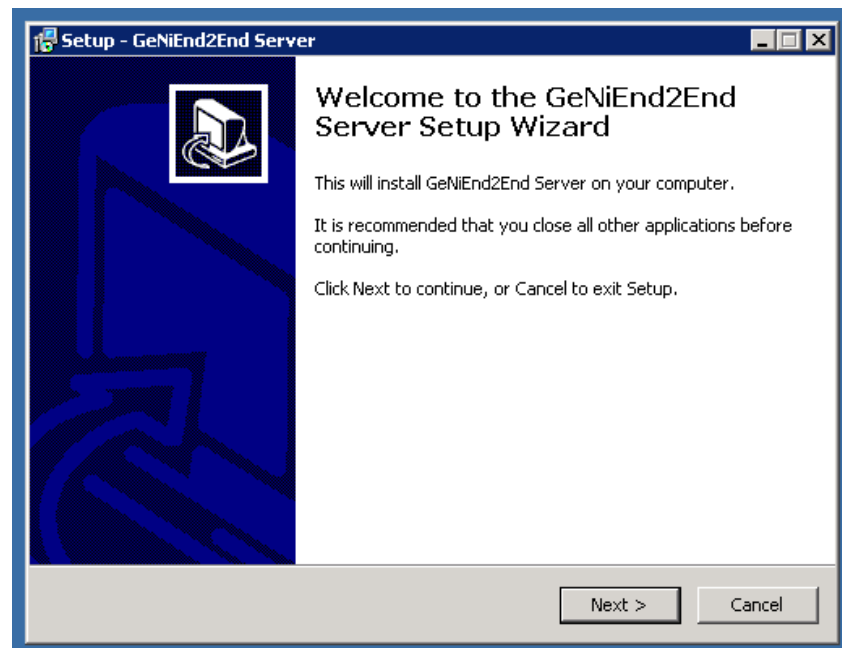
1.1.3 GeNiEnd2End Installation

The GeNiEnd2End 5.3 installer provides all required files to install GeNiEnd2End Server on your system.

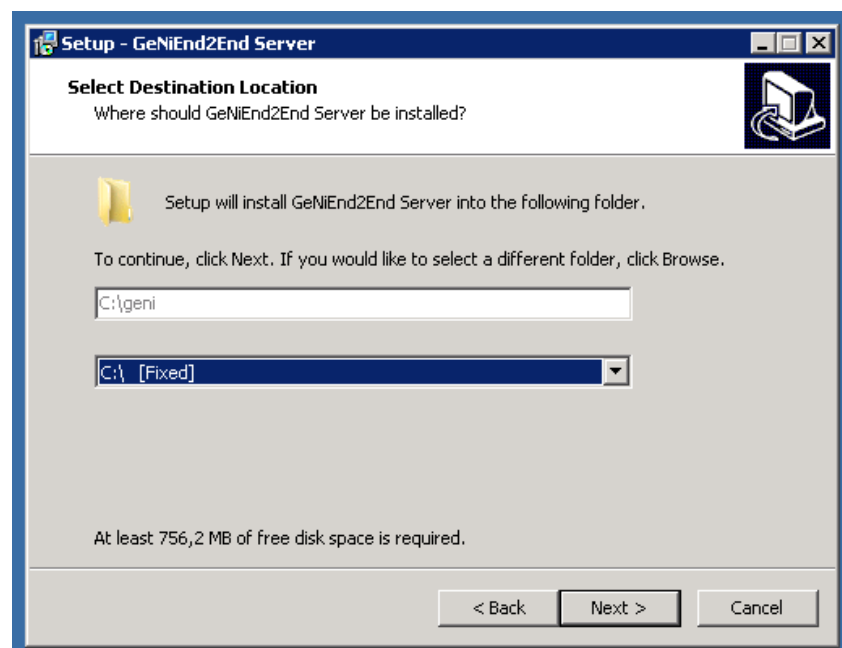
After downloading the installation files, transfer them to the server on which you want to install.

Note: Please run the installer as Administrator!

Start the installer with the right click option "Run as Administrator". Click on [Next >].



In the next screen select the destination drive where to install GeNiEnd2End 5.3.
Click on [Next].



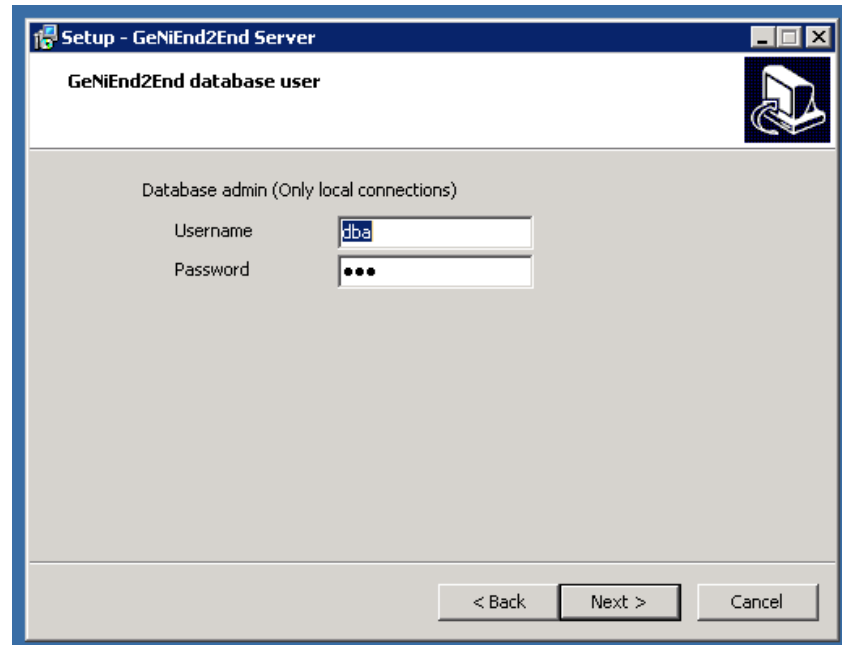
You can change the user credentials for the database user for local connections.

Default are:

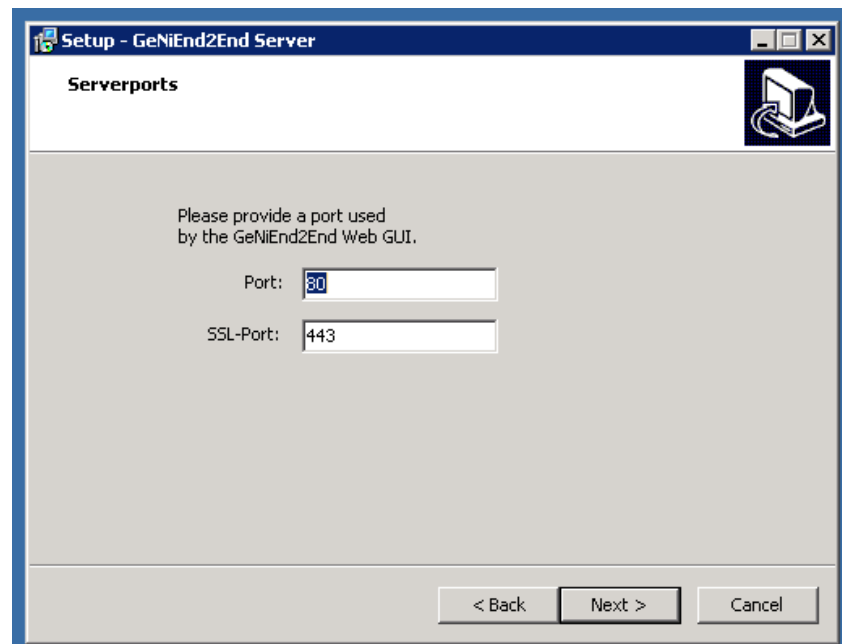
Default Username	Default Password	Description
------------------	------------------	-------------

dba	sql	Only local connections Root
-----	-----	-----------------------------

Click on [Next >].

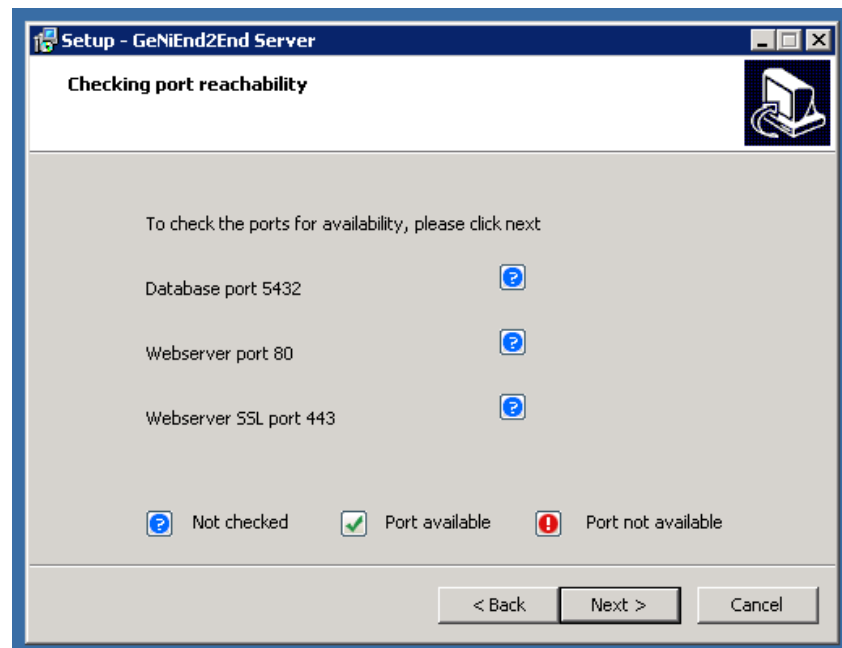


In the next screen you can see which ports are used to connect to the GUI of GeNiEnd2End. Click on [Next >].

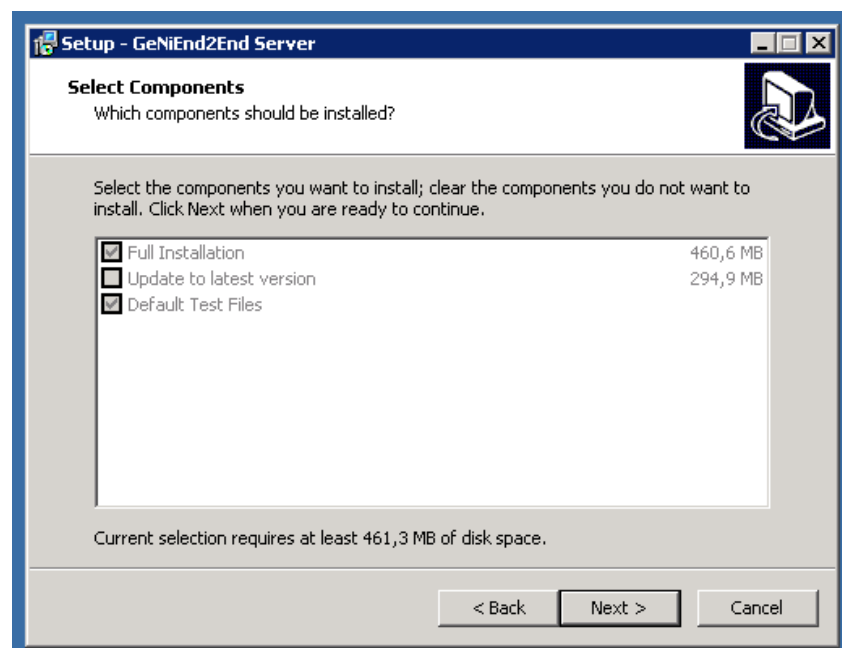


The GeNiEnd2End installer checks if the ports are available. If all three ports are available it will automatically proceed to the next step.

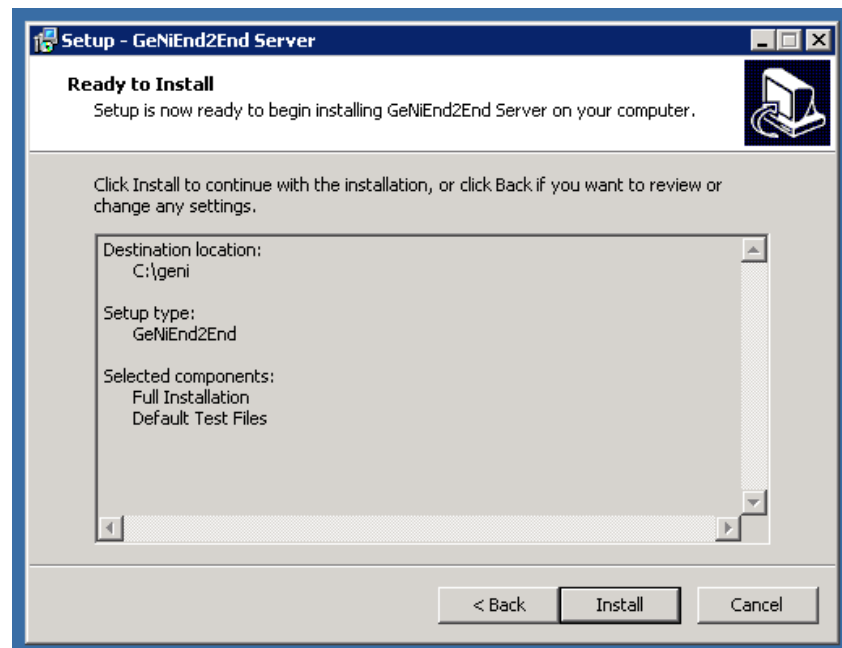
Click [Next >] to start the check.



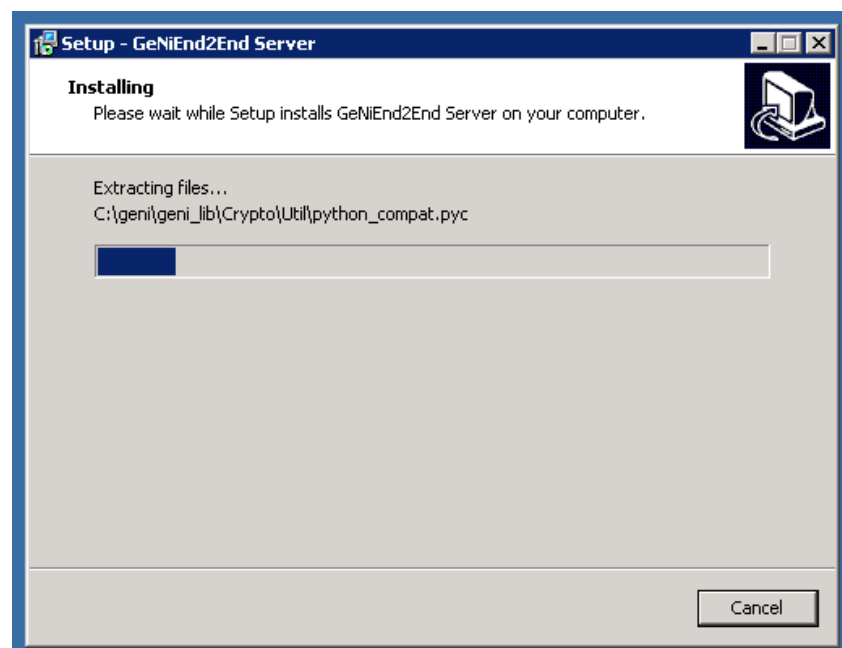
For a full installation there are no selectable options. Click on [Next]>.



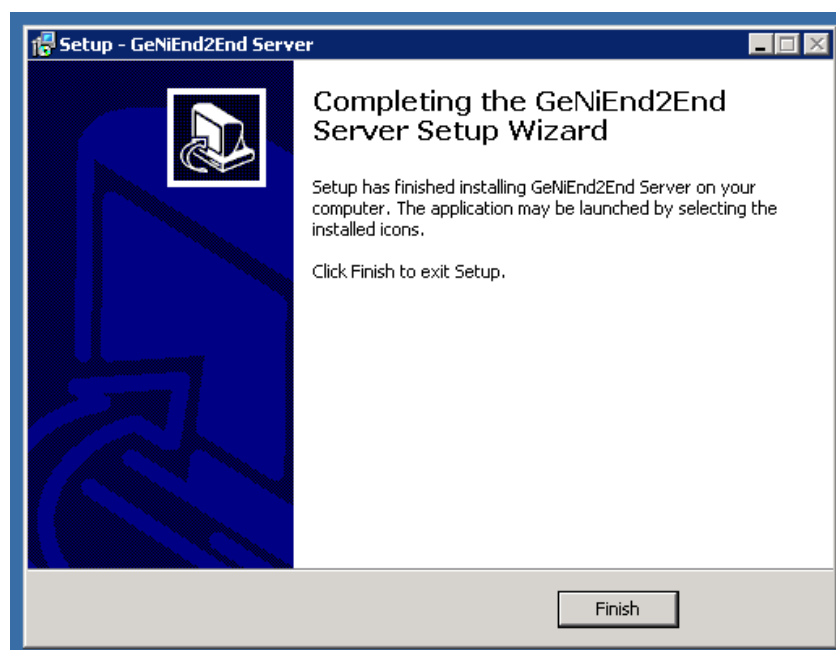
The installer is now ready to start the installation. Please check the configuration and click on [Install].



The installation will take a few minutes.
Please wait until it's finished.



Now GeNiEnd2End 5.3 is successfully installed on your system.
Click on [Finish].



1.1.3.1 Install IxChariot Viewer

Installation IxChariot Viewer

You are going to need a local IxChariot Viewer, provided you use the GeNiEnd2End Network edition. GeNiEnd2End Network requires the IxChariot Viewer to retrieve the configuration of the TST-files and generate html output of existing measurements. (TST-files include all measurement-related data including the configuration parameters as well as the raw measurements and are readable only by the IxChariot Viewer.)

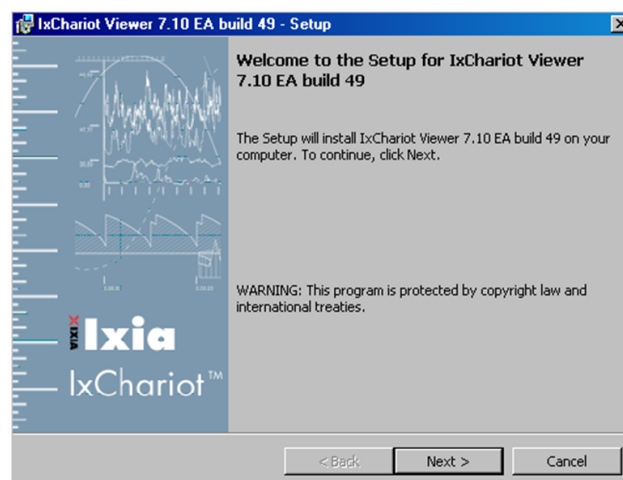
- A. In case the IxChariot Console software and the GeNiEnd2End Server are installed on separate servers, you may install IxChariot Viewer software on the GeNiEnd2End Server using its installer.
- B. The IxChariot installer allows either the Console or the Viewer to be installed on a system, not both at the same time. Therefore, in case the IxChariot Console has already been installed on the server and you want to install the GeNiAgent on it as well, you must copy the viewer files manually.

Note: The version of IxChariot Viewer must correspond with the version number of the already installed IxChariot Console. A distinction in version numbers may cause problems. Accordingly, in case you update IxChariot Console, you also must update the Viewer installation.

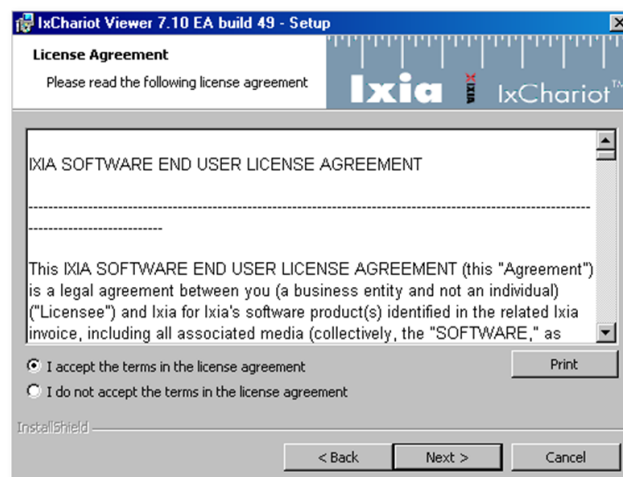
You can download the IxChariot Viewer installer files from IXIA Support site or ask the support of your reseller or NETCOR.

Variant A) Install

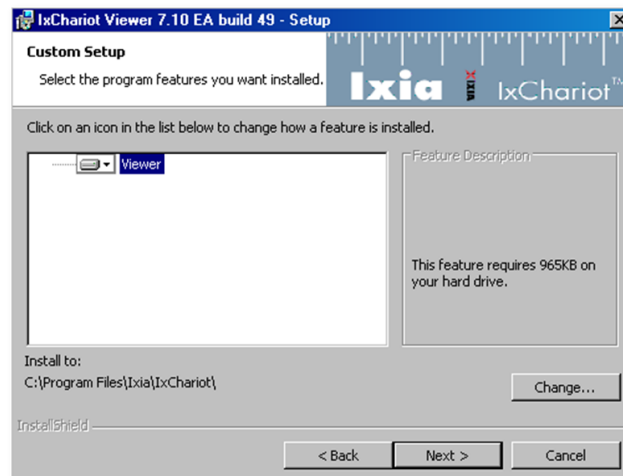
Locate and run the file „Setup.exe“ to install the IxChariot Viewer.



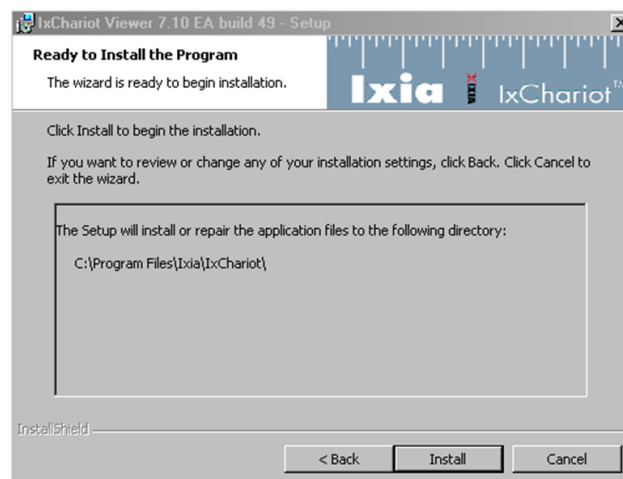
Click on [Next >] to proceed.



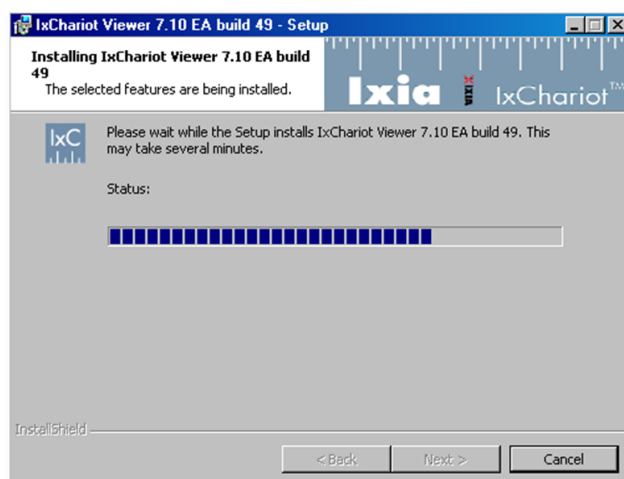
Accept license agreement and click on [Next >] to proceed.



Change the installation path or accept the default installation folder and proceed with clicking on [Next >].

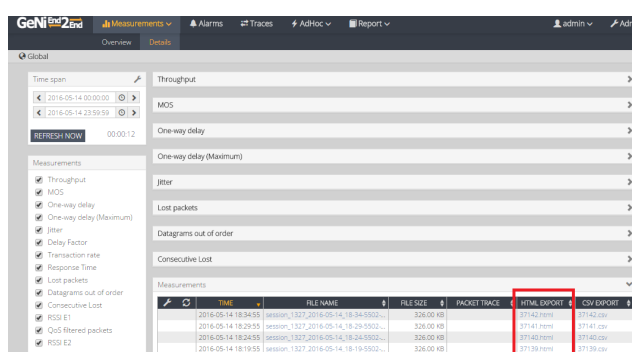


Click on [Install] to proceed.



The IxChariot Viewer finished successfully.

You can now open html exports from network measurements. Just open the "Measurements" table at the very bottom detail graph page.

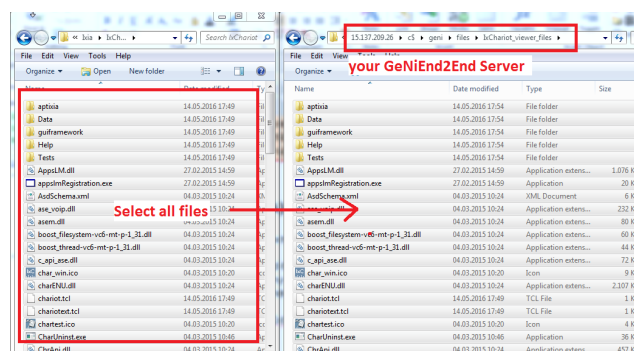


Variant B) Copy

In order to obtain the viewer files, you must install the IxChariot Viewer on another system, excluding the server (see the previous section for the installation instructions). The IxChariot Viewer does not need any license, so you can install it wherever you may need it, e.g. your local desktop system.

After you finished the installation, please copy all files and directories to the following folder on the GeNiEnd2End Server:

`\geni\files\IxChariot_viewer_files\`



1.1.3.2 GeNiEnd2End Services

The GeNiEnd2End Server uses following services.

- GeNiEnd2End Database (Service name: GeNiEnd2End Database)
- GeNiEnd2End Webserver (Service name: GeNiEnd2End Webserver)
- GeNiEnd2End Server (Service name: GeNiEnd2End Server)

GeNiEnd2End User

During the installation of GeNiEnd2End we created a user with Administration rights on your system.

The username is: GeNiEnd2End

The default password is: Hsd23%x1

Please change the password of the user!

Do it for your own safety.

Some of the GeNiEnd2End services are being run as this user because they need Administrative permissions.

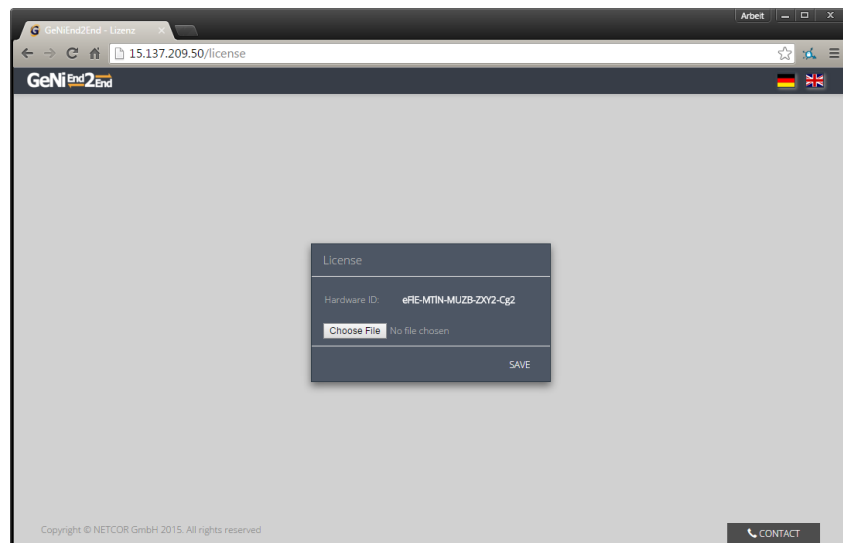
1.1.3.3 GeNiEnd2End Licensing

After the installation of GeNiEnd2End 5.3 you are required to upload a GeNiEnd2End license file.

You can request a license by sending an email to support@NETCOR-europe.com with your hardware ID, company name and your license ID. You can find your license ID on the GeNiEnd2End 5.3 license document.

How to get your hardware ID:

Open the GeNiEnd2End GUI in your browser to get your hardware ID. The license page should load automatically.

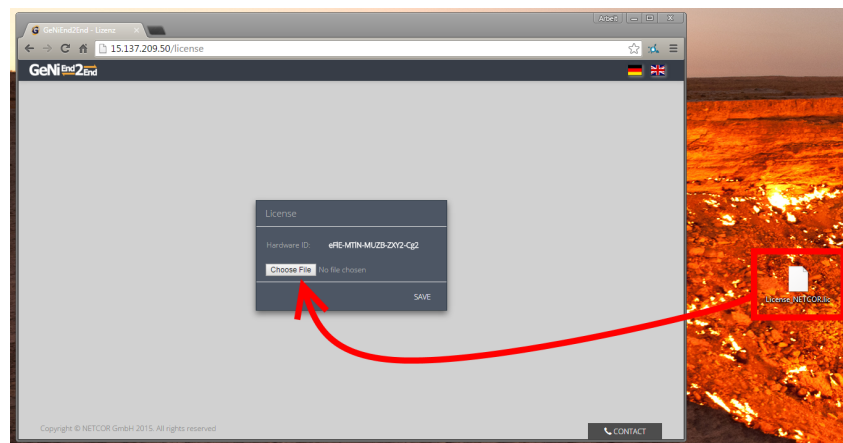


How to upload the license?

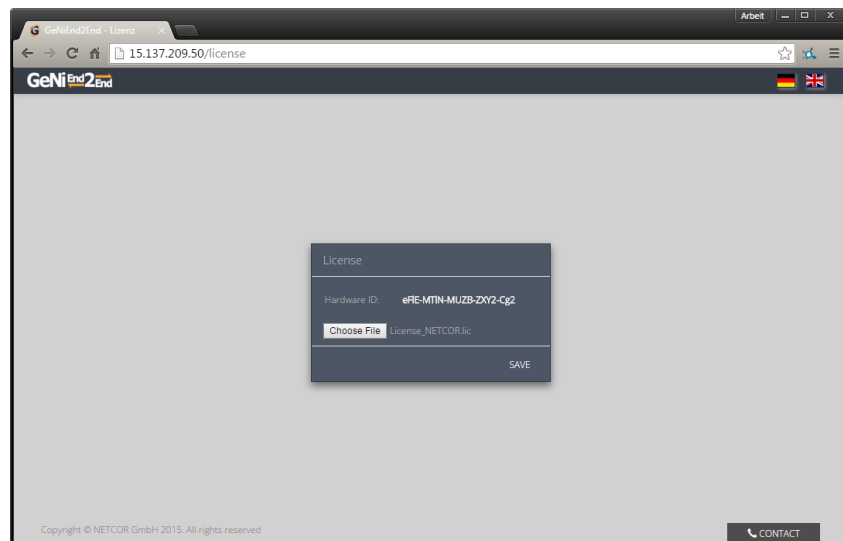
Once you obtained your license from NETCOR GmbH, you must upload it to GeNiEnd2End via the Web GUI.

If you use Google Chrome you can drag and drop the file directly on the [Choose File] button.

If you use another browser, please click on [Choose File] and select the file.



After choosing the file click on "Save".

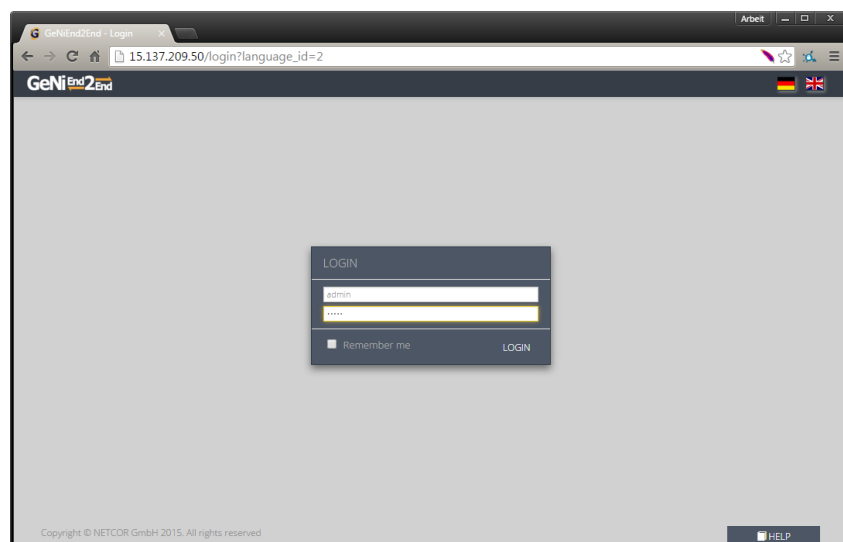


If the license is valid GeNiEnd2End will automatically navigate to the Login Page. In e the license ist not valid, please contact the NETCOR support.

The default credentials are:

User name: Admin

Password: Admin



1.2 Installation of the GeNiAgent

The GeNiAgent is the client side of GeNiEnd2End. It's pre-installed on the GeNiJacks to generate measurement values. Every GeNiAgent communicates with the GeNiEnd2End Server to get new test settings and deliver measurement results.

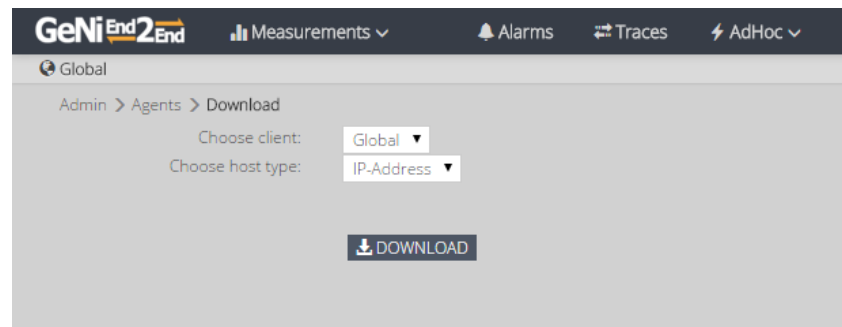
Users of the GeNiEnd2End Network Edition:

Is it best practice to install the IxChariot Console on your robot first, followed by the installation of the GeNiAgent.

The IxChariot Console installation process is described here: [> ¹⁹ IxChariot](#)

In order to start the GeNiAgent installation, please navigate your GeNiEnd2End GUI to

Admin > Agents > Download



Please choose the hierarchical position of the client and if it should connect via IP or hostname, then click on [DOWNLOAD].

You will receive a file named:

GeNiAgent#IP_{IP or Hostname}#C_{Client ID}.exe

It provides the IP and the client ID for GeNiEnd2End.

These values are optional and can be set manually in the Installer. For further details, see:

[> Default Installation ⁸⁴](#)

In case you want to do a silent installation, see:

[> Silent Installation ⁹¹](#)

System requirements:

- DualCore 2GHz
- 4GB RAM
- At least 10GB free disc space
- OS:
 - Windows 7
 - Windows 8.1
 - Windows 10

1.2.1 IxChariot

Contents

- [IxChariot Console ²⁰ installation](#)
- [IxChariot Console registration ²⁵](#)
 - [Online ²⁶](#)

- [Offline](#) ³⁰
- [Floating license](#) ³⁹
- [De-Registration license](#) ⁴⁵
- [De-Registration Floating license](#) ⁴⁹
- [Installation of IxChariot endpoint](#) ⁷³
- [Configure IxChariot Console](#) ⁸³
- [Installation of IxChariot Viewer](#) ¹²

1.2.1.1 IxChariot Console Installation

IxChariot Console installation

IxChariot is only necessary for the GeNiEnd2End Network edition. If you just use the GeNiEnd2End Application edition, you can skip everything concerning IxChariot.

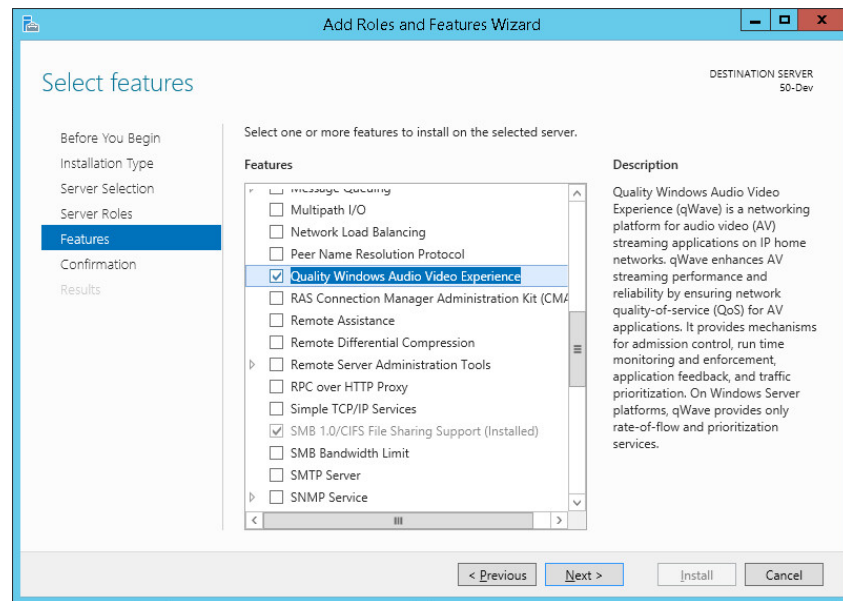
Locate and run the file "IxChariot_730EASP3.exe" (version numbers can vary).

In case your system is missing DotNet 1.1, the necessary files are located in the same directory. Please run "dotnetfx.exe" first, followed by the service pack "NDP1.1sp1-KB867460-X86.exe".

For Windows Server 2008/2012, install DotNet via the OS internal "Add Features".

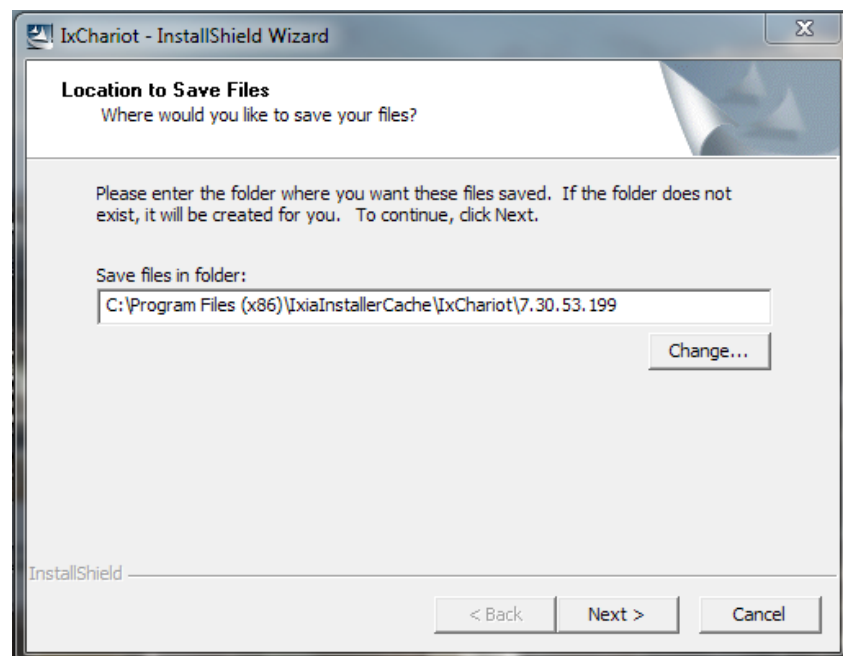
If you use Windows Server 2008 (R2) or newer, you must install the "Quality Windows Audio Video Experience" Feature, if you plan to use the local system as an endpoint. If you don't install QWAVE and try to run a DSCP tagged test, it will always fail.

Go to: Server Manager - Features - Add Feature > Quality Windows Audio Video Experience

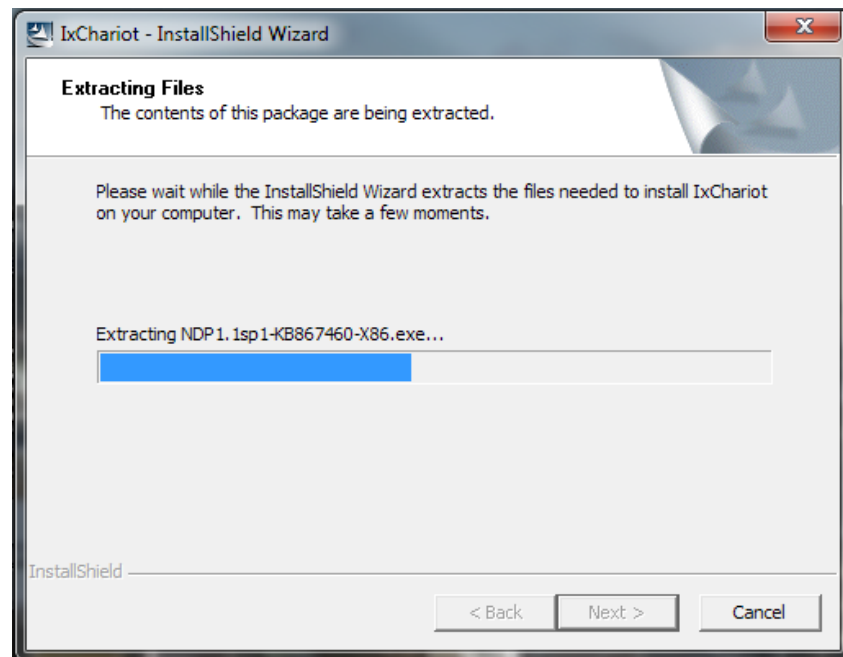


The Windows Server 2008 Web Edition does not support this feature.

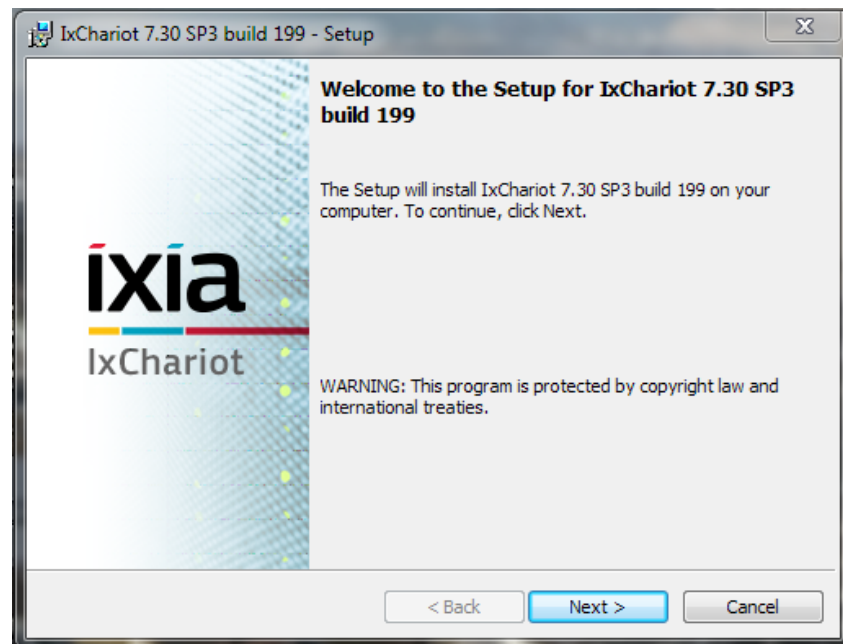
During the installation you must specify the folder where the installer files will be unpacked. This is not the directory for the actual IxChariot Console installation. Click on [Next >].



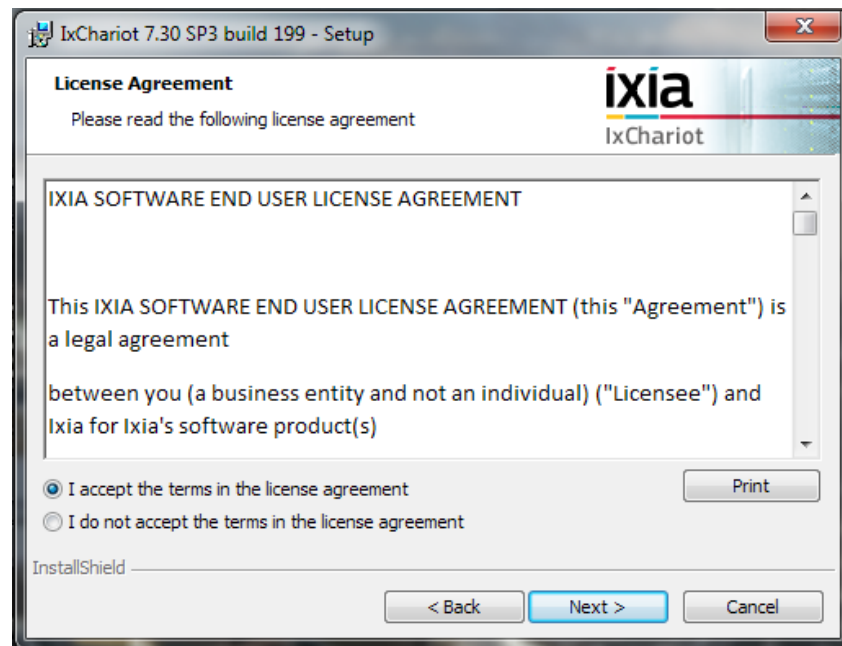
The installer will extract the installation files into the installer directory.



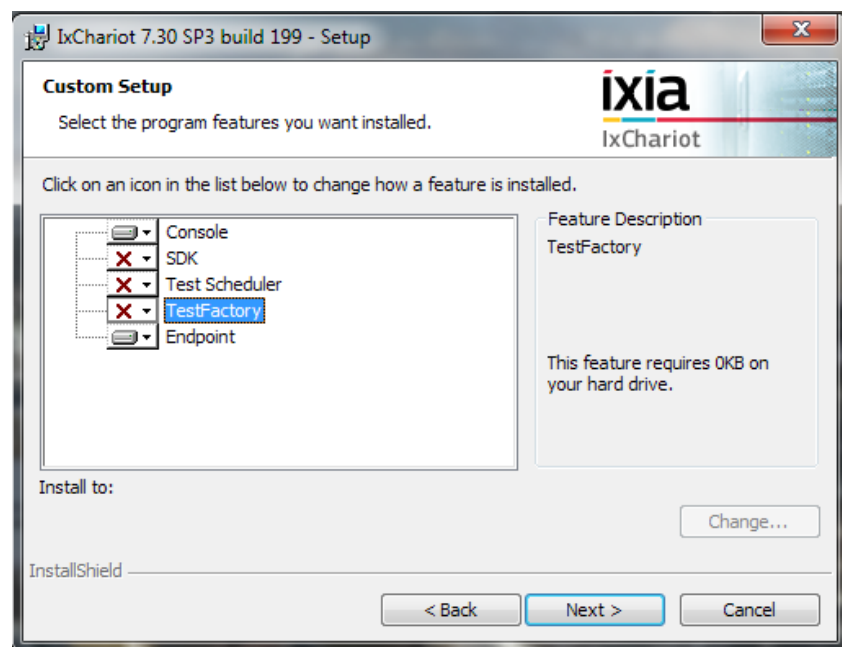
Click on [Next >].



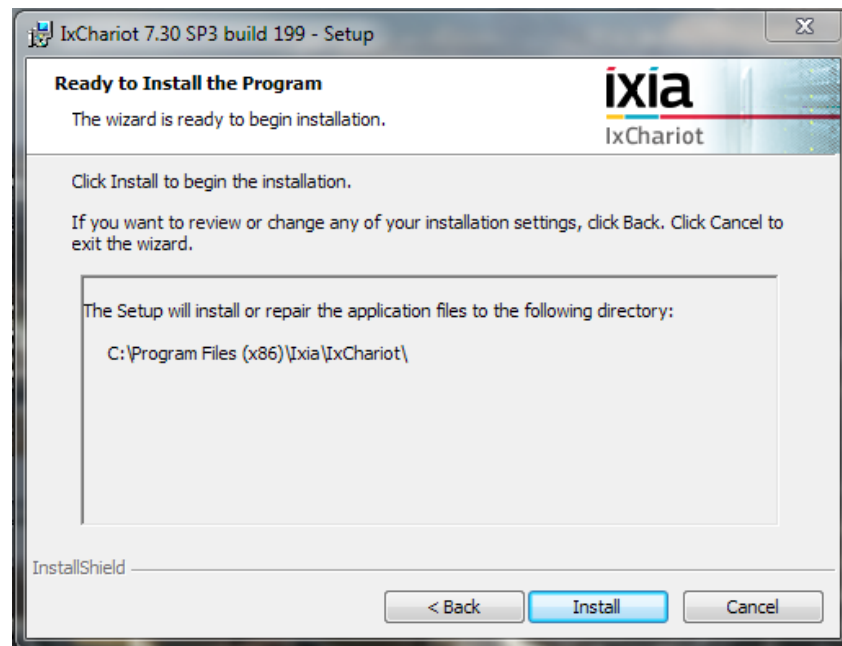
You must accept the license agreement. Click on [Next >].



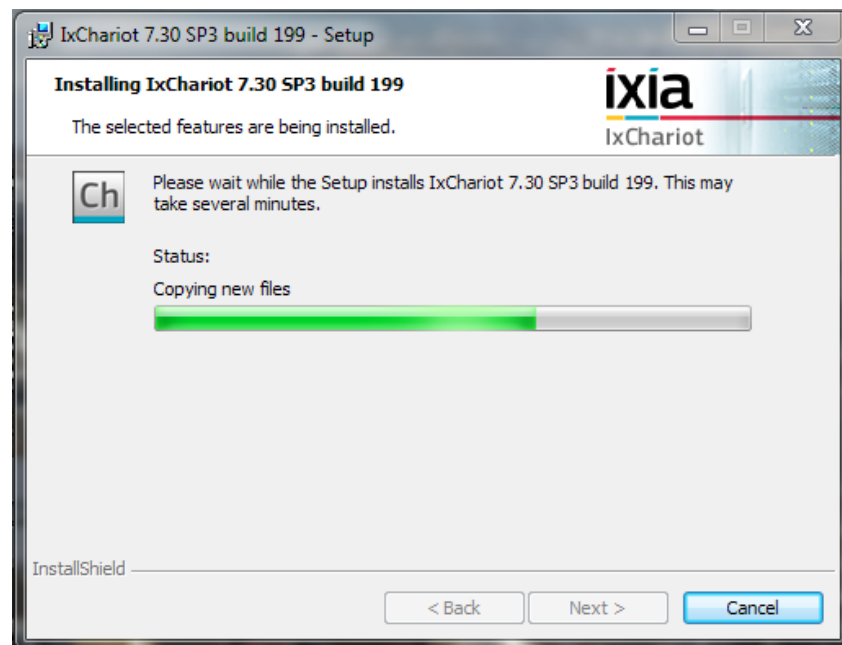
For a normal installation you only need to install the Console and the Endpoint. You may change the installation directory if you must. Click on [Next >].



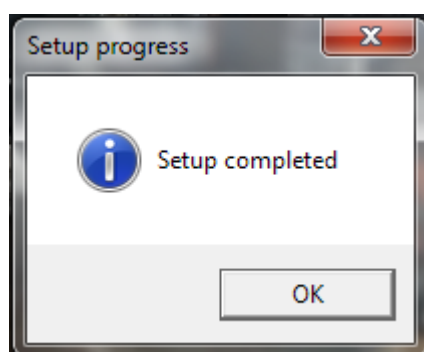
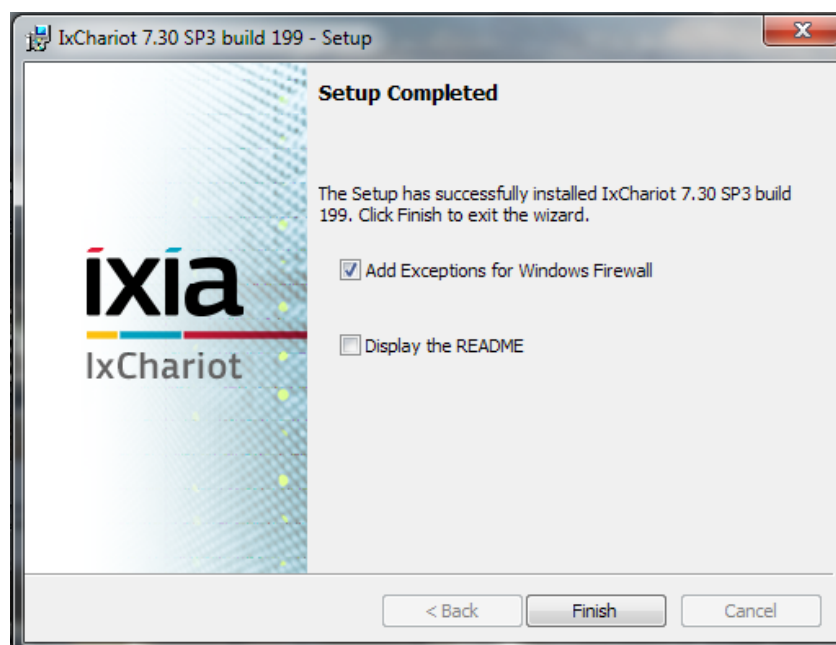
The Setup is ready. Click on [Next >].



Click on [Next >] and the installation starts.



At the end the installer will ask to "Add Exceptions for the Windows Firewall". You must enable this option to be able to use the software, if your Windows firewall is active. Finally click [Finish]. The installation is complete.



1.2.1.2 IxChariot Console Registration

IxChariot Console registration

You must register your copy of IxChariot. You can either use a normal or a floating license. There are two possible ways to perform this.

The first and easier way is a direct online registration. In this case the system on which you installed IxChariot Console requires access to the Internet (also possible via proxy).

The second way is an offline registration using another system with internet access.

Old versions are licensed using the IXIA Registration Utility (IRU). Beginning with version **7.30 SP3** IXIA is using a **new licensing** tool called IXIA License Utility (ILU).

Both variants are documented in the following chapters.

1.2.1.2.1 Versions before 7.30 SP3

Please use this guide to register IxChariot prior version 7.30 SP3.

1.2.1.2.1.1 Online Registration

Online registration

Go to Start > Programs > Ixia > Licensing > IRU to open the Ixia Registration Utility (IRU).



Choose "Register" and click on [Start].



Enter your "Registration Number" and the "Password". You should have received them by either NETCOR or the Ixia support. Click on [Next].

Ixia License Registration

Steps

1. Enter your Ixia registration number.

Please enter your registration number and password:

Registration Number: 500139150NS

Password: *****

You should have received an Ixia registration number and password from licensing@ixiacom.com. If you have not received a registration number, please contact the Ixia registration desk at +1.818.871.1800 or registrations@ixiacom.com.

Help Back Next Cancel

Choose "localhost" if you want to register the IxChariot Console to the local machine. Your product features are shown in the list. Click on [Next].

Ixia License Registration

Steps

1. Enter your Ixia registration number.
2. **Enter your computer name.**

This license allows these features to be used on a particular computer. Please enter the name or IP address of the computer.

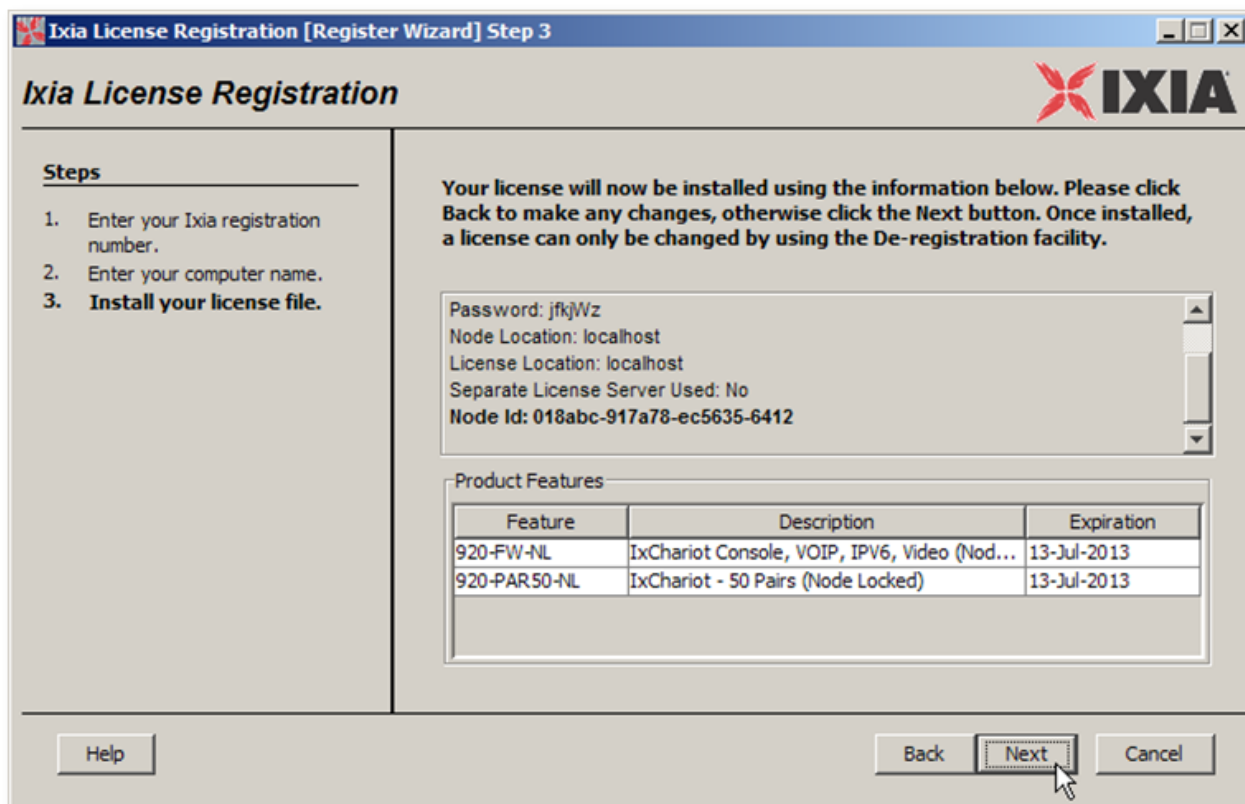
Name or IP address:

Product Features

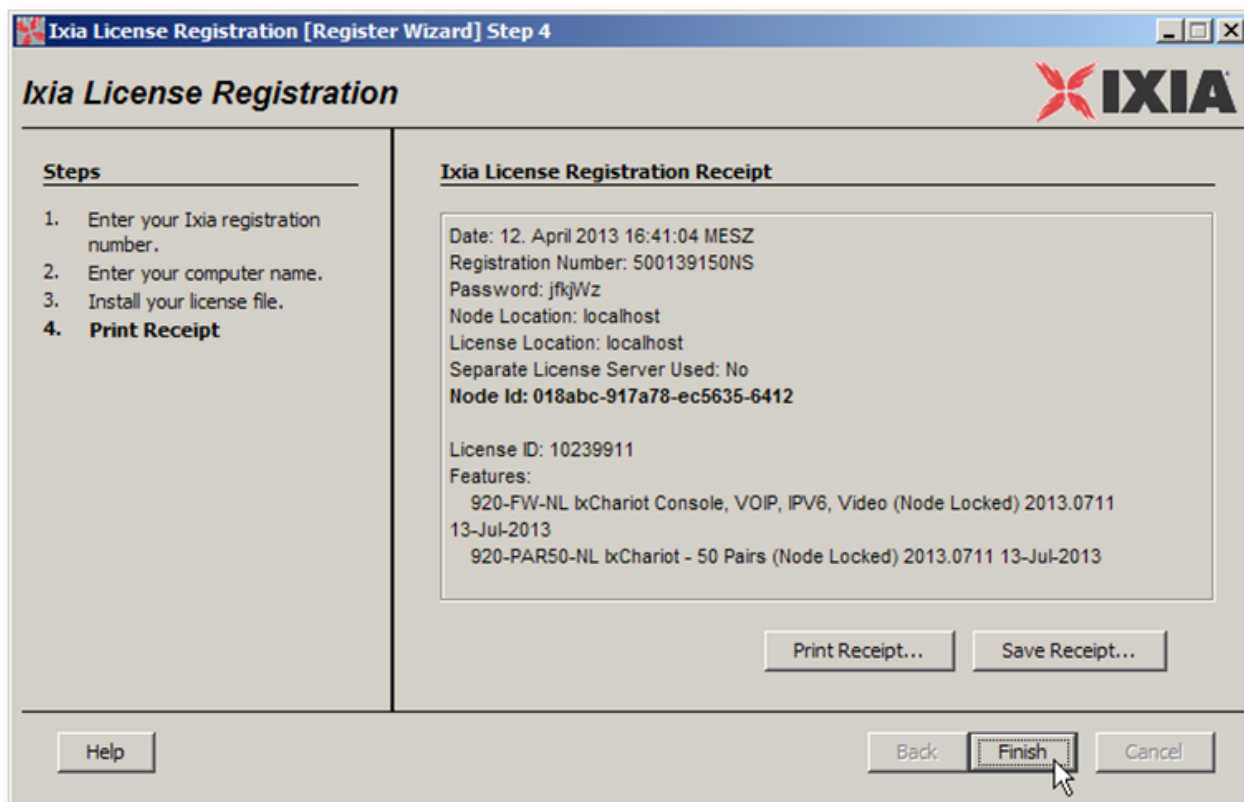
Feature	Description	Expiration
920-FW-NL	IxChariot Console, VOIP, IPV6, Video (Node Locked)	13-Jul-2013
920-PAR50-NL	IxChariot - 50 Pairs (Node Locked)	13-Jul-2013

Buttons: Help, Back, Next, Cancel

Click on [Next] to continue.



Your IxChariot Console is now licensed. Click on [Finish].



Important: Please close IxChariot.

Any open IxChariot consumes a license. In that case, GeNiEnd2End is unable to use that license at the same time, so please remember to close any open IxChariot Consoles at any time.

1.2.1.2.1.2 Offline Registration

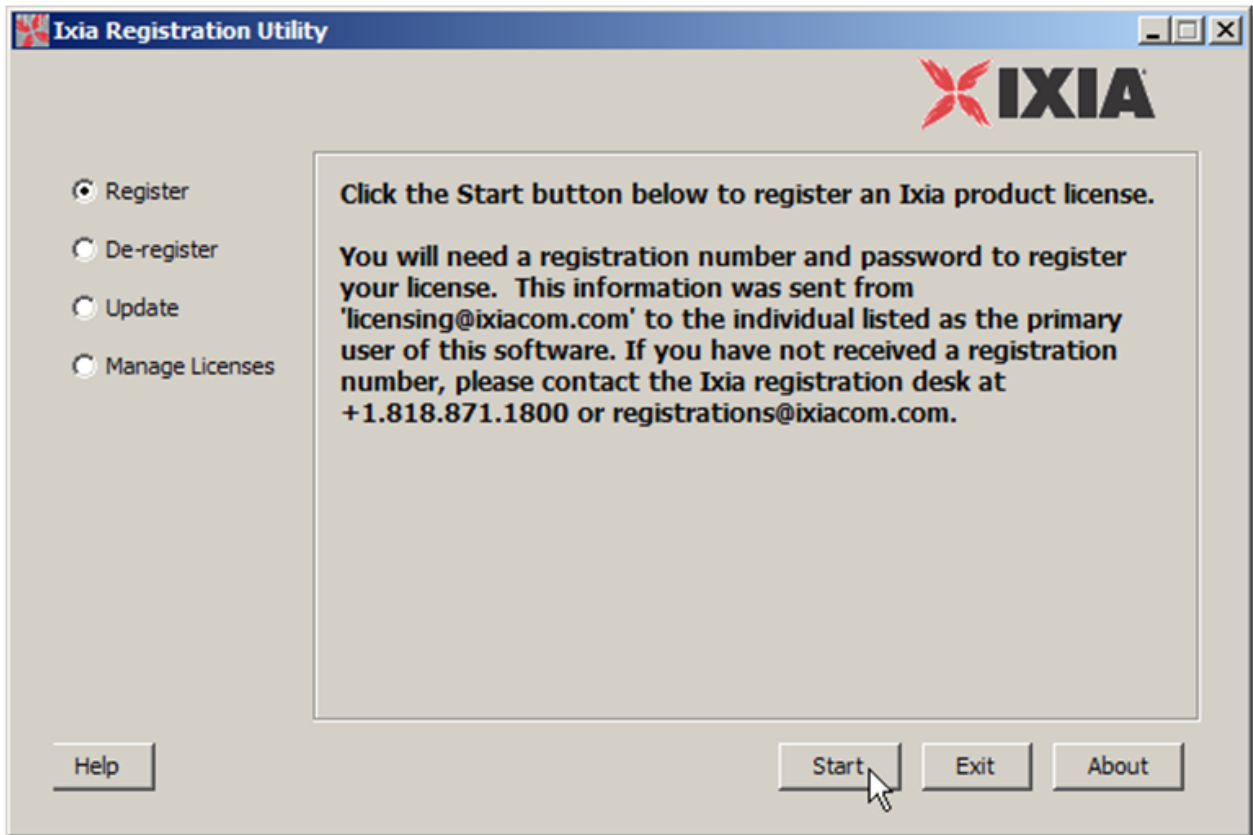
Offline registration

In case the system on which you installed IxChariot Console does not have internet access, you can register your IxChariot Console using the offline registration. You're going to need another system with internet access though.

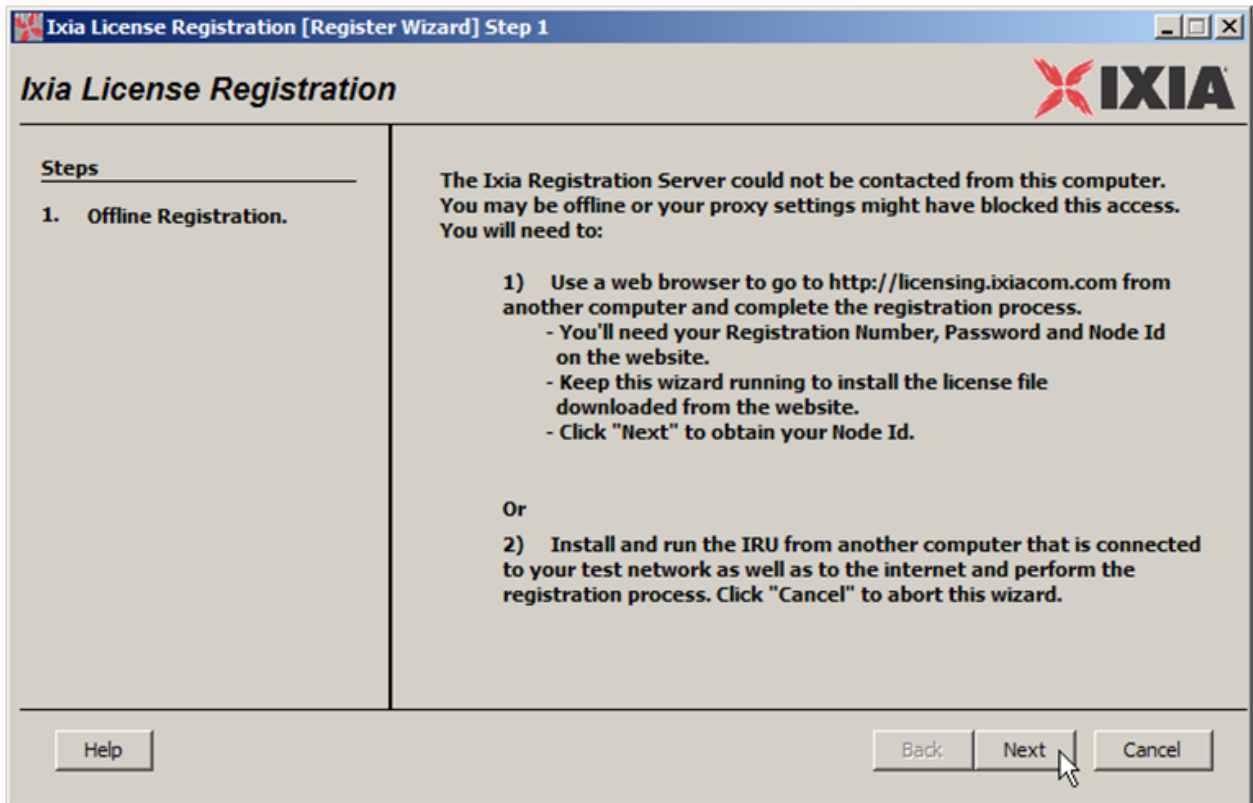
Go to Start > Programs > Ixia > Licensing > IRU to open the Ixia Registration Utility (IRU).



Choose "Register" and click on [Start].



Click on [Next] to start the offline registration.



Enter your "Registration Number" and your "Password". Click on [Next].

Ixia License Registration

Steps

1. Offline Registration.
2. Enter your Ixia registration number.

Please enter your registration number and password:

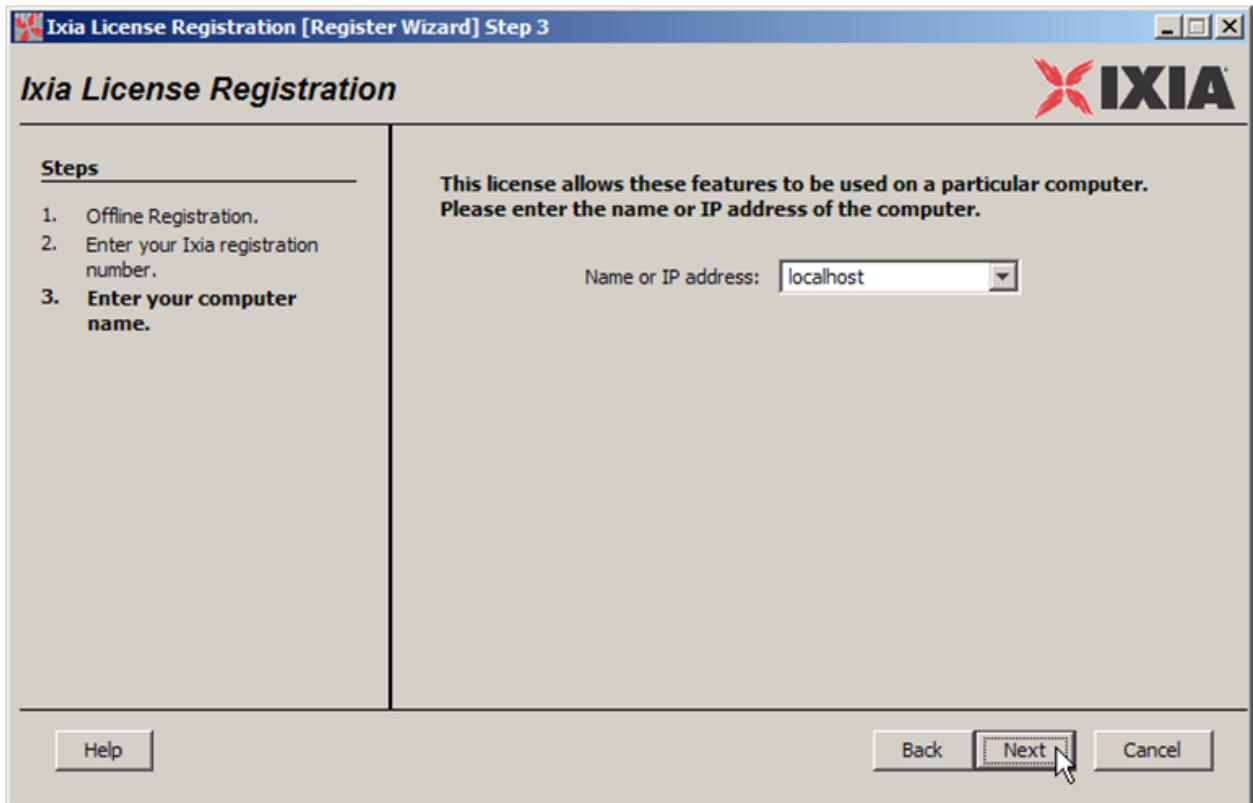
Registration Number:

Password:

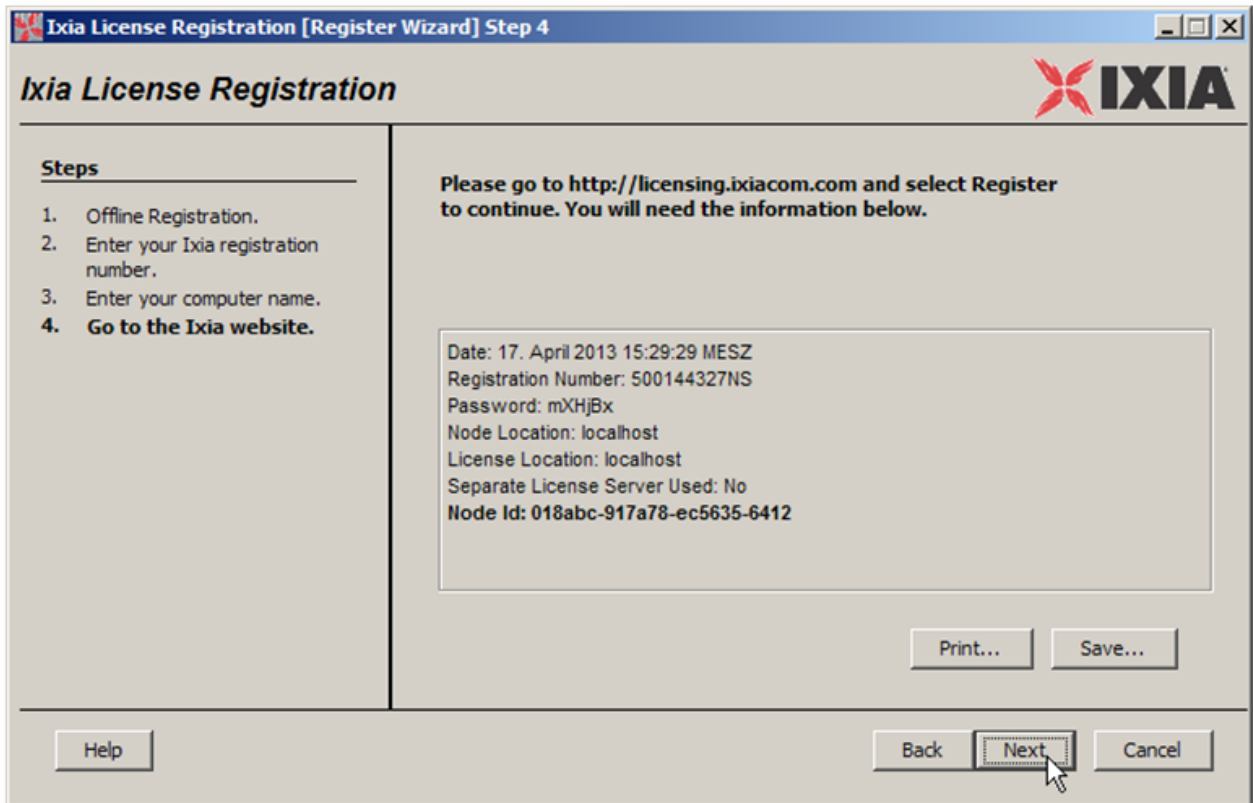
You should have received an Ixia registration number and password from licensing@ixiacom.com. If you have not received a registration number, please contact the Ixia registration desk at +1.818.871.1800 or registrations@ixiacom.com.

Help Back Next Cancel

Type "localhost" and click on [Next].



Copy or note your Node ID. This ID is important, so don't lose it! Click on [Next].



Open a web browser on a machine with internet access and browse to <http://licensing.ixiacom.com/>
Click on "Register IxChariot".



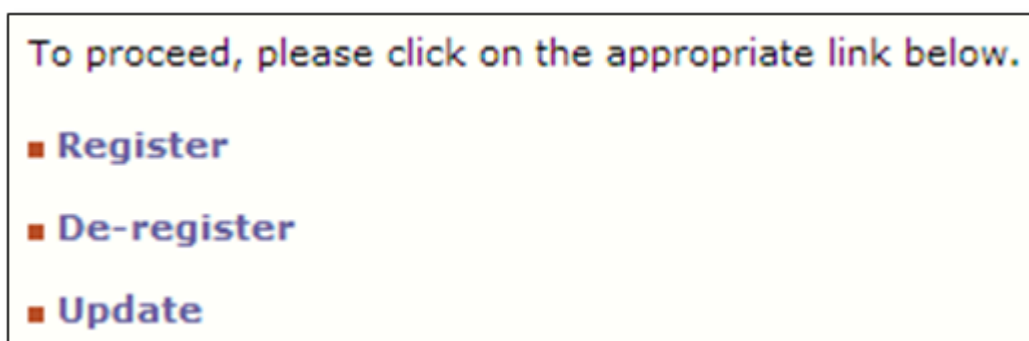
Choose "Register IxChariot Version 6.10 or Later".



Please choose one of the following.

- Register IxChariot Version 6.10 or Later
- Register All Other Versions

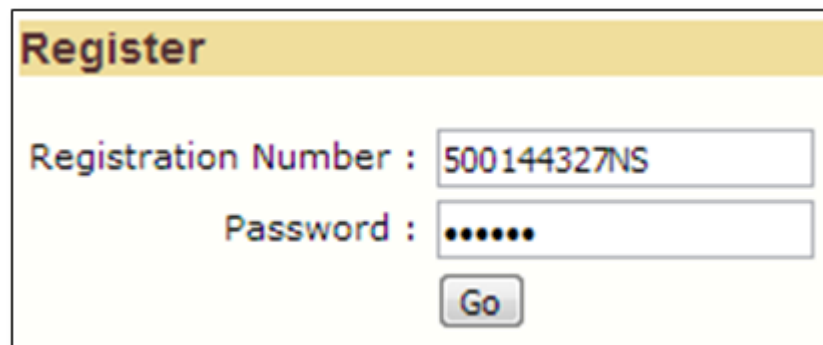
Click on "Register".



To proceed, please click on the appropriate link below.

- Register
- De-register
- Update

Enter your registration information.



Register

Registration Number :

Password :

Enter your node ID and click on "Get License File" to download your license. Save the license file. You must copy the license file to your machine where the IxChariot Console is installed. Use a USB stick or a mounted network drive or something similar for this step.

Register

Registration No: 500144327NS

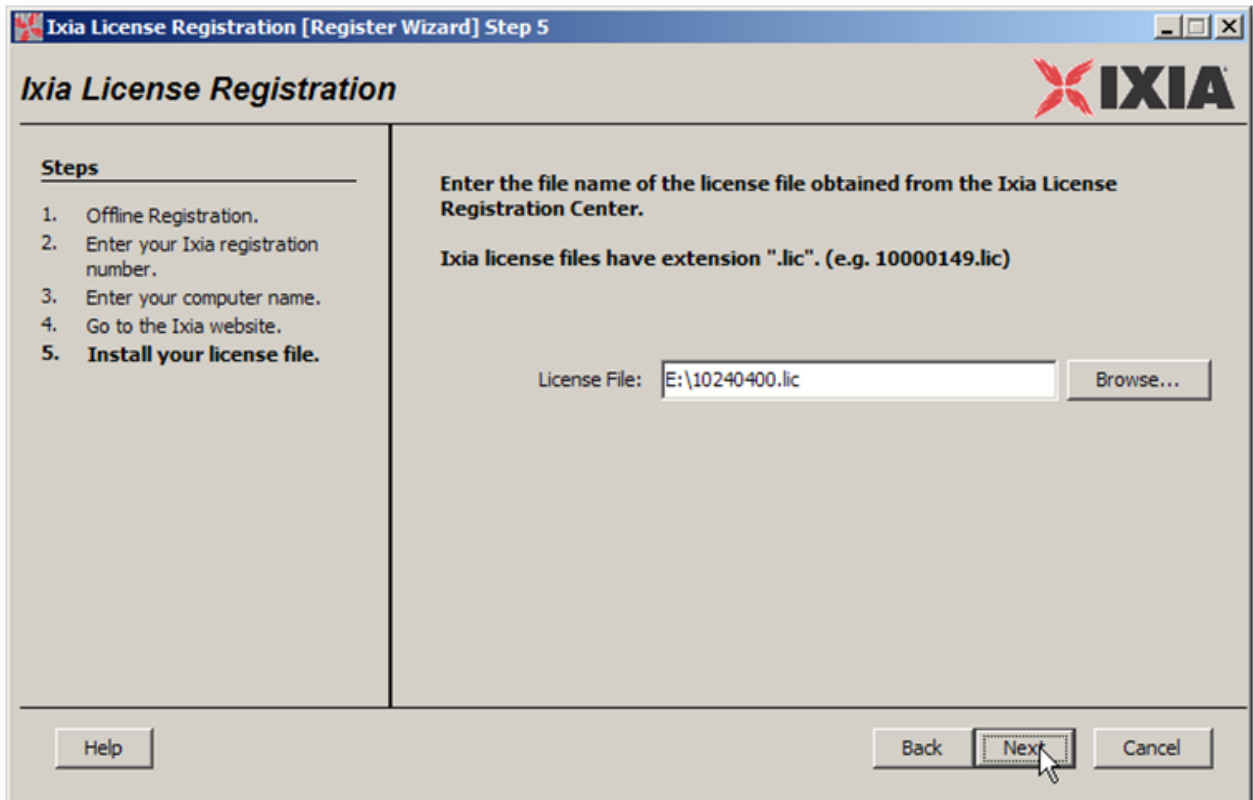
Registered To:
Henrik Wahsner
Henrik_Wahsner@netcor.de
NETCOR GmbH (8111)
UNKNOWN
UNKNOWN ,
DE

Product/Features:
IxChariot-NL Version 7.10 SP3

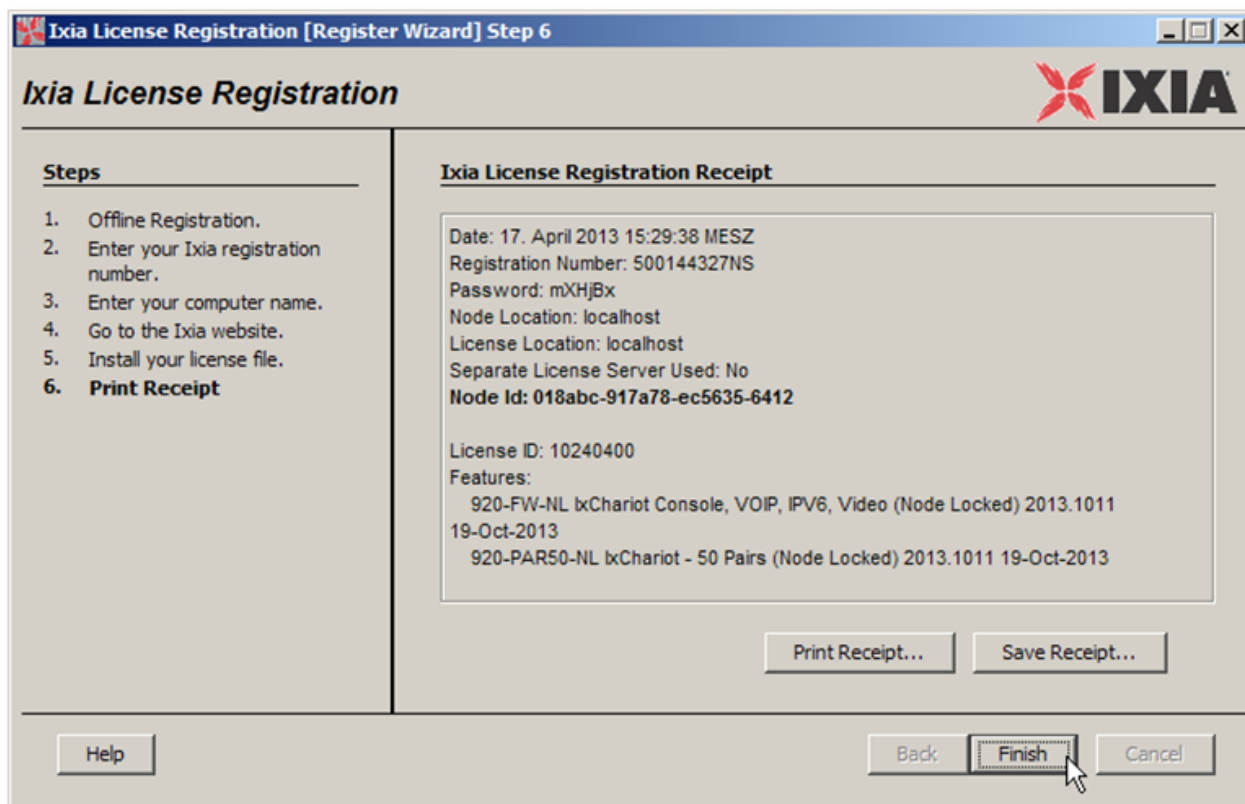
920-FW-NL IxChariot Console, VOIP, IPV6, Video (Node Locked)
920-PAR50-NL IxChariot - 50 Pairs (Node Locked)

Enter Node Id :

Back on your machine with the IxChariot Console, open the downloaded file and click on [Next].



Your IxChariot Console is now licensed. Click on [Finish].



Important: Please close IxChariot.

Any open IxChariot consumes a license. In that case, GeNiEnd2End is unable to use that license at the same time, so please remember to close any open IxChariot Consoles at any time.

1.2.1.2.1.3 Floating License Registration

Floating license registration

It's possible to register your IxChariot installation against a local license server to borrow licenses dynamically as required, so multiple systems can use the same IxChariot Console license at different times.

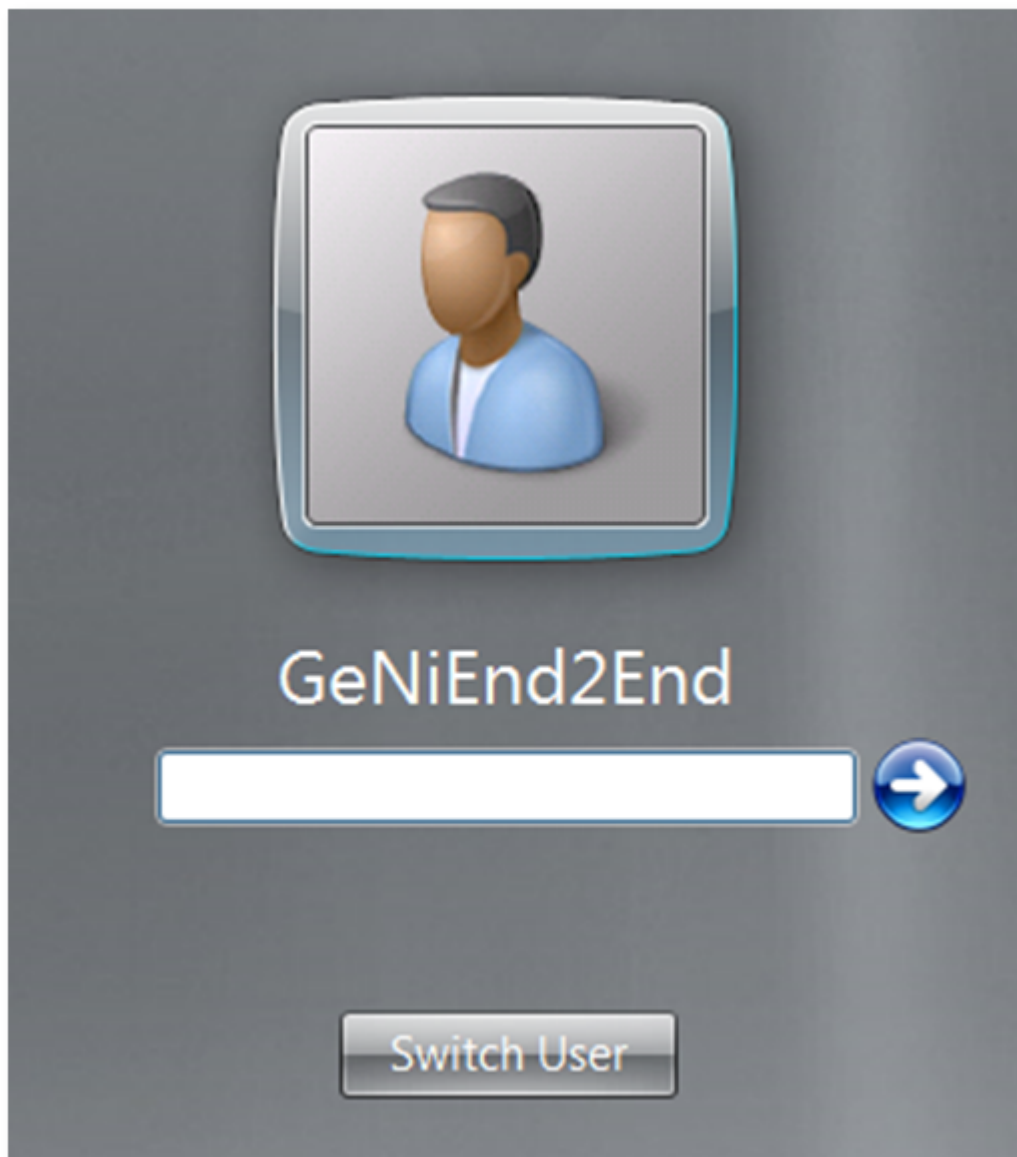
The license server is installed automatically at the Console installation. In case you'd like to run a dedicated one, please refer to the IxChariot Manual.

Hold the SHIFT-Key, then do a right click on IxChariot, select "Run as ..." on the context menu and enter the credentials for the GeNiEnd2End user.

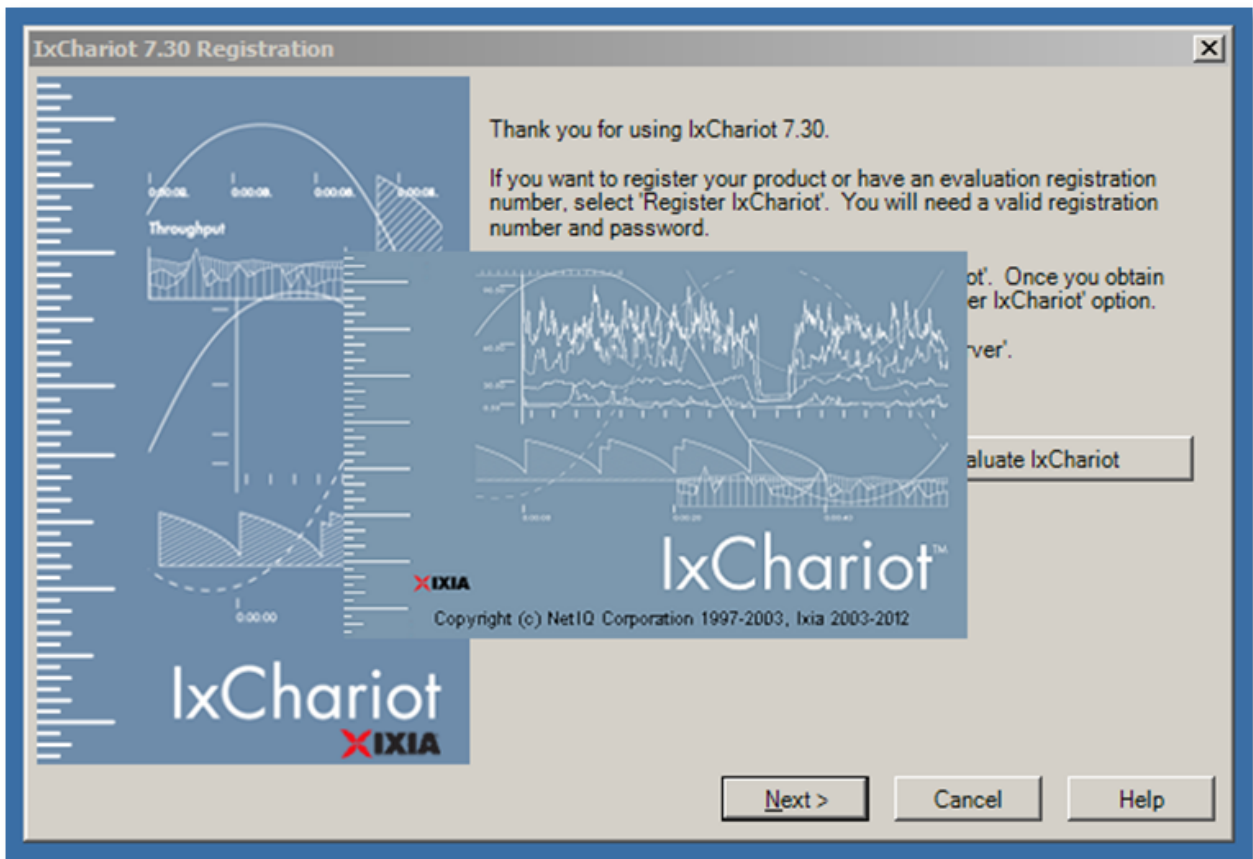
Alternatively, log in as the GeNiEnd2End user.

You can find the standard credentials at [Security Information](#)⁹³.

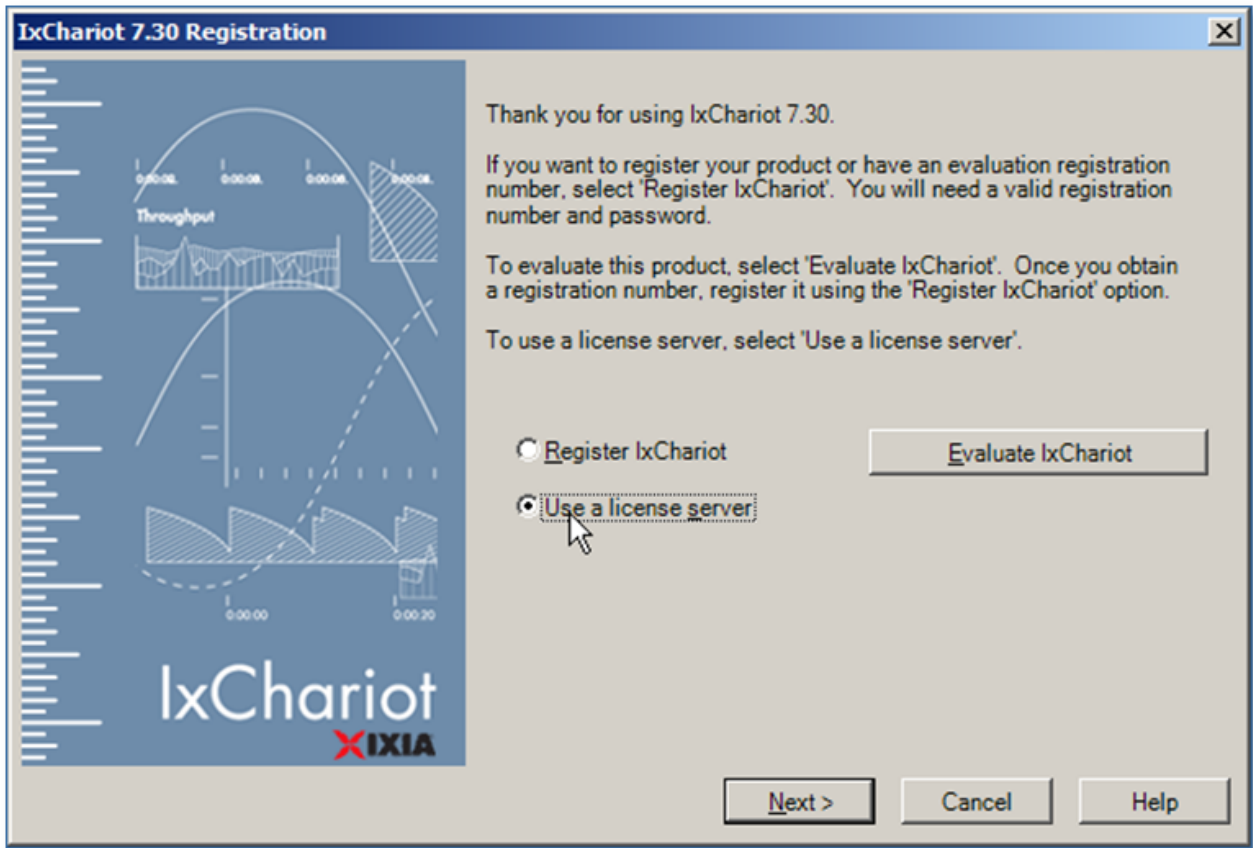
Please change the password for your own safety!



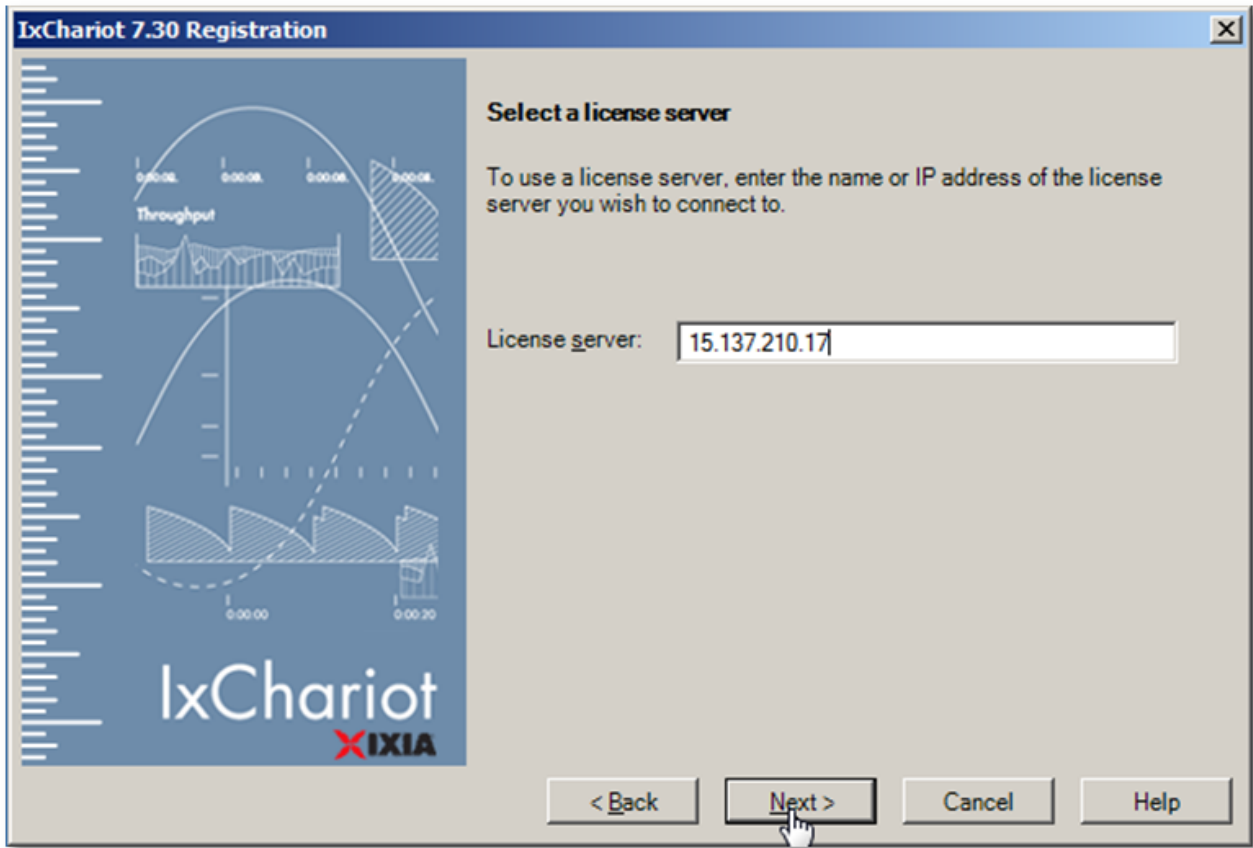
To set the floating license start IxChariot go to
Start > All Programs >IxChariot >IxChariot



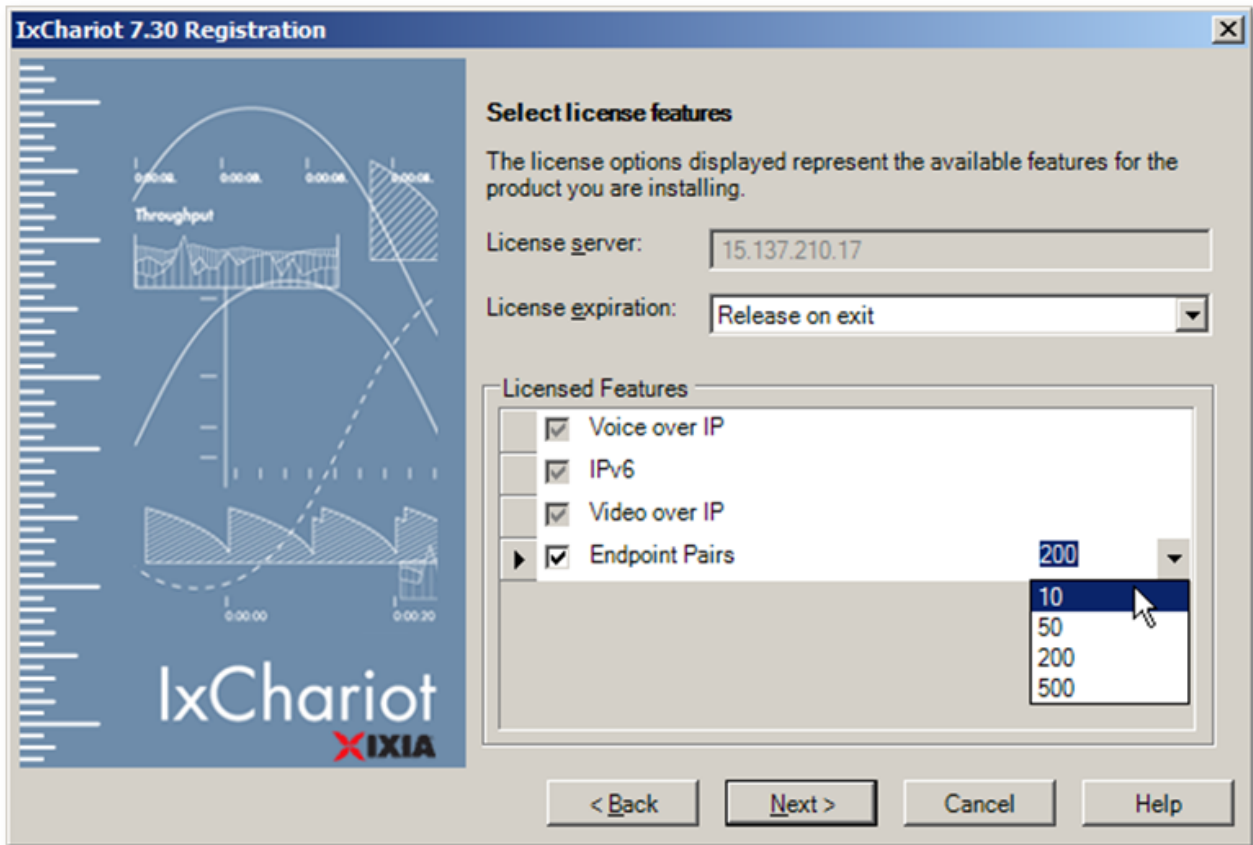
Click in the registration window to see the options.
Select "Use a license server", then click [Next].



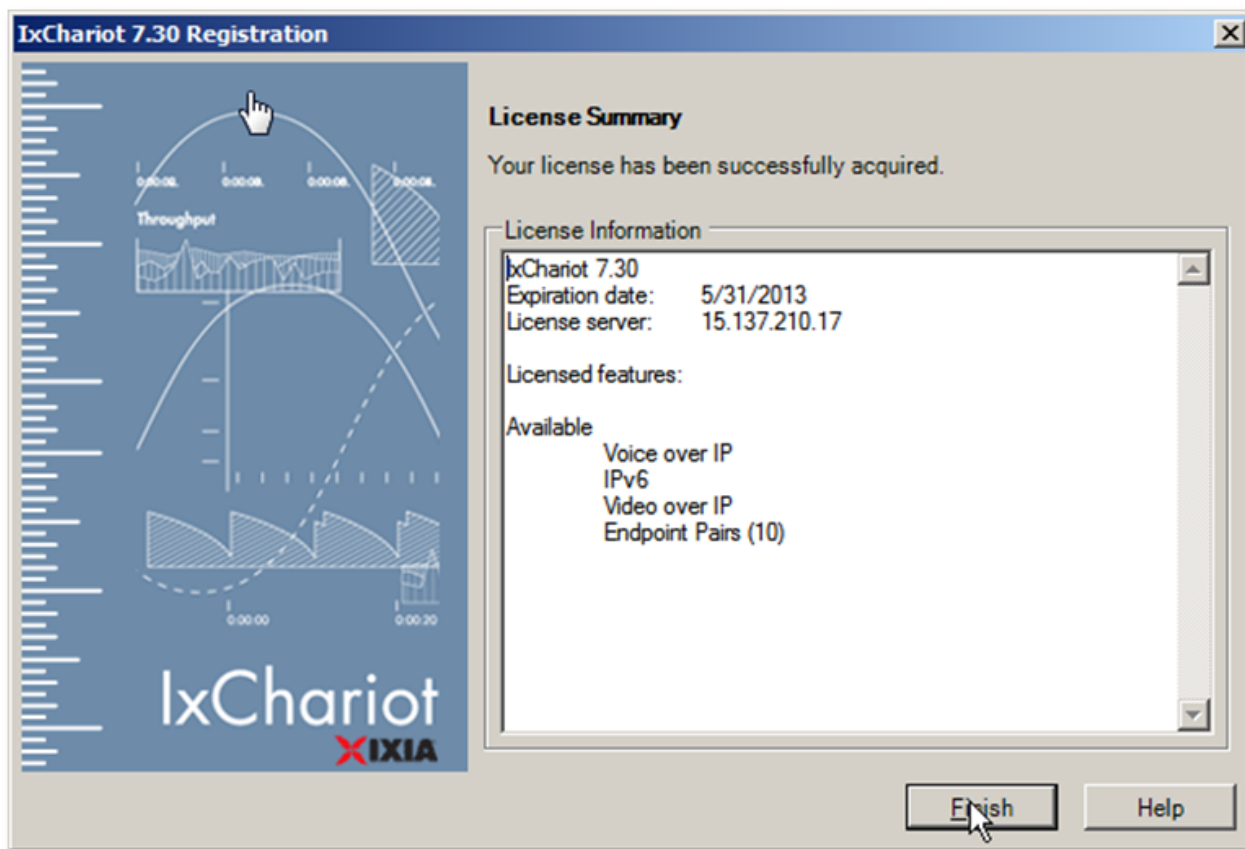
Please insert the IP of your Ixia IxChariot license server into the input field, then click [Next].



Please select "Release on exit" in the "License expiration" field and how many (in steps of 10) "Endpoint Pairs" Ixia IxChariot can register on the license server.



Finally, the license information is being displayed.
Click [Finish] to finish the registration.



Important: Please close IxChariot.

Any open IxChariot consumes a license. In that case, GeNiEnd2End is unable to use that license at the same time, so please remember to close any open IxChariot Consoles at any time.

1.2.1.2.1.4 De-registration of the IxChariot license

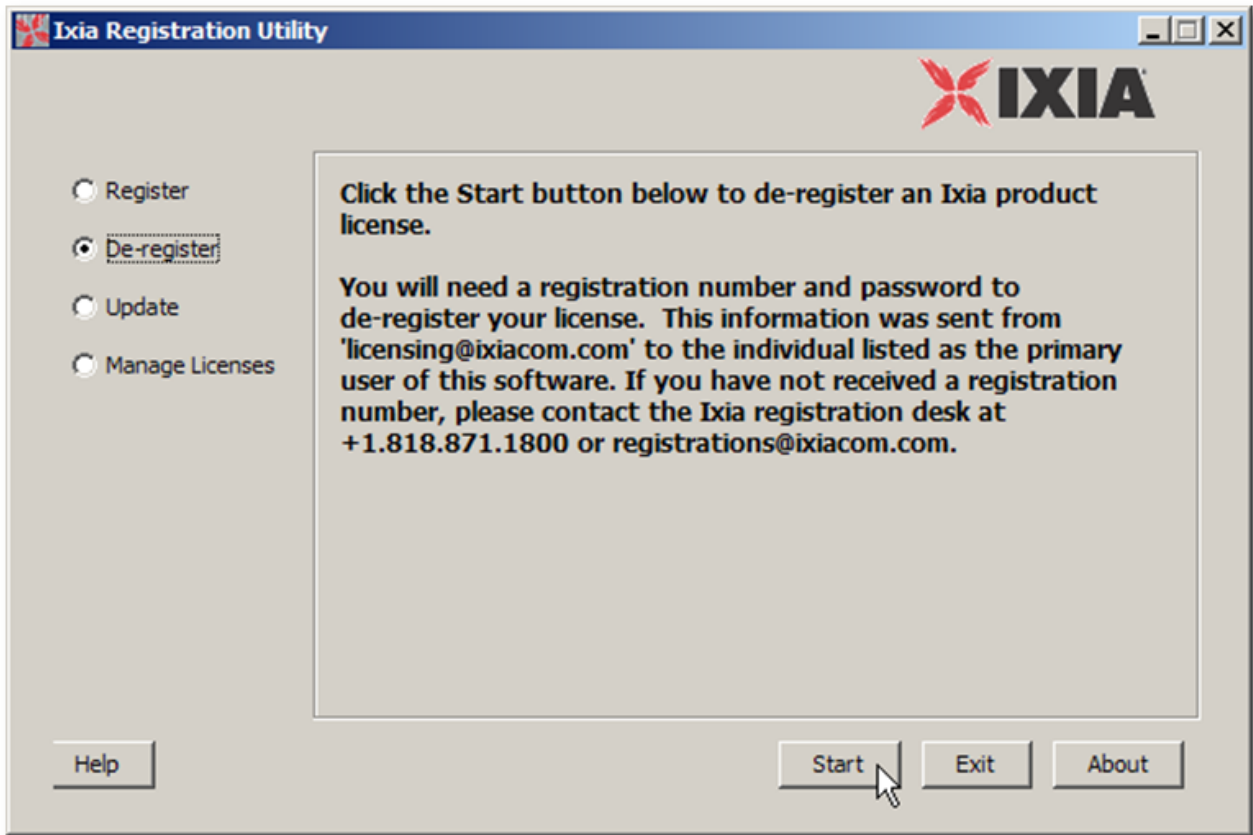
De-registration of your Ixia IxChariot license

If you want to move the IxChariot Console, deinstall or reinstall your system, you must de-register your IxChariot license.

**Open the Ixia Registration Utility (IRU) using
Start > Programs > Ixia > Licensing > IRU.**



Select "De-register" and click on [Start] n.



Enter the license information and click [Next].

The screenshot shows a Windows-style dialog box titled "Ixia License Registration [De-register Wizard] Step 1". The window has a blue title bar with standard minimize, maximize, and close buttons. The main area is divided into two panes. The left pane, titled "Steps", contains a list with one item: "1. Enter your Ixia registration number." The right pane is titled "Please enter your registration number and password:" and contains two input fields. The "Registration Number" field is filled with "500139150NS". The "Password" field is filled with "*****". Below the input fields, there is a paragraph of text: "You should have received an Ixia registration number and password from licensing@ixiacom.com. If you have not received a registration number, please contact the Ixia registration desk at +1.818.871.1800 or registrations@ixiacom.com." At the bottom of the window, there are three buttons: "Help" on the left, and "Back", "Next", and "Cancel" on the right. A mouse cursor is pointing at the "Next" button.

Ixia License De-registration

Steps

1. Enter your Ixia registration number.

Please enter your registration number and password:

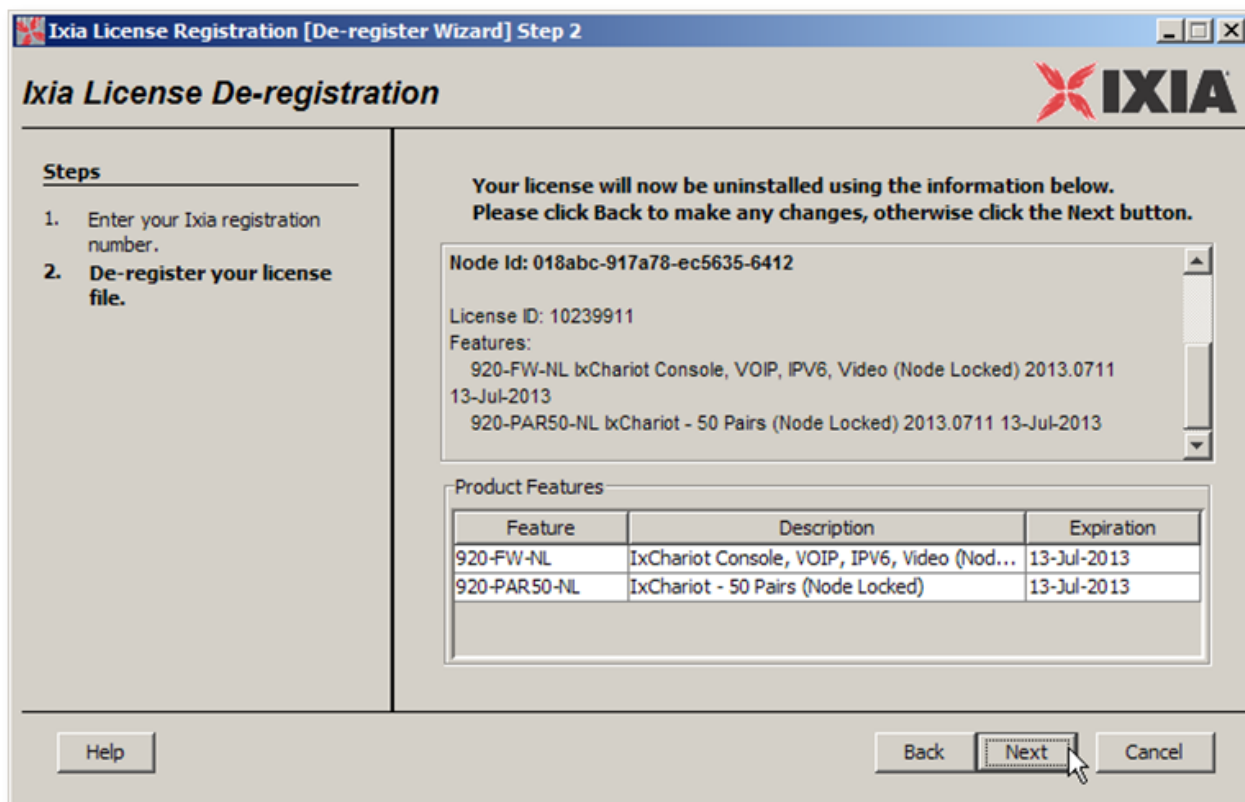
Registration Number:

Password:

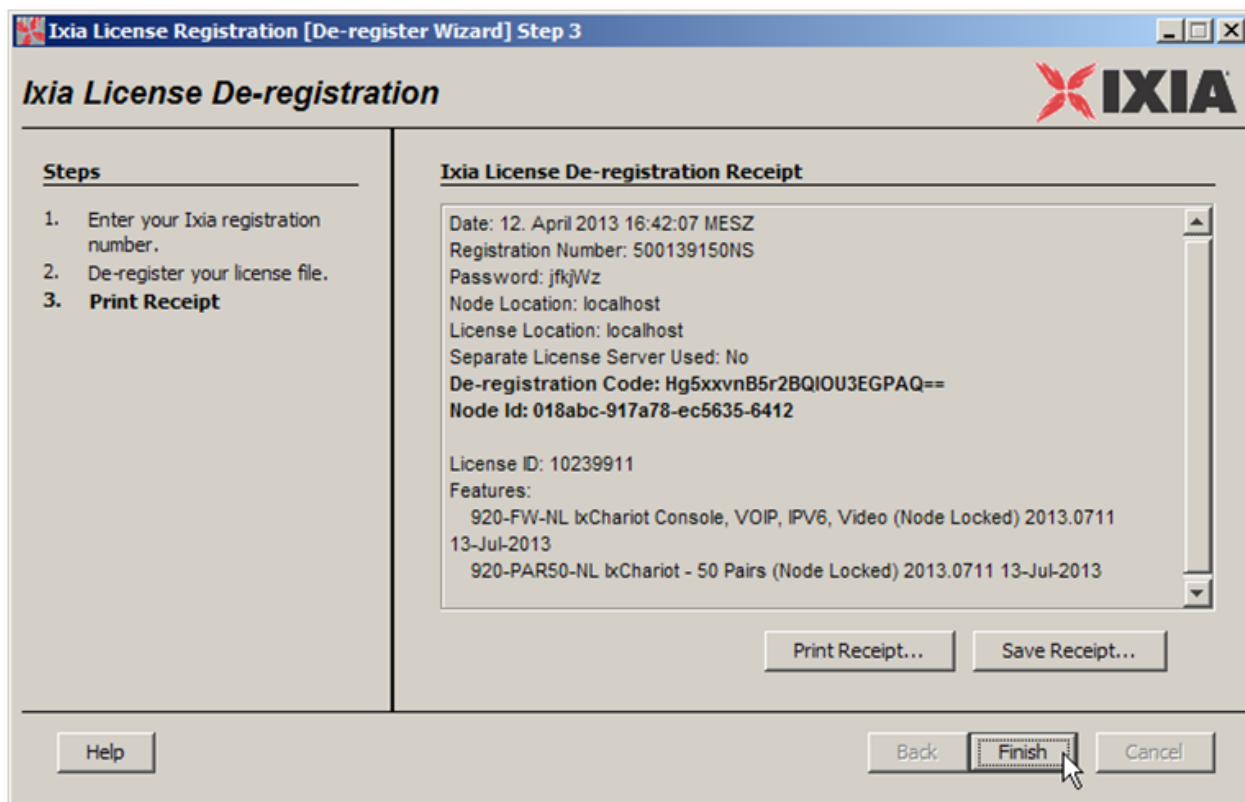
You should have received an Ixia registration number and password from licensing@ixiacom.com. If you have not received a registration number, please contact the Ixia registration desk at +1.818.871.1800 or registrations@ixiacom.com.

Help Back Next Cancel

Your product features are shown in the list. Click on [Next].



Your Ixia License is now released. Click on [Finish] to complete the de-registration.



1.2.1.2.1.5 De-registration of the IxChariot Floating license

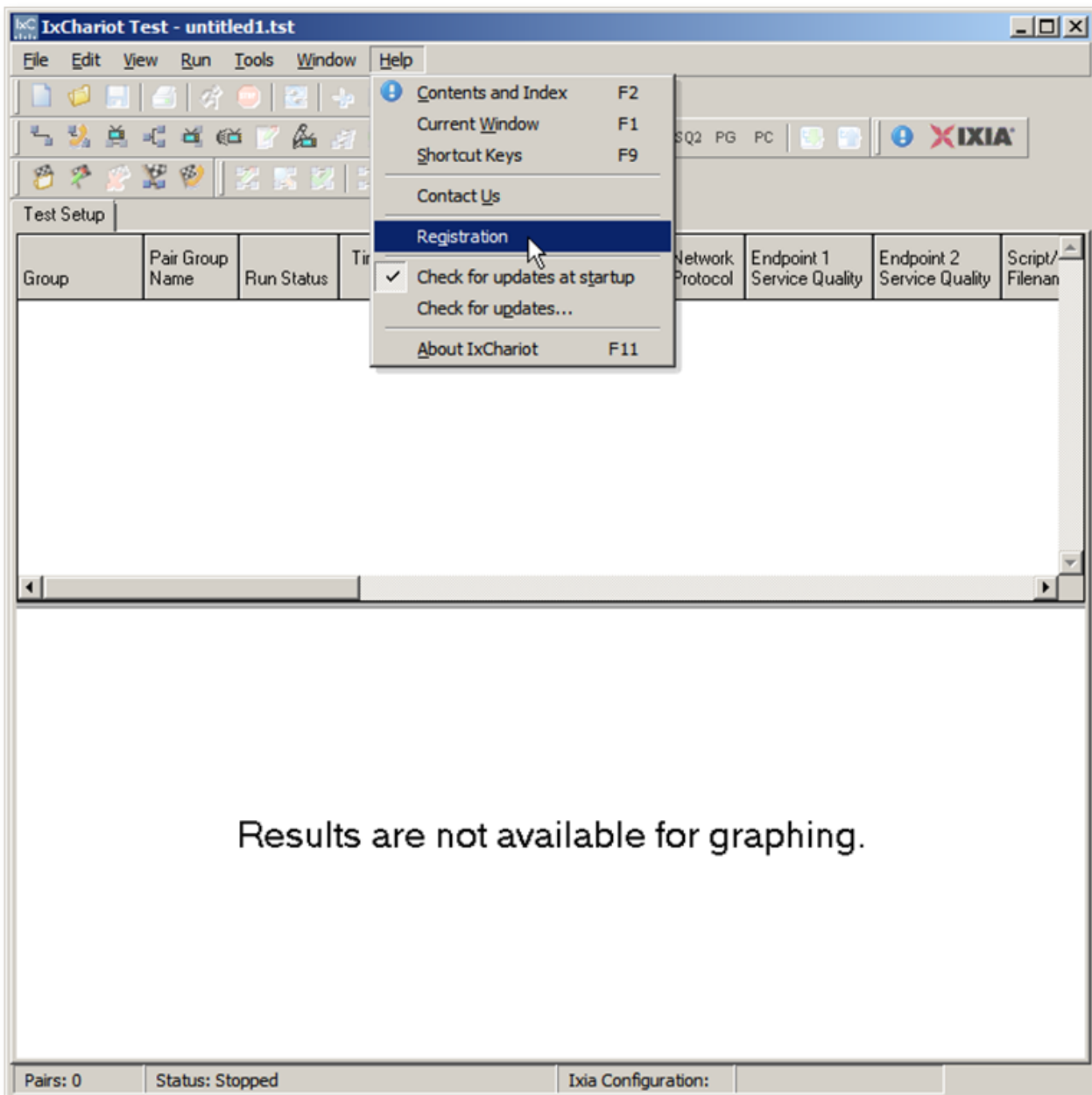
De-registration of your Ixia IxChariot Floating license

You must start IxChariot to release your Ixia IxChariot Floating license. Hold the Shift-Key, then perform a right click on IxChariot, select "Run as ..." on the context menu and enter the credentials for the GeNiEnd2End user.

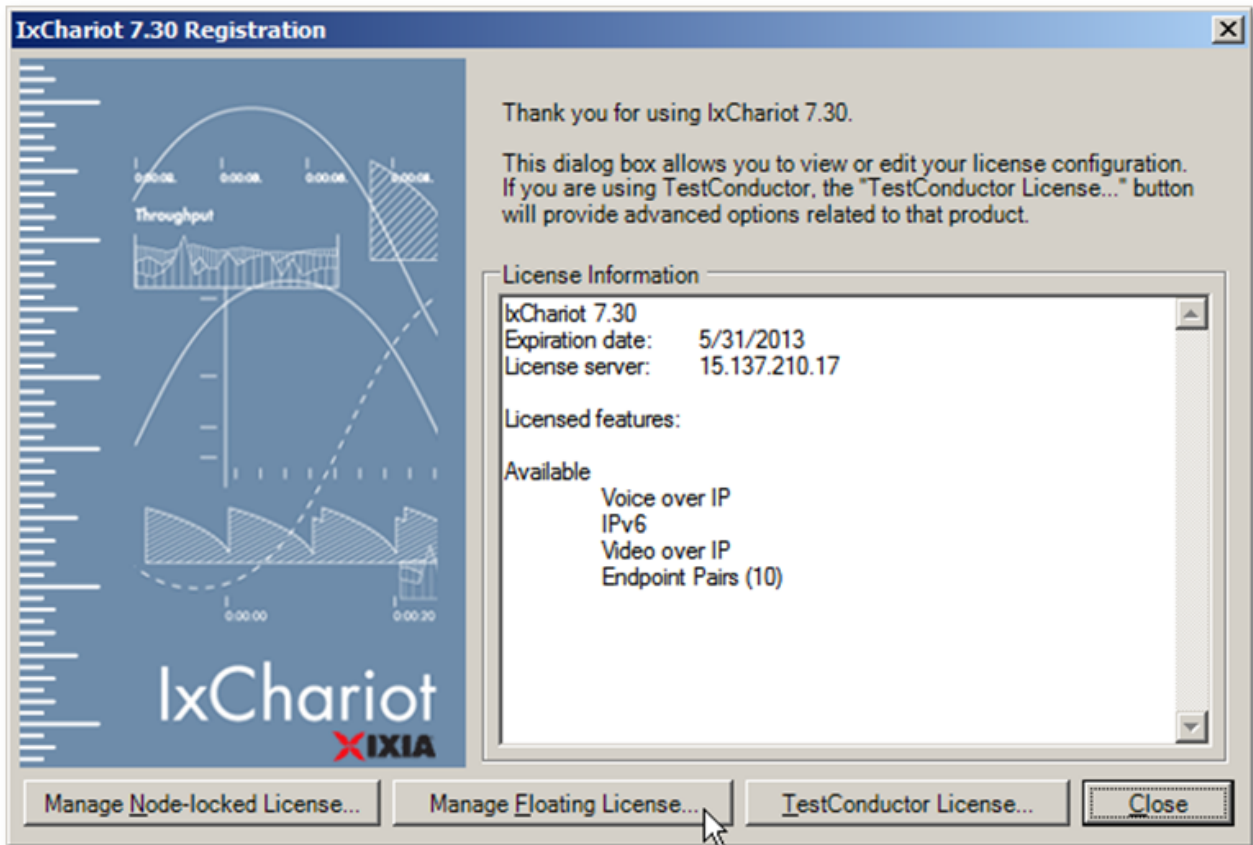
Alternatively, log in as the GeNiEnd2End user.

You can find the standard credentials at [Security Information](#)^[93].

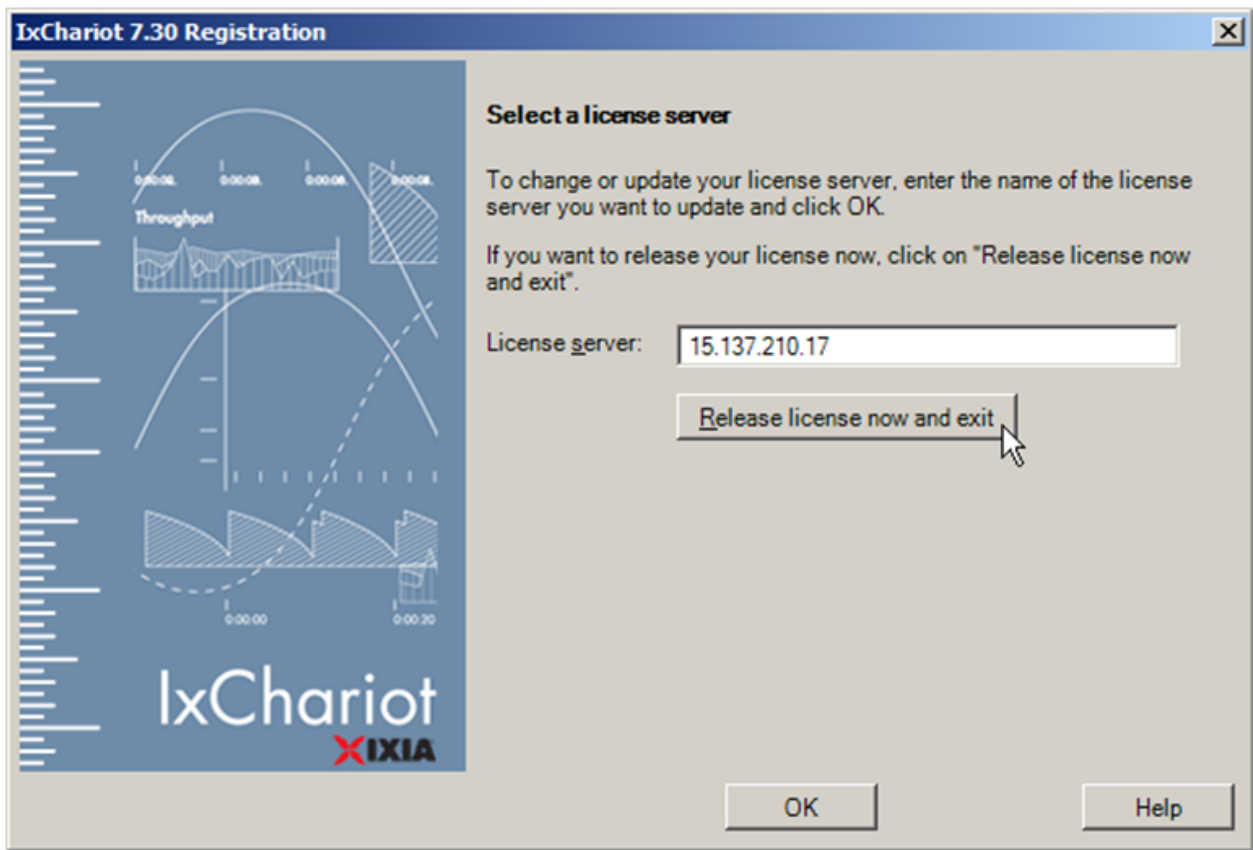
Go to Start > All Programs > IxChariot > IxChariot



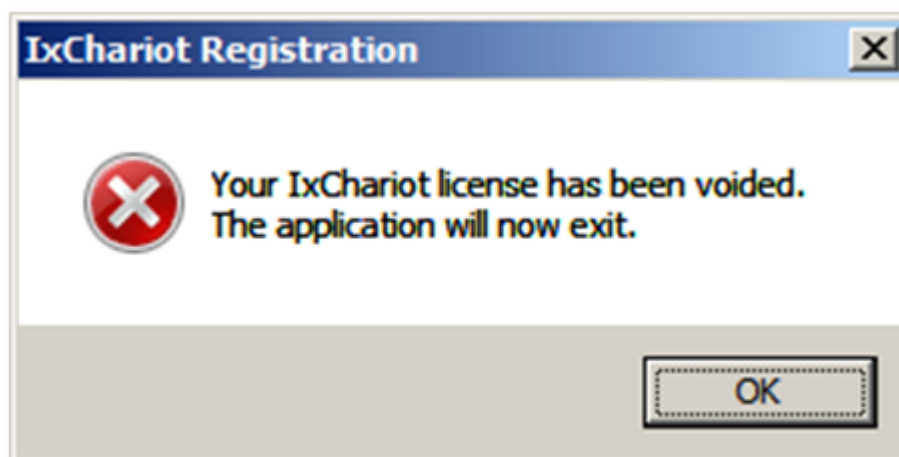
Click on Help > Registration.
In the upcoming window, click on [Manage Floating License...].



Ixia IxChariot displays the IP of your Ixia IxChariot Floating license server.



With a click on [Release license now and exit] the license will be released and Ixia IxChariot closes and your license has been released.



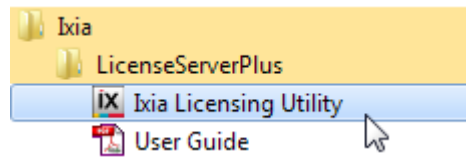
1.2.1.2.2 Version 7.30 SP3 and later

Please use this guide to register IxChariot version 7.30 SP3 or later.

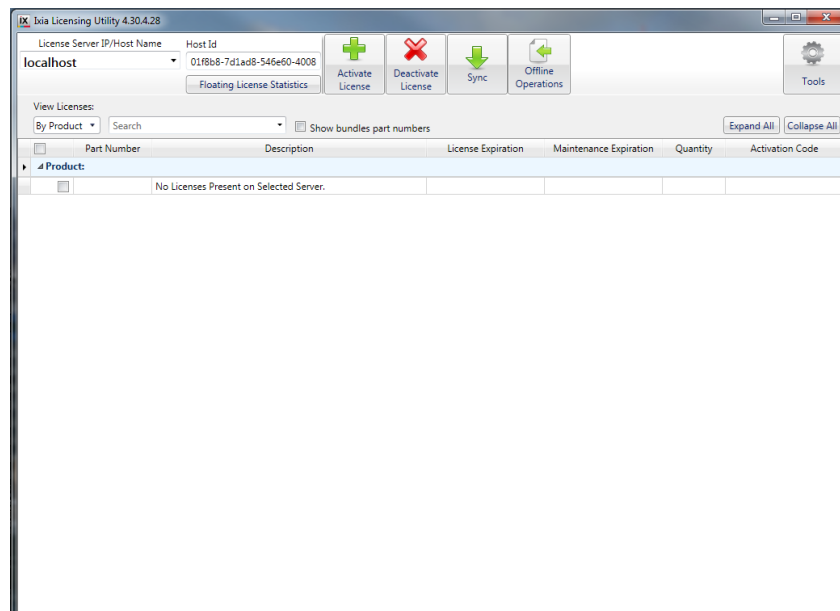
1.2.1.2.2.1 Online Registration

To open the Ixia Licensing Utility go to:

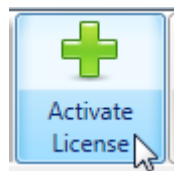
Start > Programs > Ixia > LicenseServerPlus > Ixia Licensing Utility



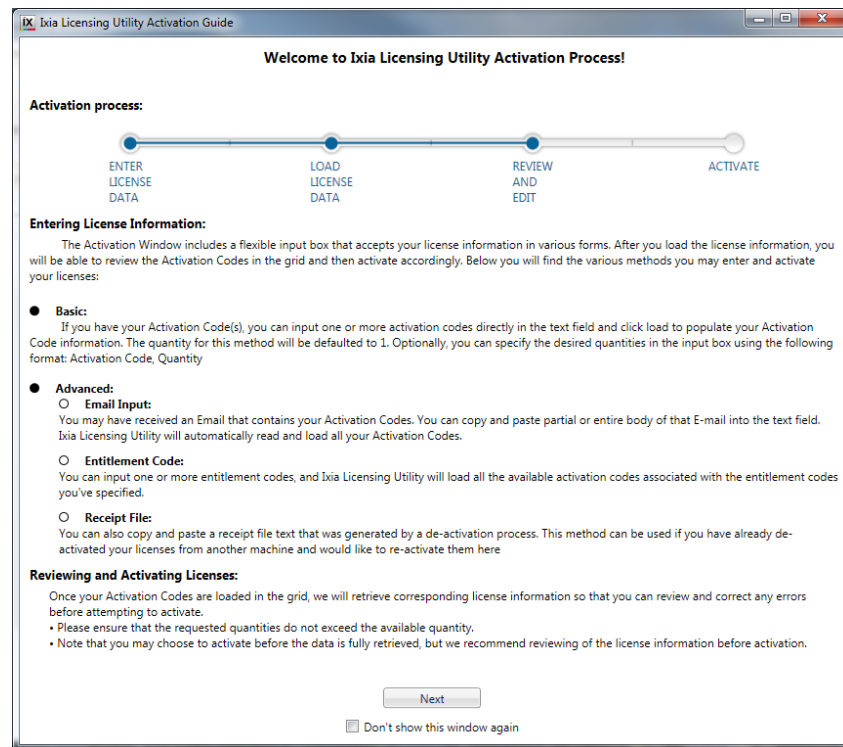
The Ixia Licensing Utility is a new tool, released with the Version 7.30 SP3 of IxChariot Console to manage the license of your IxChariot product.



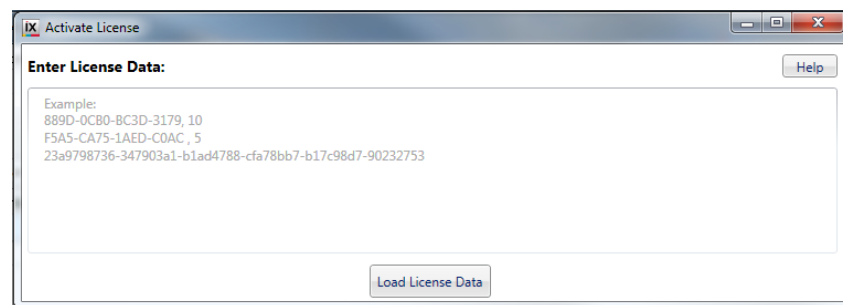
To activate a license click on "Activate License".



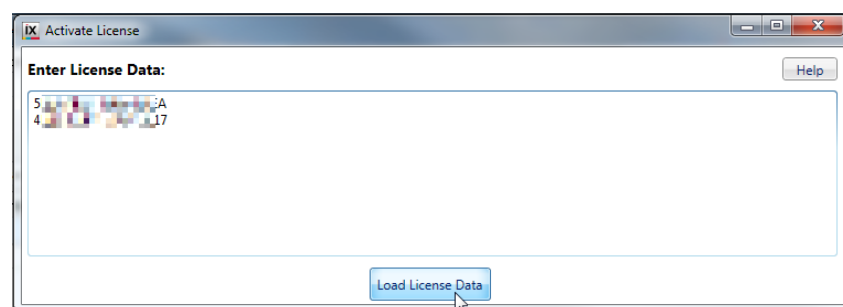
At the first start, a welcome screen will inform you about the Ixia Licensing Utility. You can click on "Don't show this window again". Click on [Next].



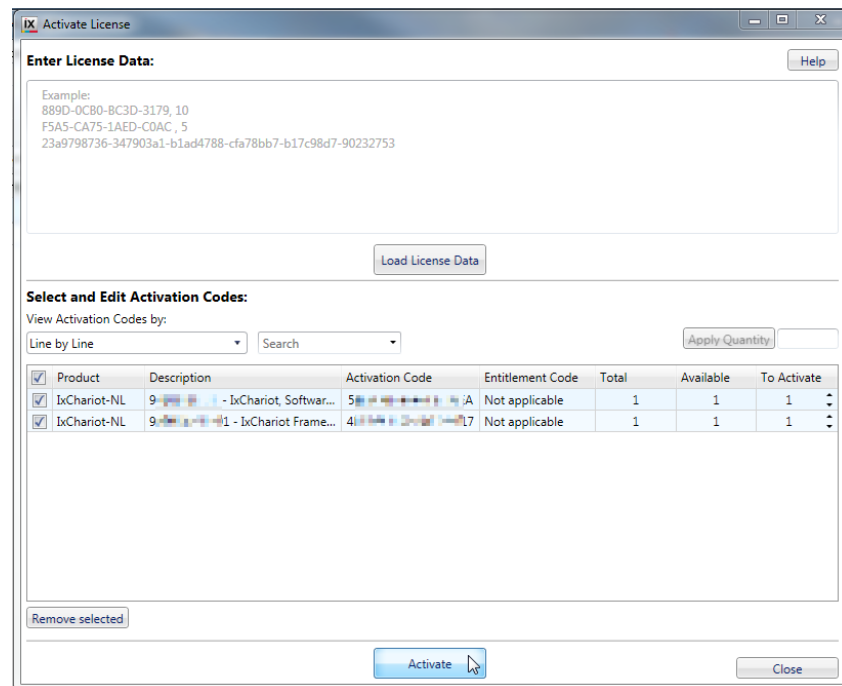
With the new Ixia Licensing Utility tool it's possible to activate more than one license.



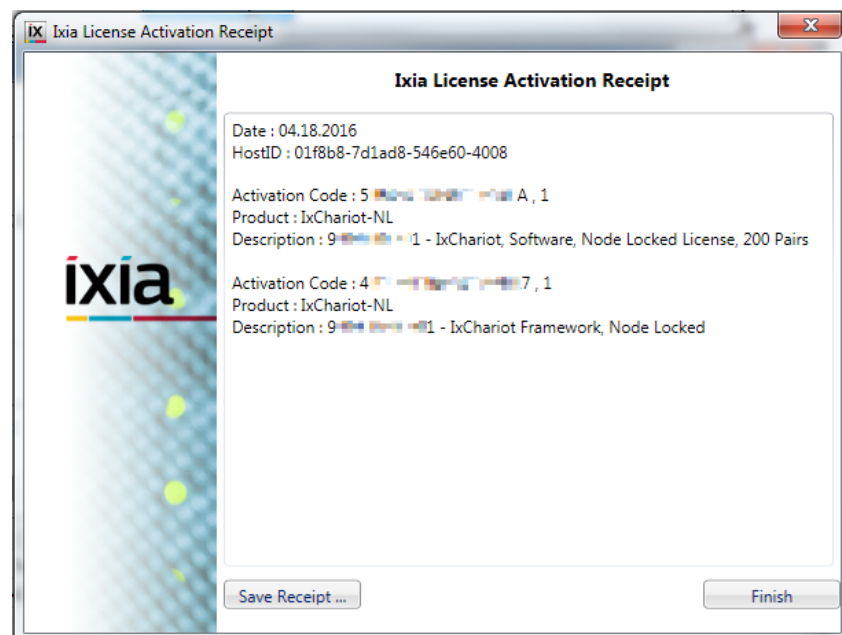
Enter your activation codes and click on [Load License Data].



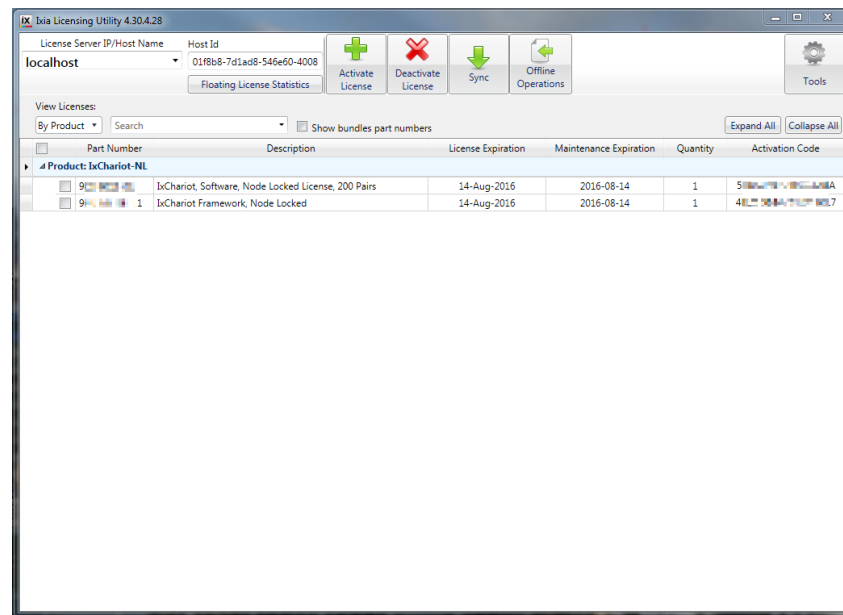
The Ixia Licensing Utility tool will get the information for this licenses and display you an overview. Mark all licenses and click on [Activate].



As final step it will show you your activation receipt.



From now on you can find your licenses in the overview of the Ixia Licensing Utility tool.



Important: Please close IxChariot.

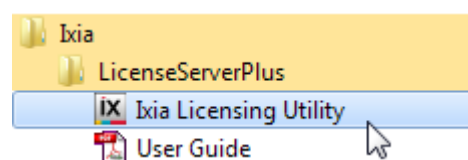
Any open IxChariot consumes a license. In that case, GeNiEnd2End is unable to use that license at the same time, so please remember to close any open IxChariot Consoles at any time.

1.2.1.2.2.2 Offline Registration

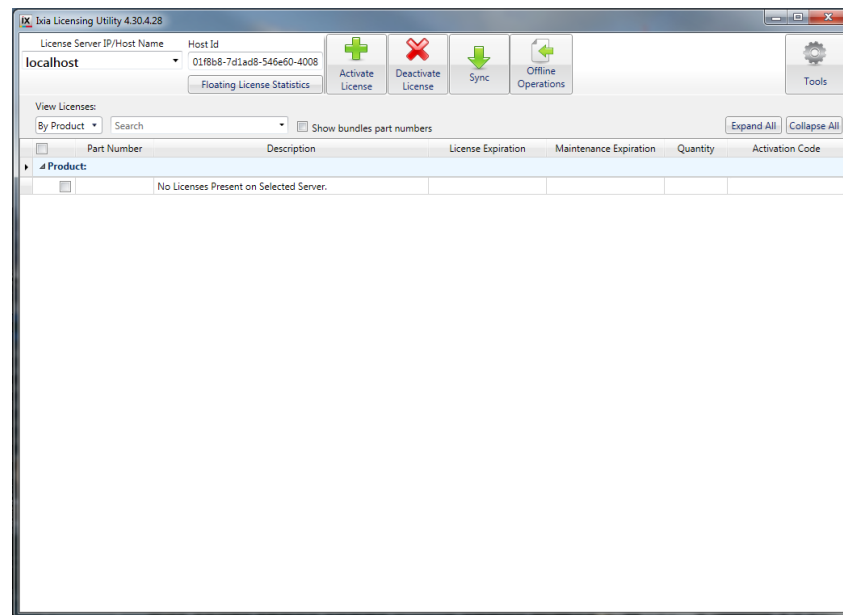
If your system has no connection to the Internet, you can use the Offline Operations of the Ixia Licensing Utility tool to activate your IxChariot product.

To open the Ixia Licensing Utility go to:

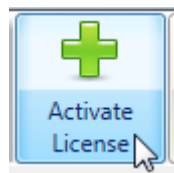
Start > Programs > Ixia > LicenseServerPlus > Ixia Licensing Utility

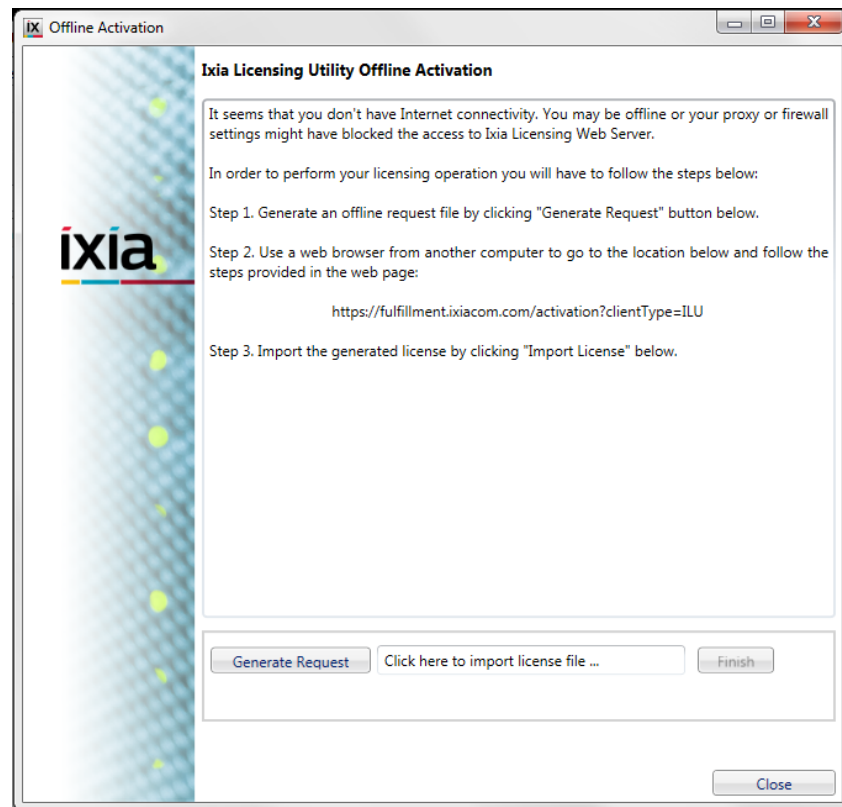


The Ixia Licensing Utility is a new tool, released with the Version 7.30 SP3 of IxChariot Console to manage the license of your IxChariot product.

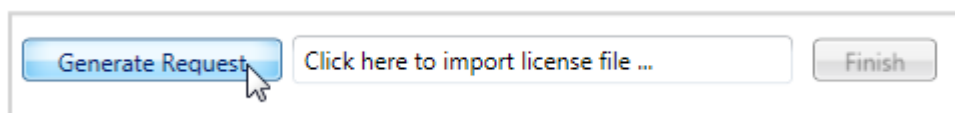


To activate a license click on "Activate License".

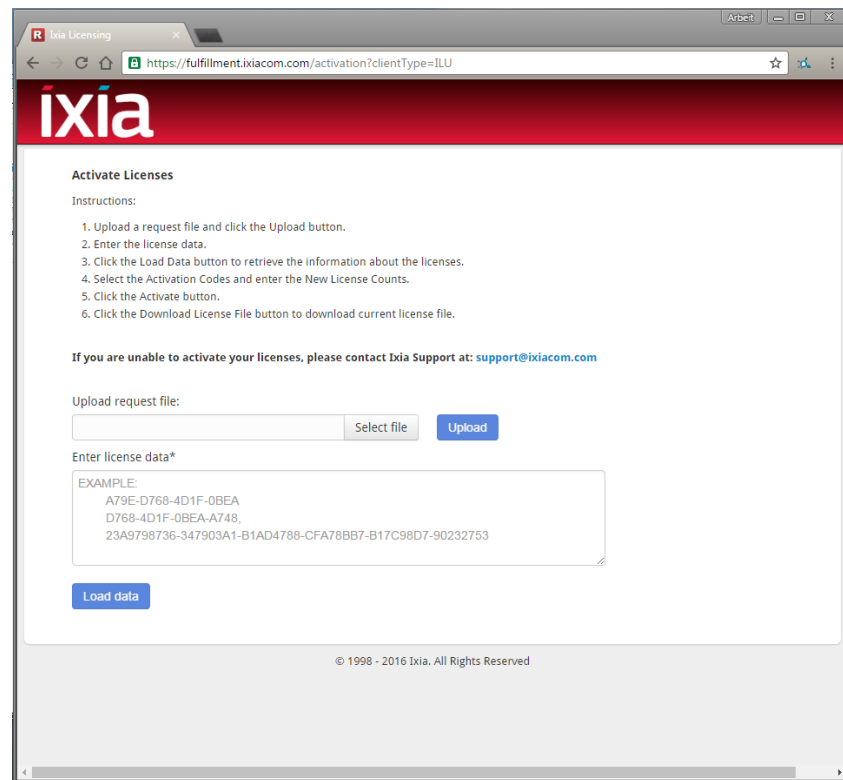




In the Offline Activation Screen click on [Generate Request] and save the .bin file on your system.

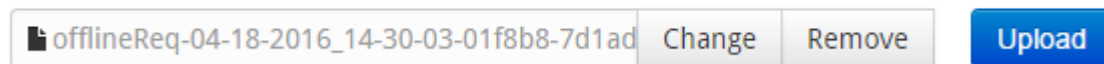


You will need to transfer this file to a system with internet access to activate your IxChariot Product.
Please browse to <https://fulfillment.ixiacom.com/activation?clientType=ILU>



Upload the *.bin file...

Upload request file:

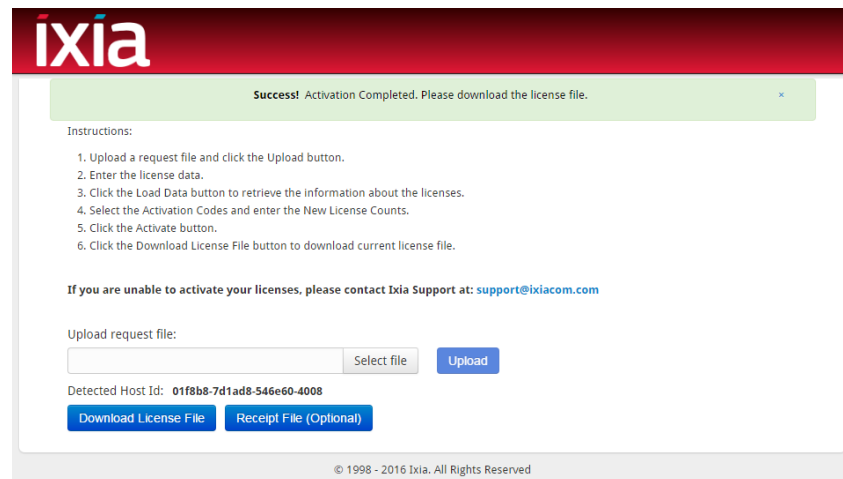


and enter the license data, then click on [Load data].

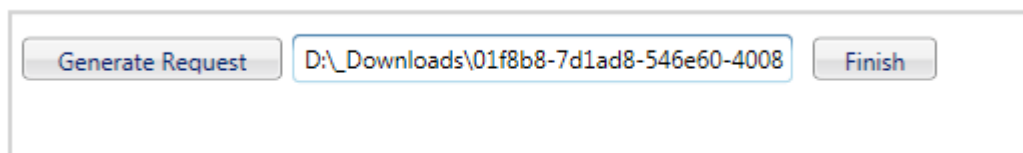
Load data

[illegible]

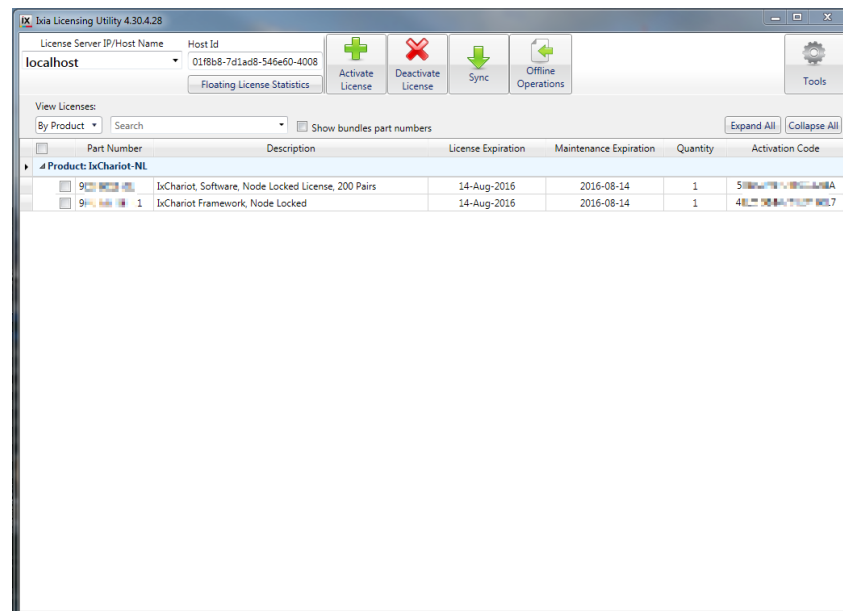
Copyright © 2017 NETCOR GmbH, all rights reserved.



Back on your <%IX> system, import the license file.



Your IxChariot Console is now licensed.



Important: Please close IxChariot.
Any open IxChariot consumes a license. In that case, GeNiEnd2End is unable

to use that license at the same time, so please remember to close any open IxChariot Consoles at any time.

1.2.1.2.2.3 Floating License Registration

Floating license registration

It's possible to register your IxChariot installation against a local license server to borrow licenses dynamically as required, so multiple systems can use the same IxChariot Console license at different times.

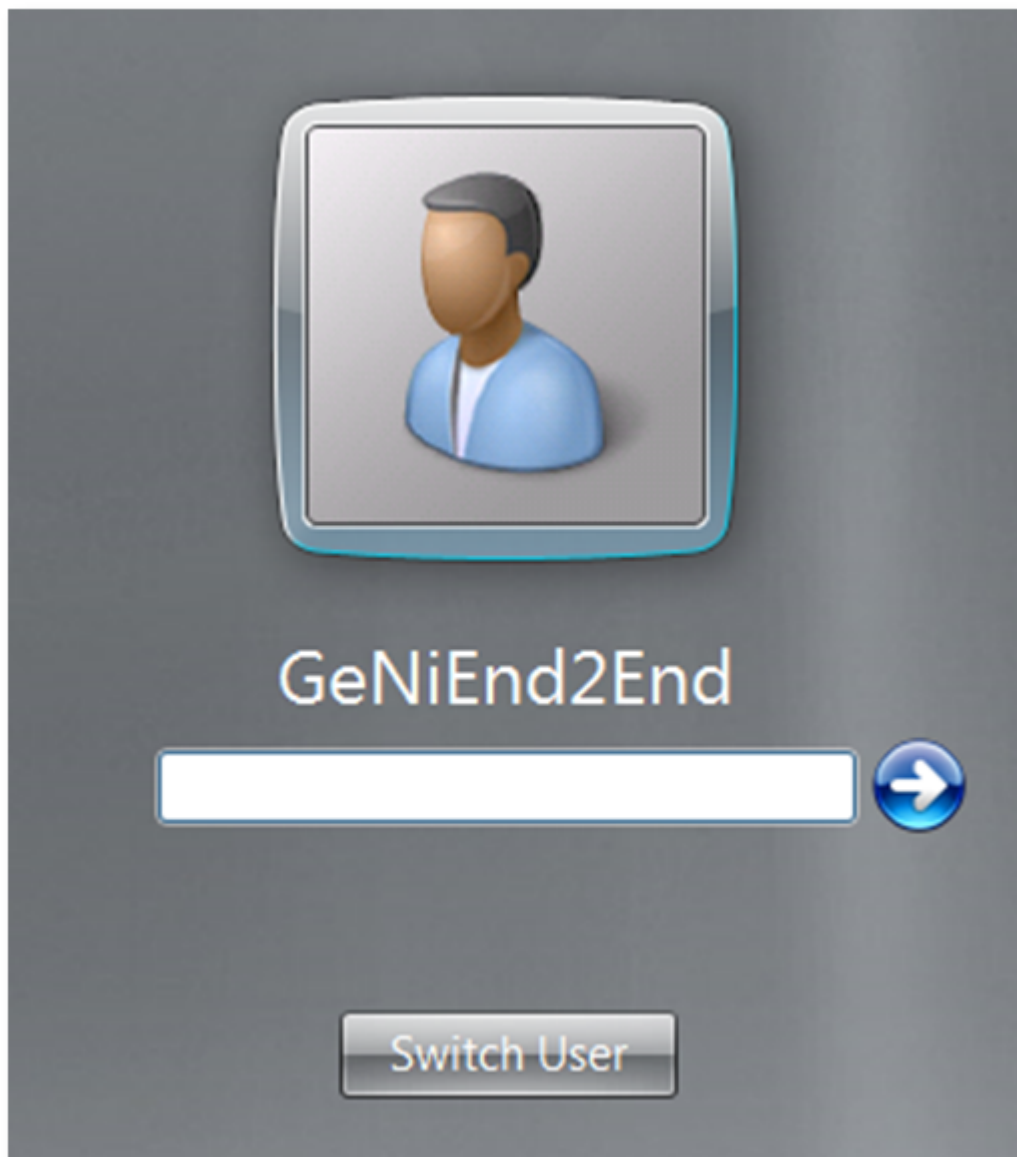
The license server is installed automatically at the Console installation. In case you'd like to run a dedicated one, please refer to the IxChariot Manual.

Hold the SHIFT-Key, then do a right click on IxChariot, select "Run as ..." on the context menu and enter the credentials for the GeNiEnd2End user.

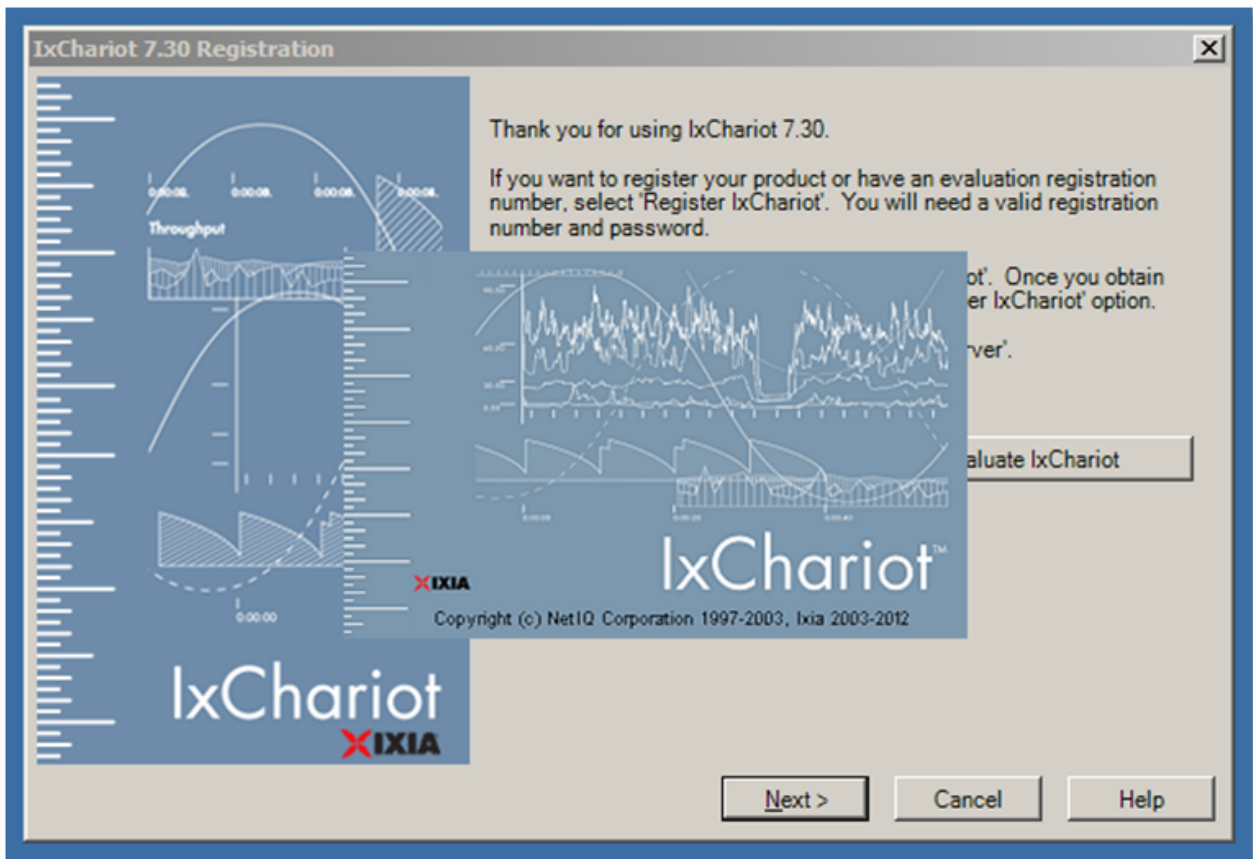
Alternatively, log in as the GeNiEnd2End user.

You can find the standard credentials at [Security Information](#)⁹³.

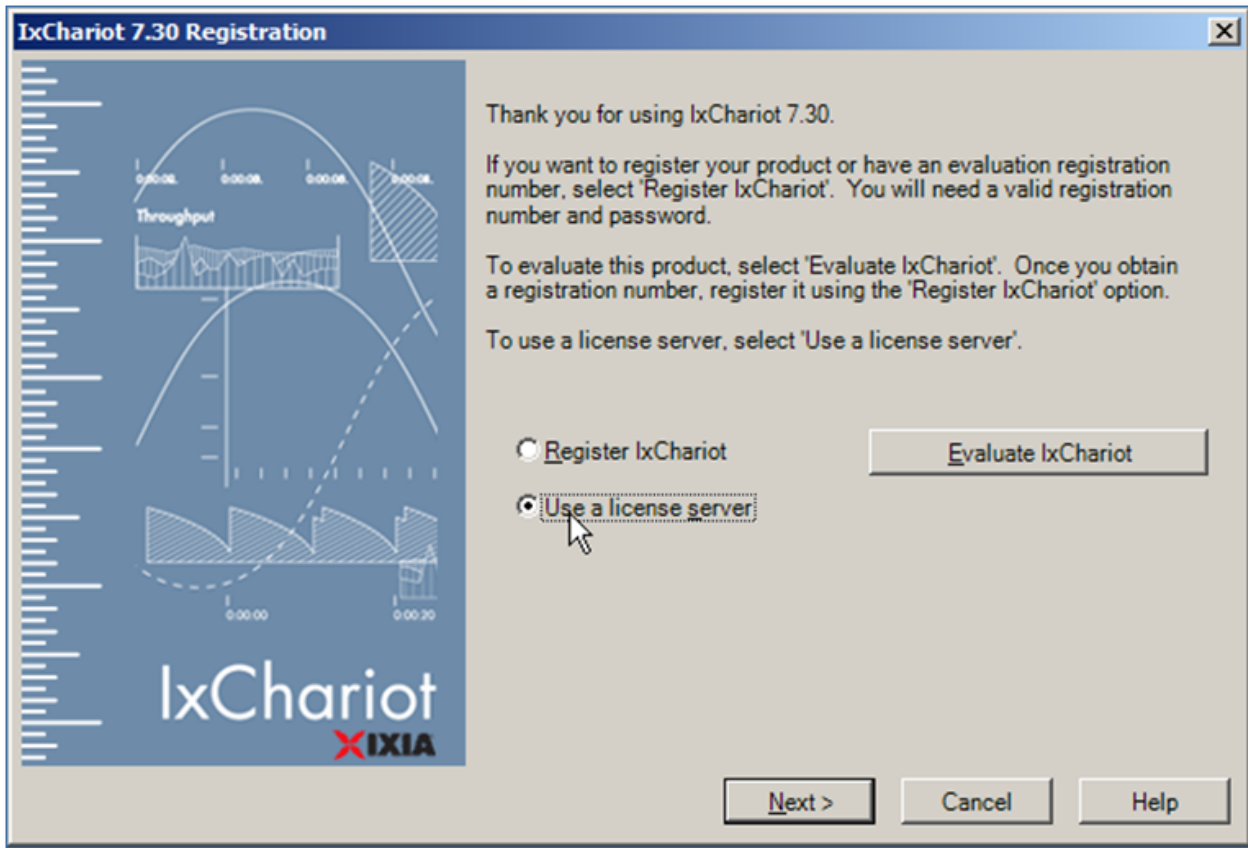
Please change the password for your own safety!



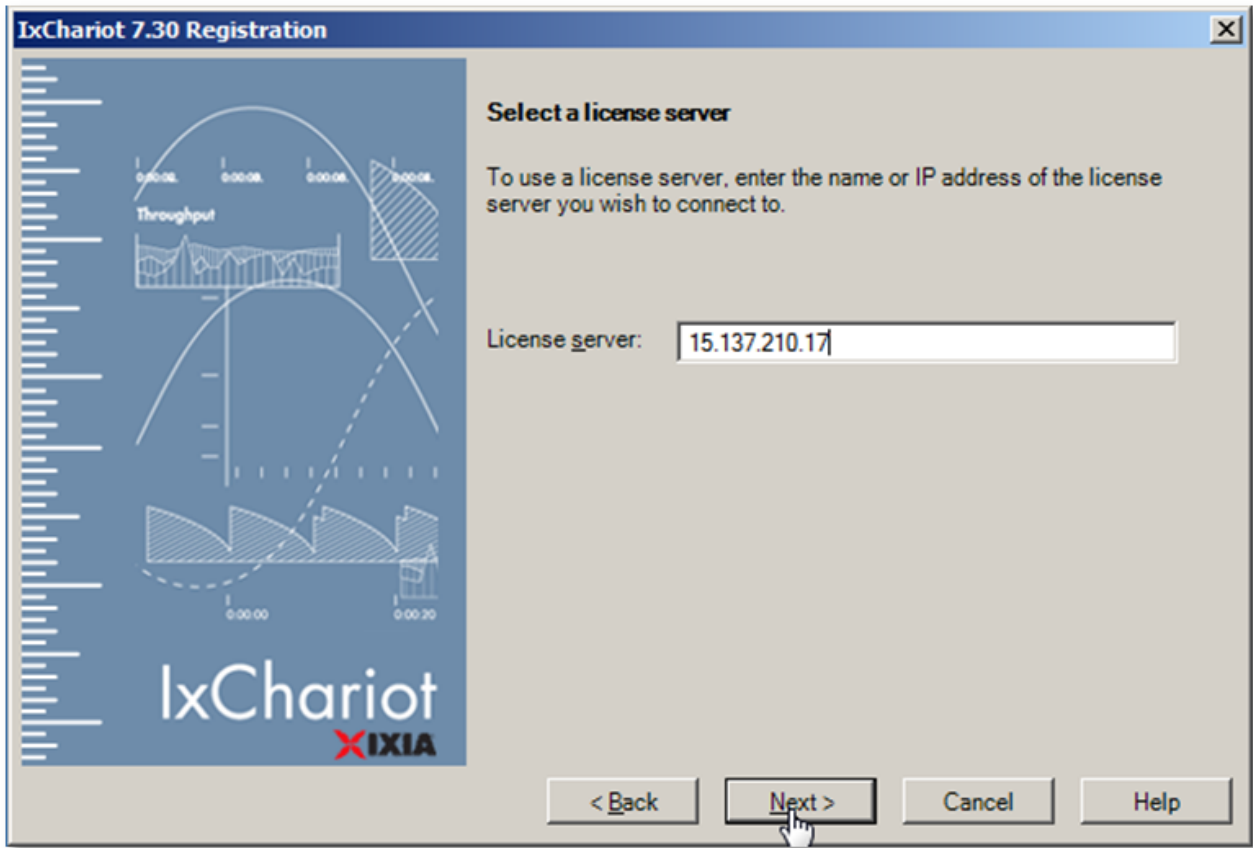
To set the floating license start IxChariot go to
Start > All Programs >IxChariot >IxChariot



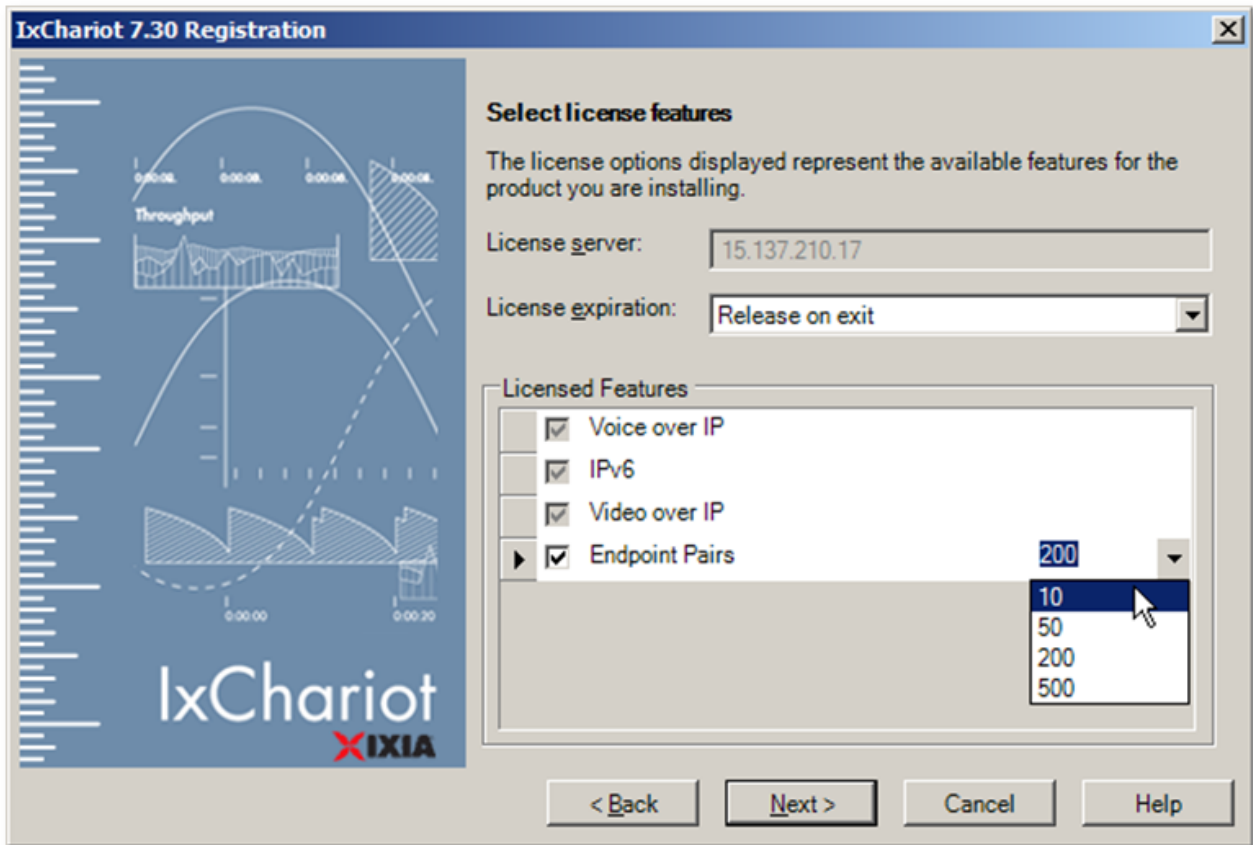
Click in the registration window to see the options.
Select "Use a license server", then click [Next].



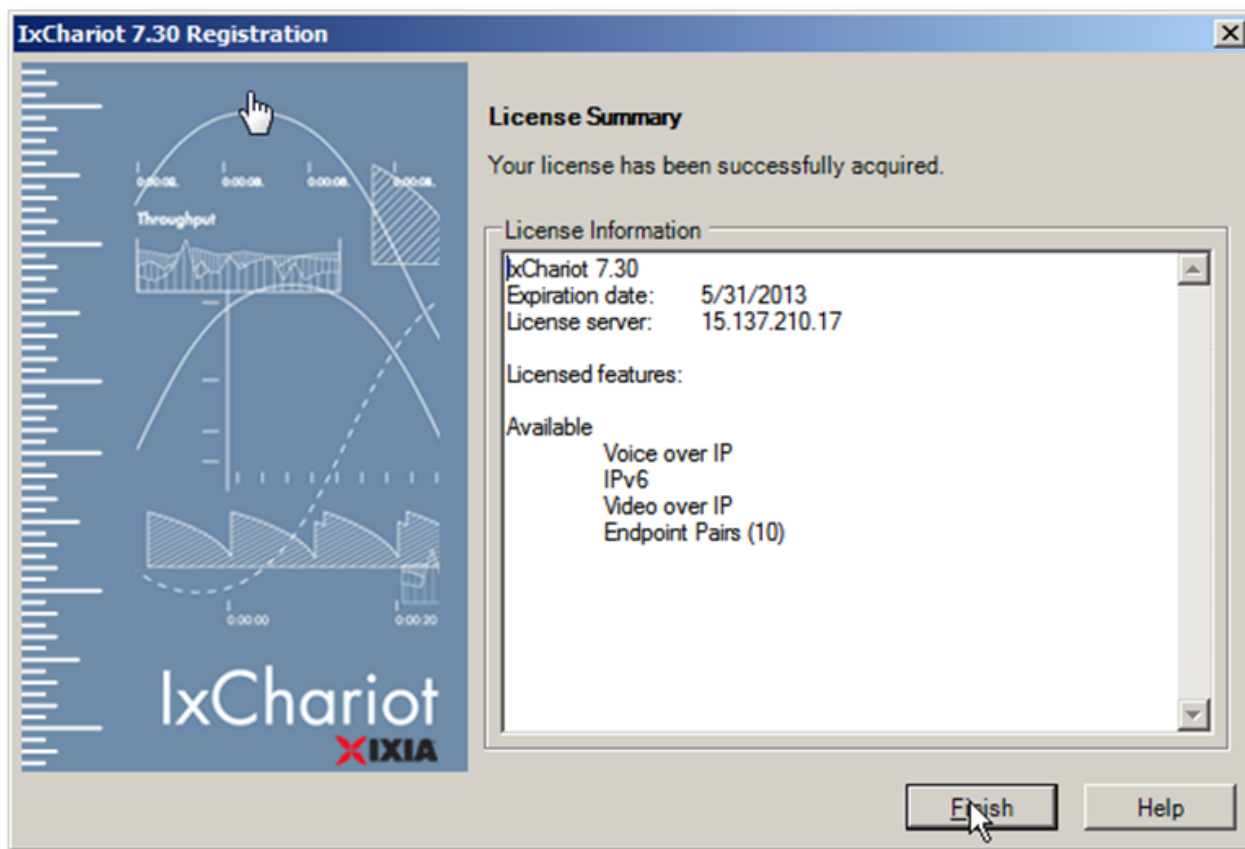
Please insert the IP of your Ixia IxChariot license server into the input field, then click [Next].



Please select "Release on exit" in the "License expiration" field and how many (in steps of 10) "Endpoint Pairs" Ixia IxChariot can register on the license server.



Finally, the license information is being displayed.
Click [Finish] to finish the registration.



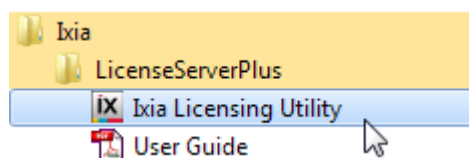
Important: Please close IxChariot.

Any open IxChariot consumes a license. In that case, GeNiEnd2End is unable to use that license at the same time, so please remember to close any open IxChariot Consoles at any time.

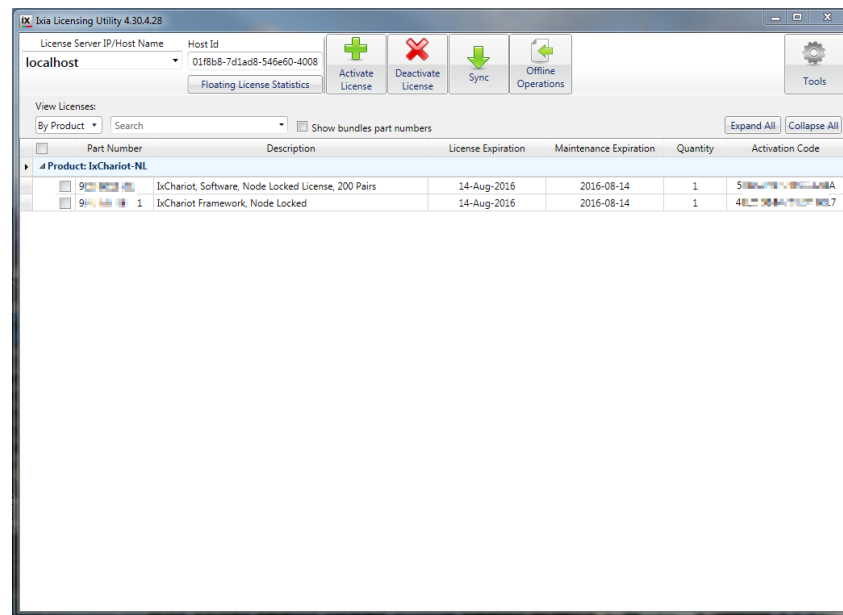
1.2.1.2.2.4 De-registration of your Ixia IxChariot License

To open the Ixia Licensing Utility go to:

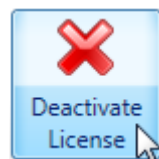
Start > Programs > Ixia > LicenseServerPlus > Ixia Licensing Utility



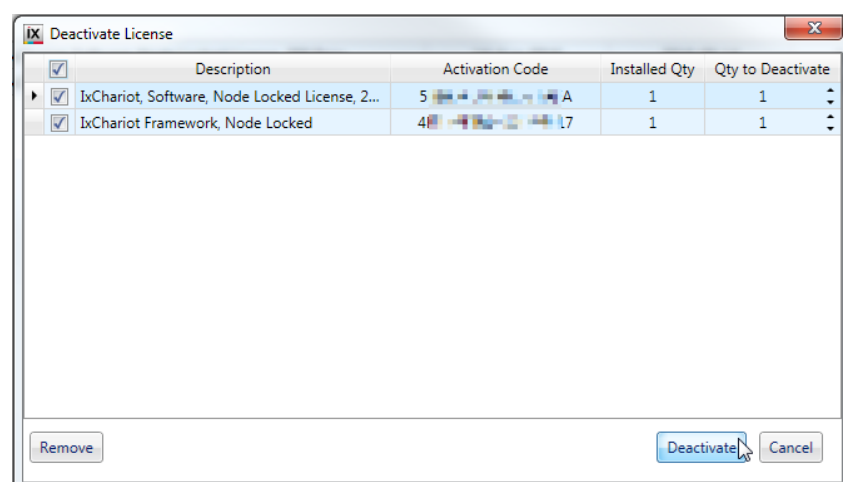
The Ixia Licensing Utility is a new tool, released with the Version 7.30 SP3 of IxChariot Console to manage the license of your IxChariot product.



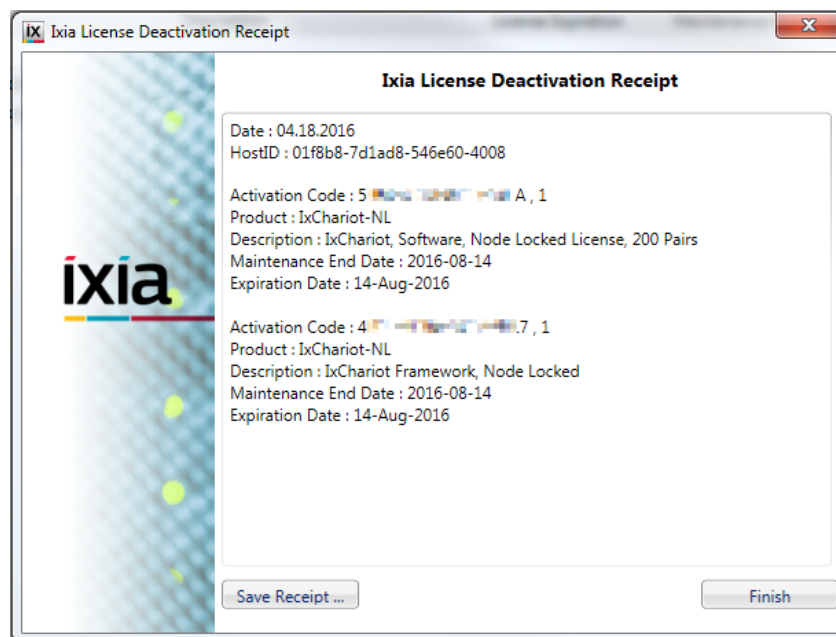
Select the license to deactivate in the overview and click on "Deactivate License".



Mark all licenses to deactivate and click on [Deactivate].



The Ixia Licensing Utility tool will show you a receipt of the deactivation. Click on [Finish].



1.2.1.2.2.5 De-registration of your Ixia IxChariot Floating License

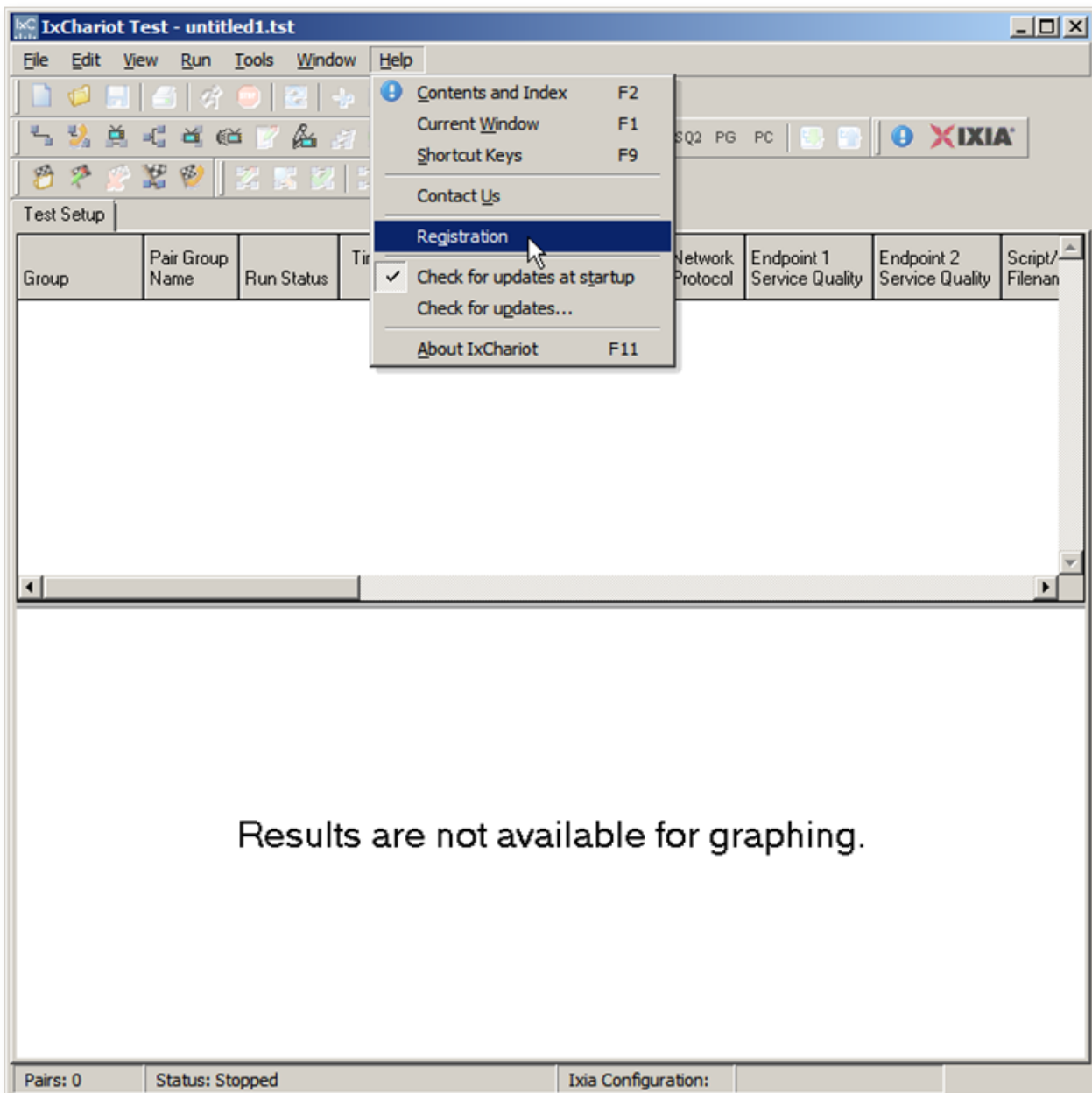
De-registration of your Ixia IxChariot Floating license

You must start IxChariot to release your Ixia IxChariot Floating license. Hold the Shift-Key, then perform a right click on IxChariot, select "Run as ..." on the context menu and enter the credentials for the GeNiEnd2End user.

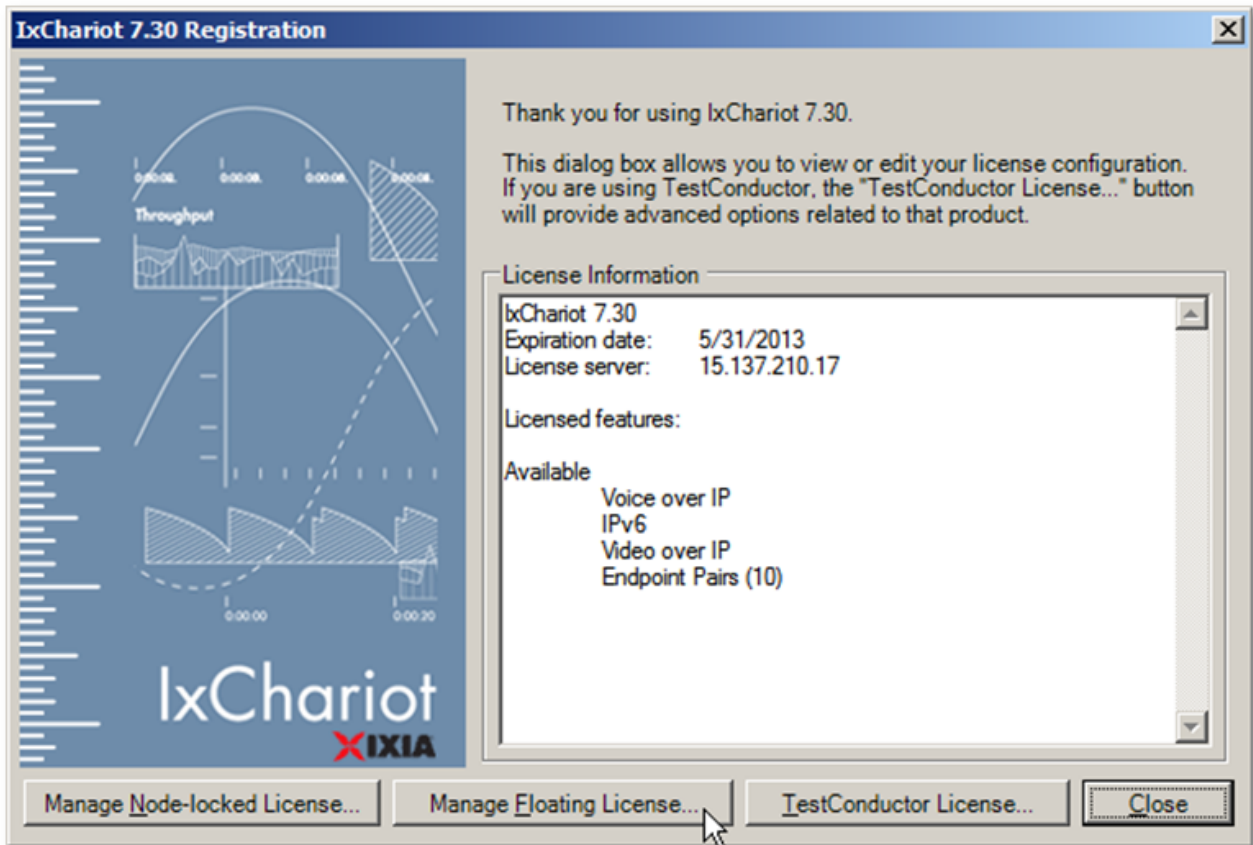
Alternatively, log in as the GeNiEnd2End user.

You can find the standard credentials at [Security Information](#)⁹³.

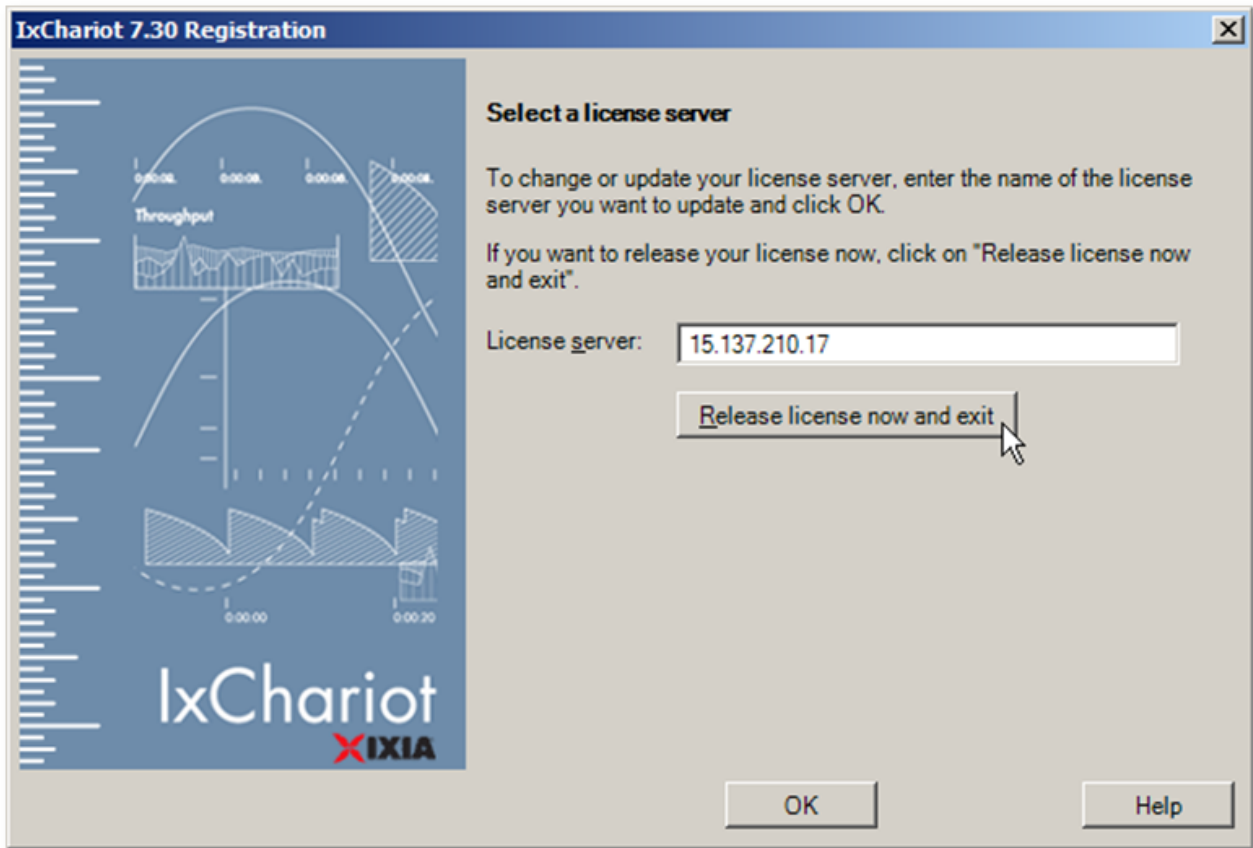
Go to Start > All Programs > IxChariot > IxChariot



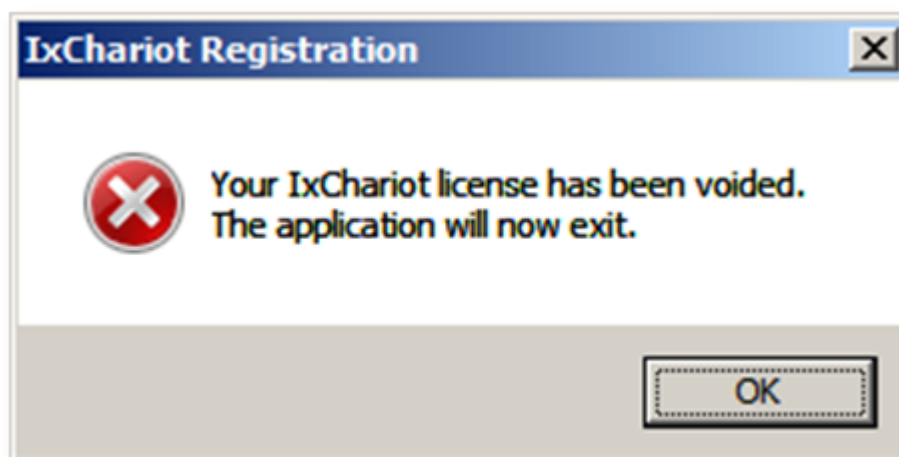
Click on Help > Registration.
In the upcoming window, click on [Manage Floating License...].



Ixia IxChariot displays the IP of your Ixia IxChariot Floating license server.



With a click on [Release license now and exit] the license will be released and Ixia IxChariot closes and your license has been released.



1.2.1.3 Install IxChariot Performance Endpoints

Install IxChariot performance endpoints

You need at least two IxChariot performance endpoints to be able to perform an end-to-end test. The performance endpoints are available for many different operating systems. The latest release as well as a user guide are available at:

<https://support.ixiacom.com/support-links/ixchariot/endpoint-library/platform-endpoints>

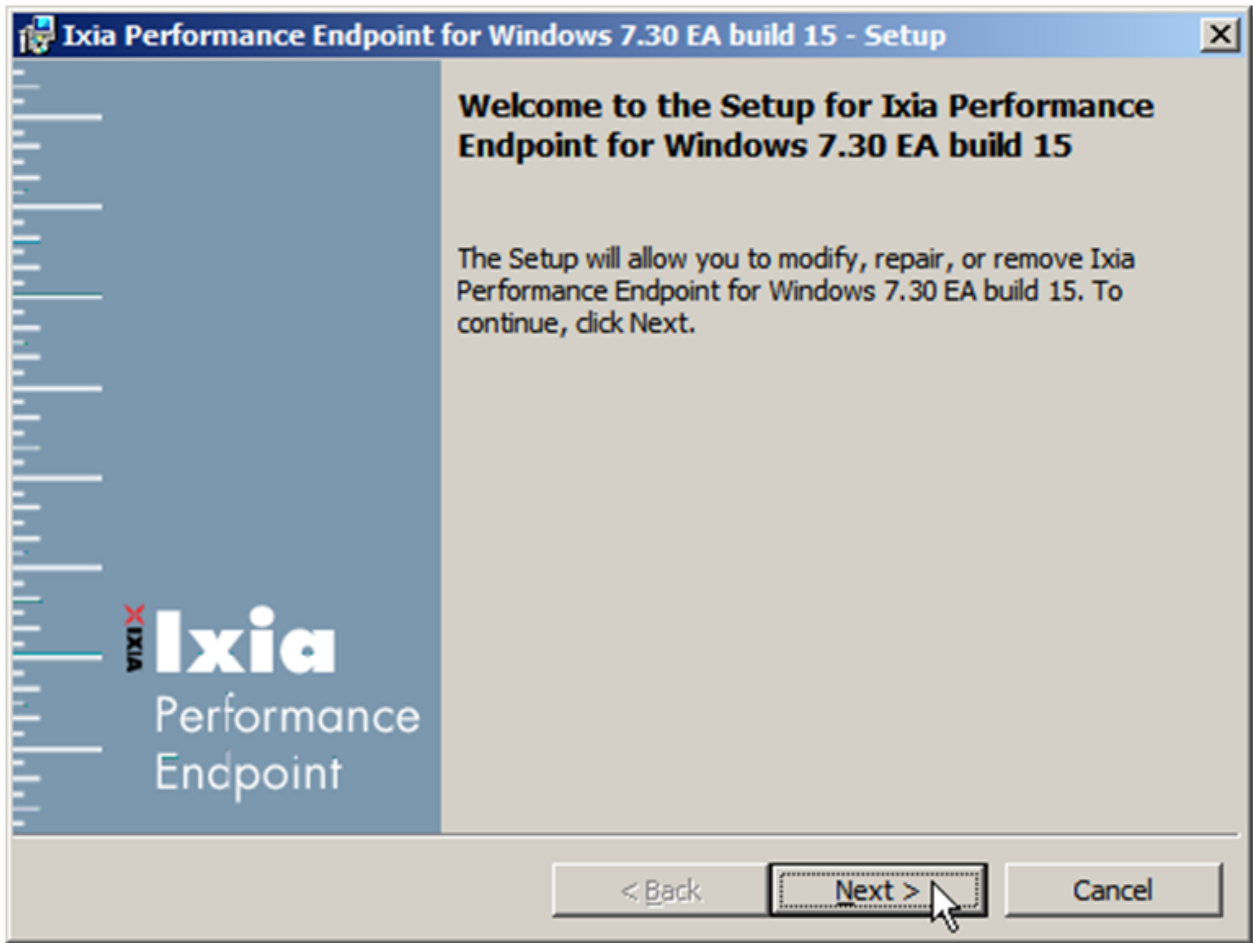
This guide focuses on the installation of an endpoint on Microsoft Windows. Regarding the installation of endpoints on other operating systems, please refer to the user guide located at the bottom of the endpoint setup download page mentioned above.

Please choose the appropriate setup for your Windows system:

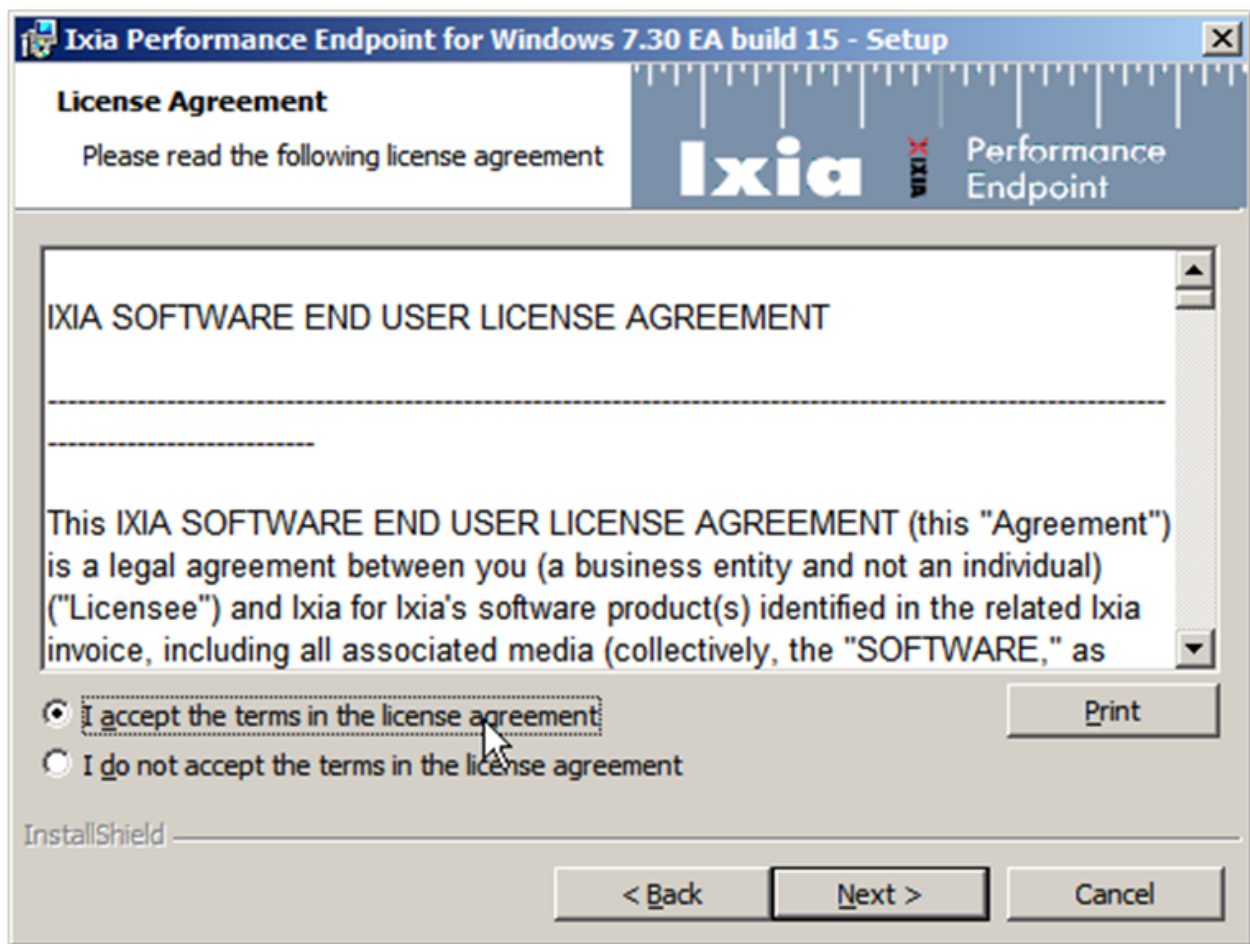
- pewindows32_730.exe: 32 bit Windows XP, 2000 and 2003
- pewindows64_730.exe: 64 bit Windows XP, 2000 and 2003
- pevista32_730.exe: 32 bit Windows Vista, Windows 7, 10, 2008 and 2012
- pevista64_730.exe: 64 bit Windows Vista, Windows 7, 10, 2008, 2012, 2016

(The version number "730" may vary)

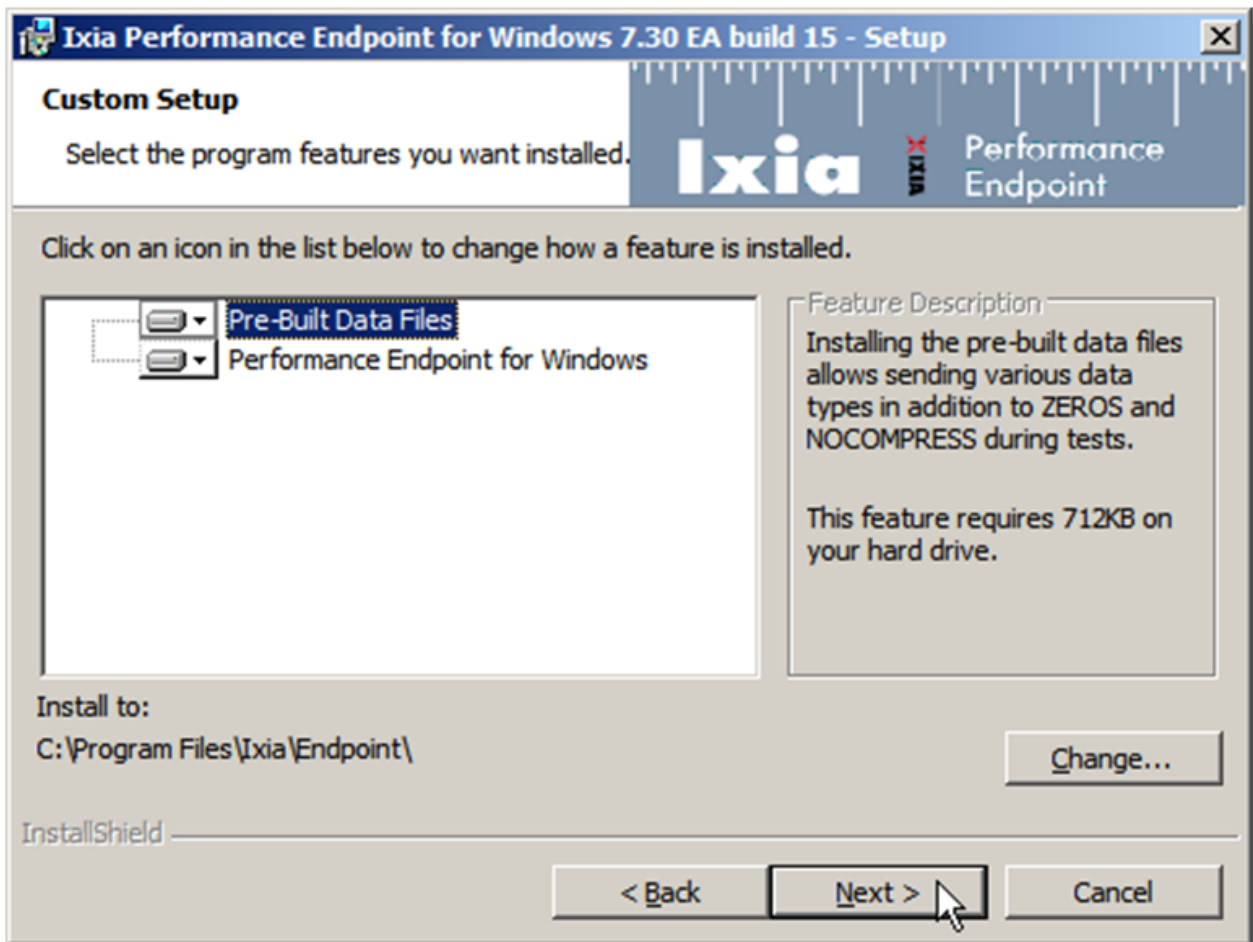
Please start the setup you just downloaded. Click on [Next >].



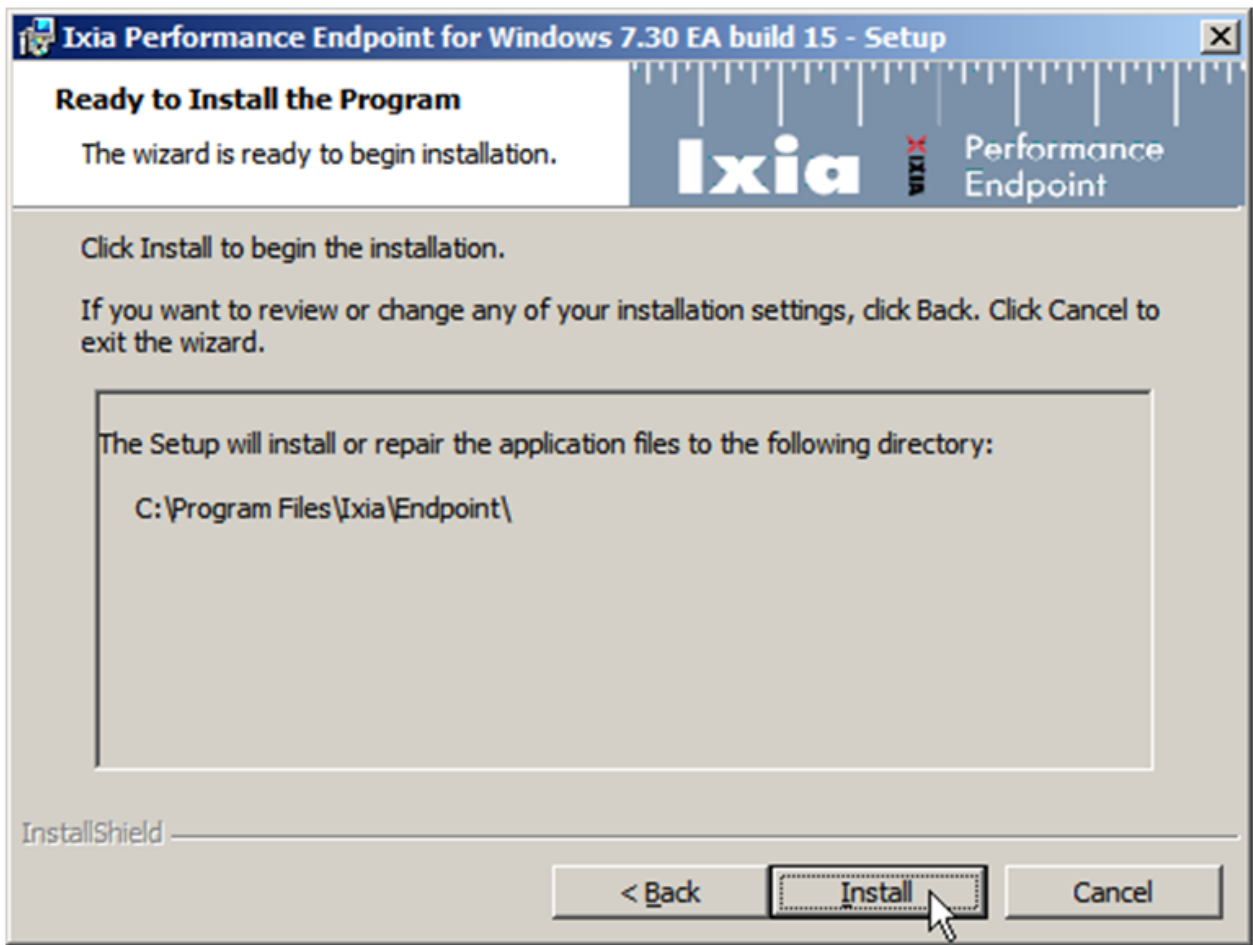
Accept the license agreement. Click on [Next >].



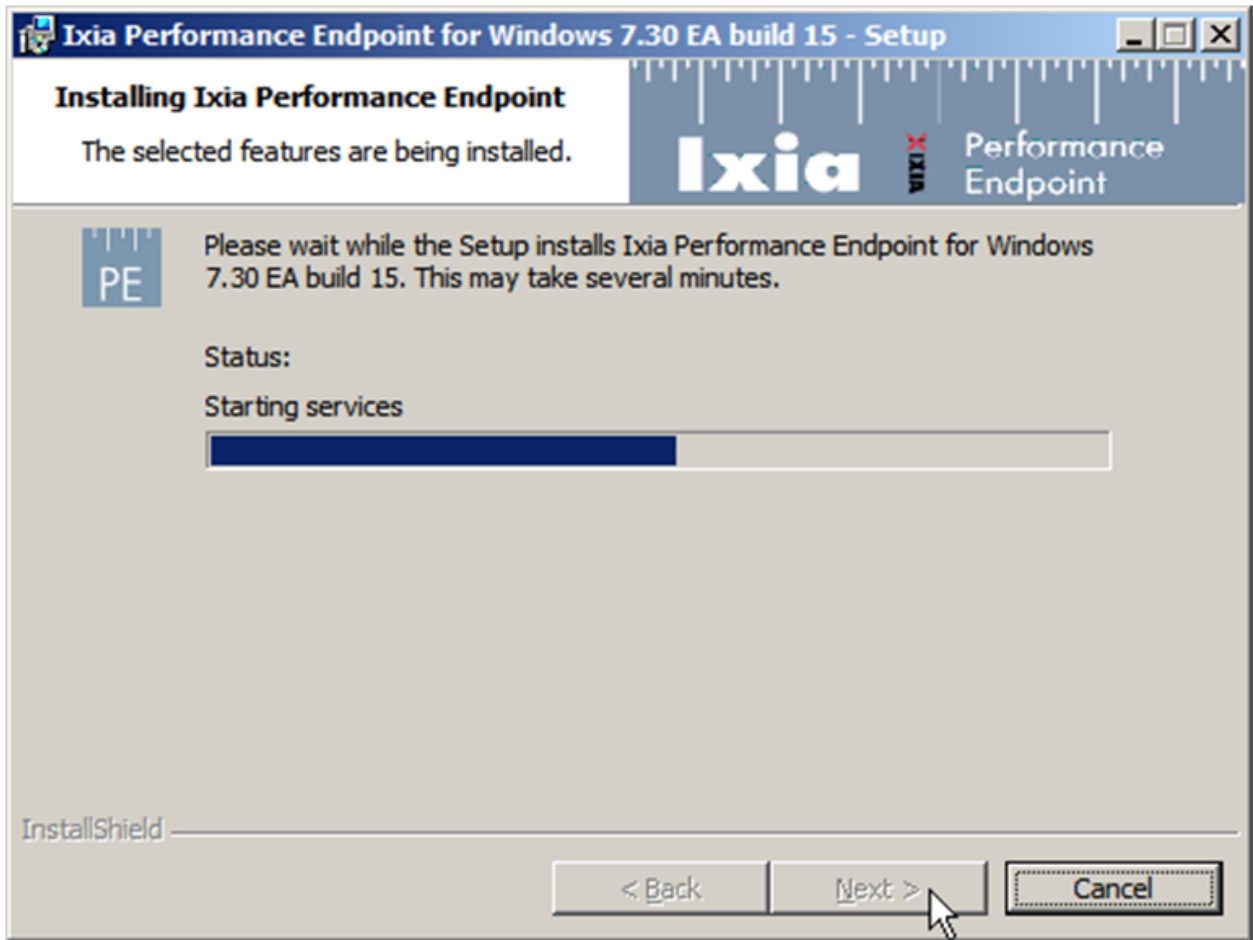
Change the installation path if needed and click on [Next >].



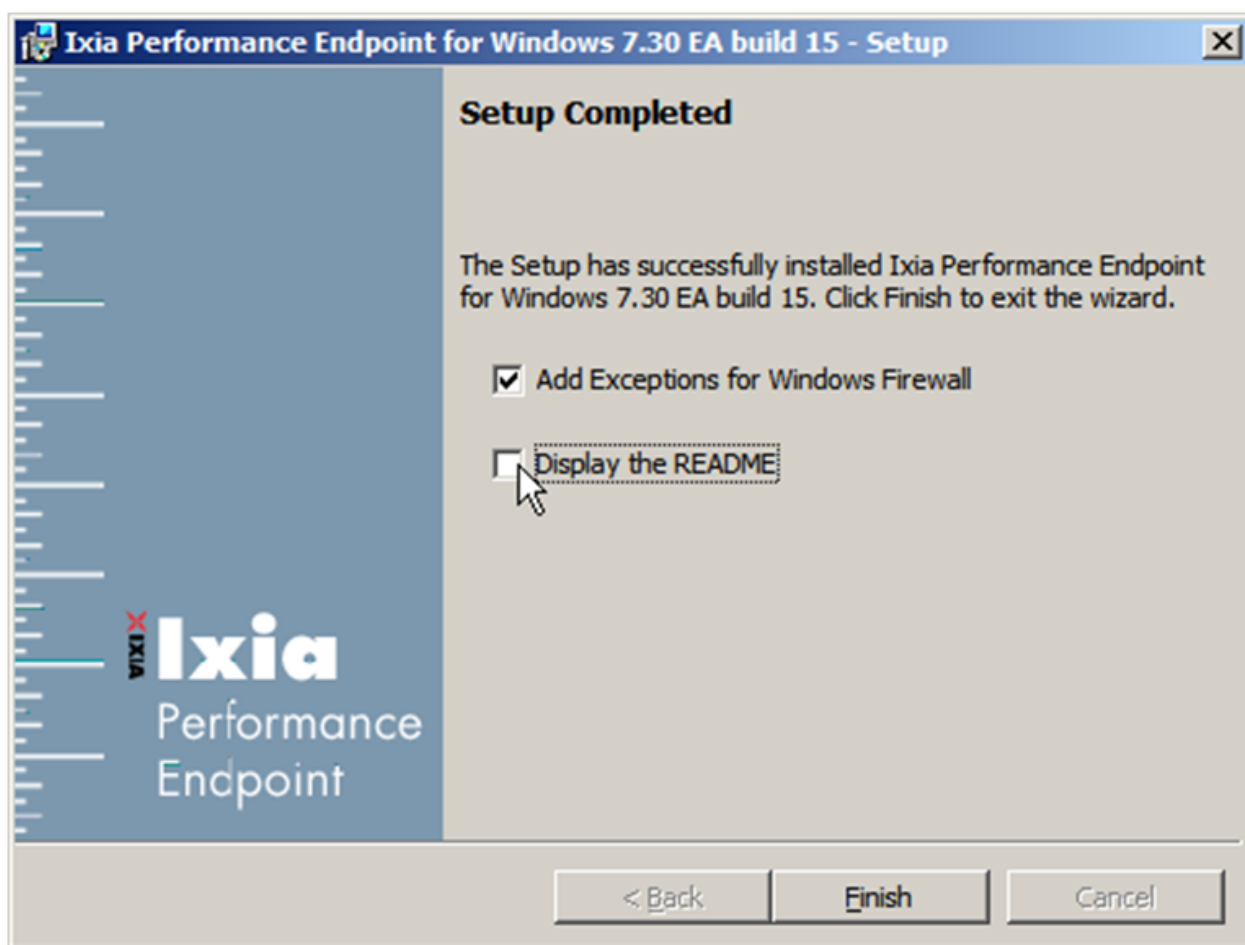
Click on [Install].



The installation will start.



You must allow the setup to add Exceptions for the Windows Firewall, in case you use it. Finally click on [Finish].



The performance endpoint now runs as the service "Ixia Performance Endpoint".

1.2.1.4 How to launch IxChariot PE at system startup on macOS

Performance Endpoint installation on macOS

Download and install the endpoint using the .dmg installation file available at:

<https://support.ixiacom.com/support-links/ixchariot/endpoint-library/platform-endpoints>

To get the endpoint to start automatically on bootup

Step 1: Open "System Preferences".

Step 2: Click on "Users & Groups".

Step 3: Click on "Login Items". At the bottom left corner of the window, click on the lock icon and enter your Admin password.

Step 4: Click on the '+' sign and find the IxChariot Endpoint Application via the finder interface in the applications folder.

Step 5: Once the item is selected, click on [Add].

It will now start on every boot of the machine but will popup as a window and ask for a password.

To enable auto start without user interaction

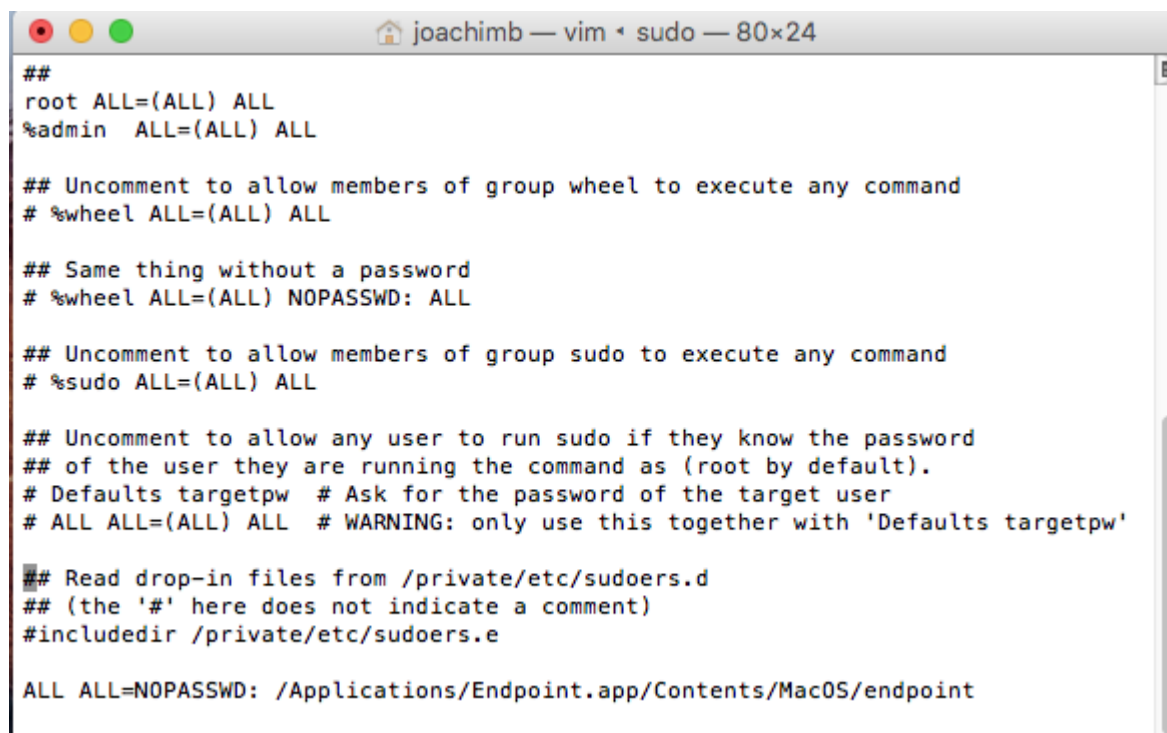
You have to put the endpoint in the sudoers file of macOS:

Step 1: Open Terminal Application.

Step 2: Execute the following command:
sudo visudo

Step 3: Enable the insert mode by pressing the "a" key and insert the following line at the end of the file:

```
ALL ALL=NOPASSWD: /Applications/Endpoint.app/Contents/MacOS/endpoint
```

A screenshot of a macOS terminal window titled 'joachim — vim — sudo — 80x24'. The window shows the contents of the sudoers file being edited with vim. The text is as follows:

```
##
root ALL=(ALL) ALL
%admin ALL=(ALL) ALL

## Uncomment to allow members of group wheel to execute any command
# %wheel ALL=(ALL) ALL

## Same thing without a password
# %wheel ALL=(ALL) NOPASSWD: ALL

## Uncomment to allow members of group sudo to execute any command
# %sudo ALL=(ALL) ALL

## Uncomment to allow any user to run sudo if they know the password
## of the user they are running the command as (root by default).
# Defaults targetpw # Ask for the password of the target user
# ALL ALL=(ALL) ALL # WARNING: only use this together with 'Defaults targetpw'

## Read drop-in files from /private/etc/sudoers.d
## (the '#' here does not indicate a comment)
#include_dir /private/etc/sudoers.d

ALL ALL=NOPASSWD: /Applications/Endpoint.app/Contents/MacOS/endpoint
```

Step 4: To save the changes, press the "ESC" key twice to exit the insert mode, then write:

:wq!

and press the "ENTER" key.

Reboot and check if the endpoint starts up without asking for the sudo password.

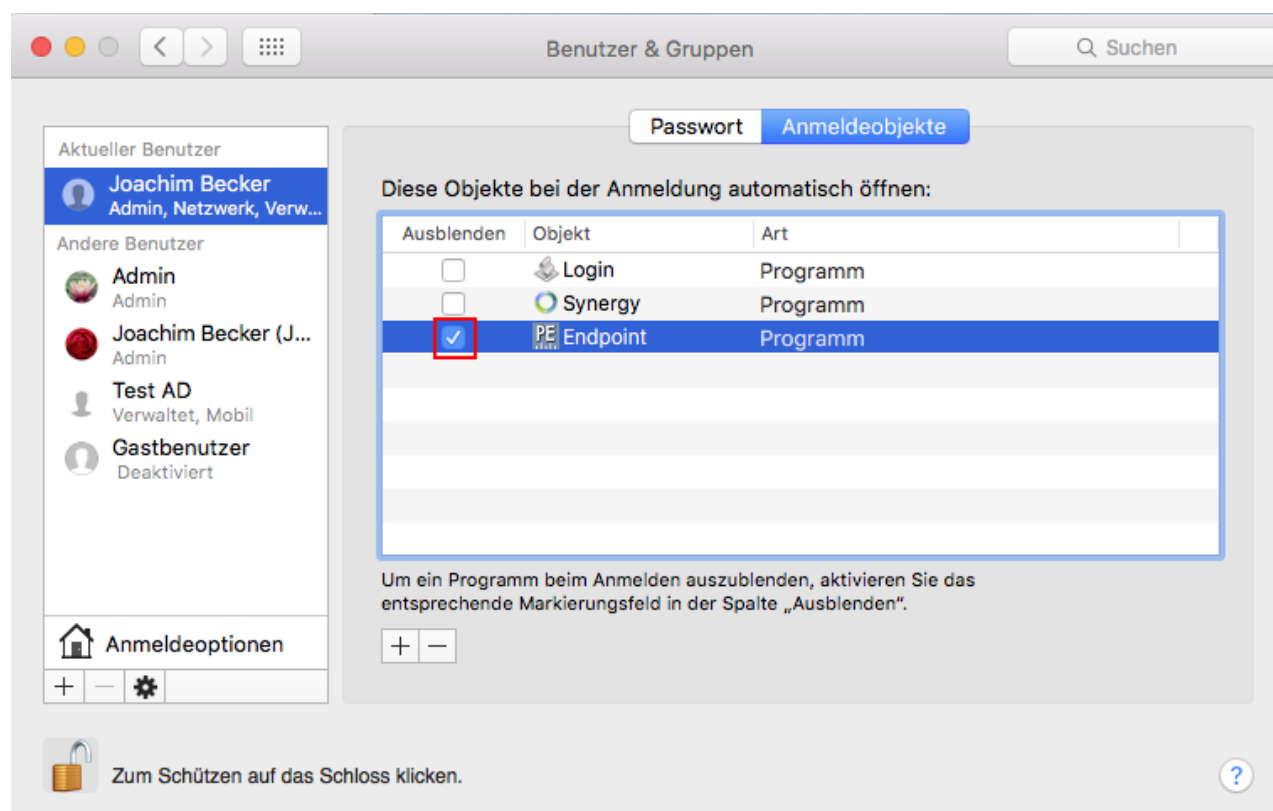
If it does, you can finally hide the endpoint following these steps:

Step 1: Open "System Preferences".

Step 2: Click "Users & Groups".

Step 3: Click "Login Items". At the bottom left corner of the window, click on the lock icon and enter your Admin password.

Step 4: Enable the hide flag for the "Endpoint" entry.



If the endpoint did ask for firewall access and you pressed add then everything should be fine. However if it still asks then you can also add that to the firewall exceptions manually.

Step 1: Open "System Preferences".

Step 2: Click on "Security". Click on the "Firewall" tab. At the bottom left corner of the window, click on the lock icon and enter your Admin password.

Step 3: Click on "Firewall-Options".

Step 4: Click on the '+' sign and find the IxChariot Endpoint Application via the finder interface in the applications folder. Set it to allow incoming connections.

1.2.1.5 Configure IxChariot Console

Configure IxChariot Console

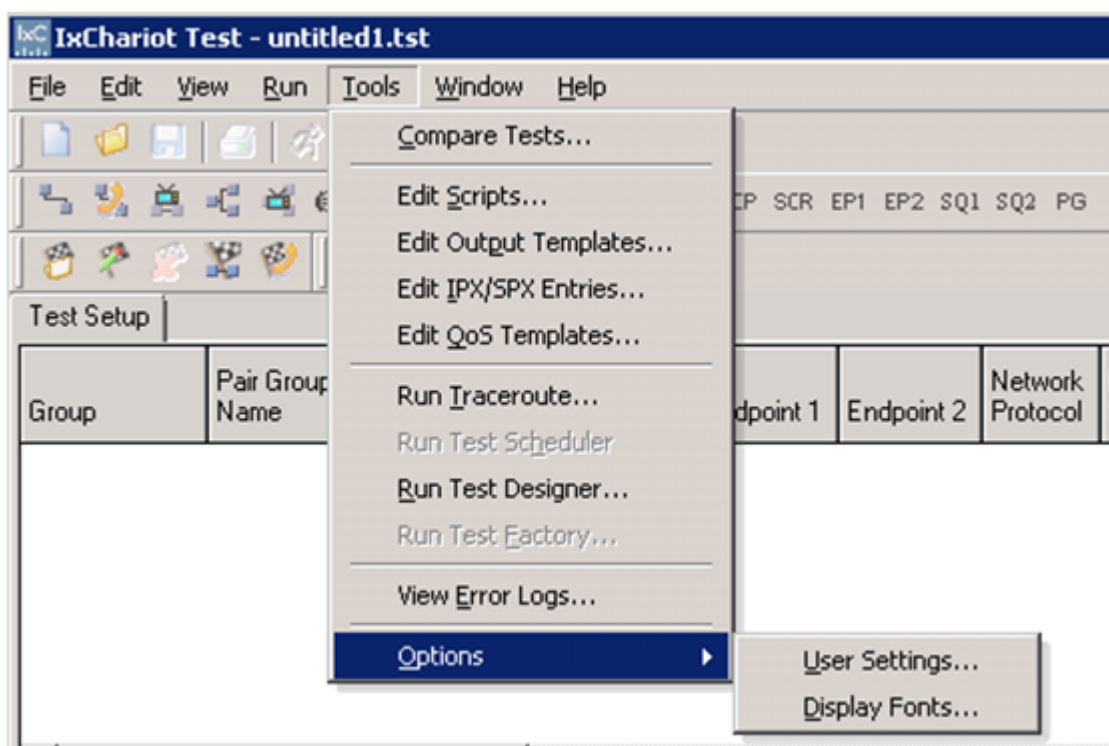
For the next step you need the privileges of the GeNiEnd2End User or of the user the GeNiAgent with the IxChariot Console runs.

Hold the Shift-Key, then do a right click on IxChariot, select "Run as ..." on the context menu and enter the credentials for the GeNiEnd2End user or as the user, the GeNiAgent with the IxChariot Console runs on.

Alternatively, log in as said user. You can find the standard credentials at [Services](#)^[16].

Open IxChariot and go to:

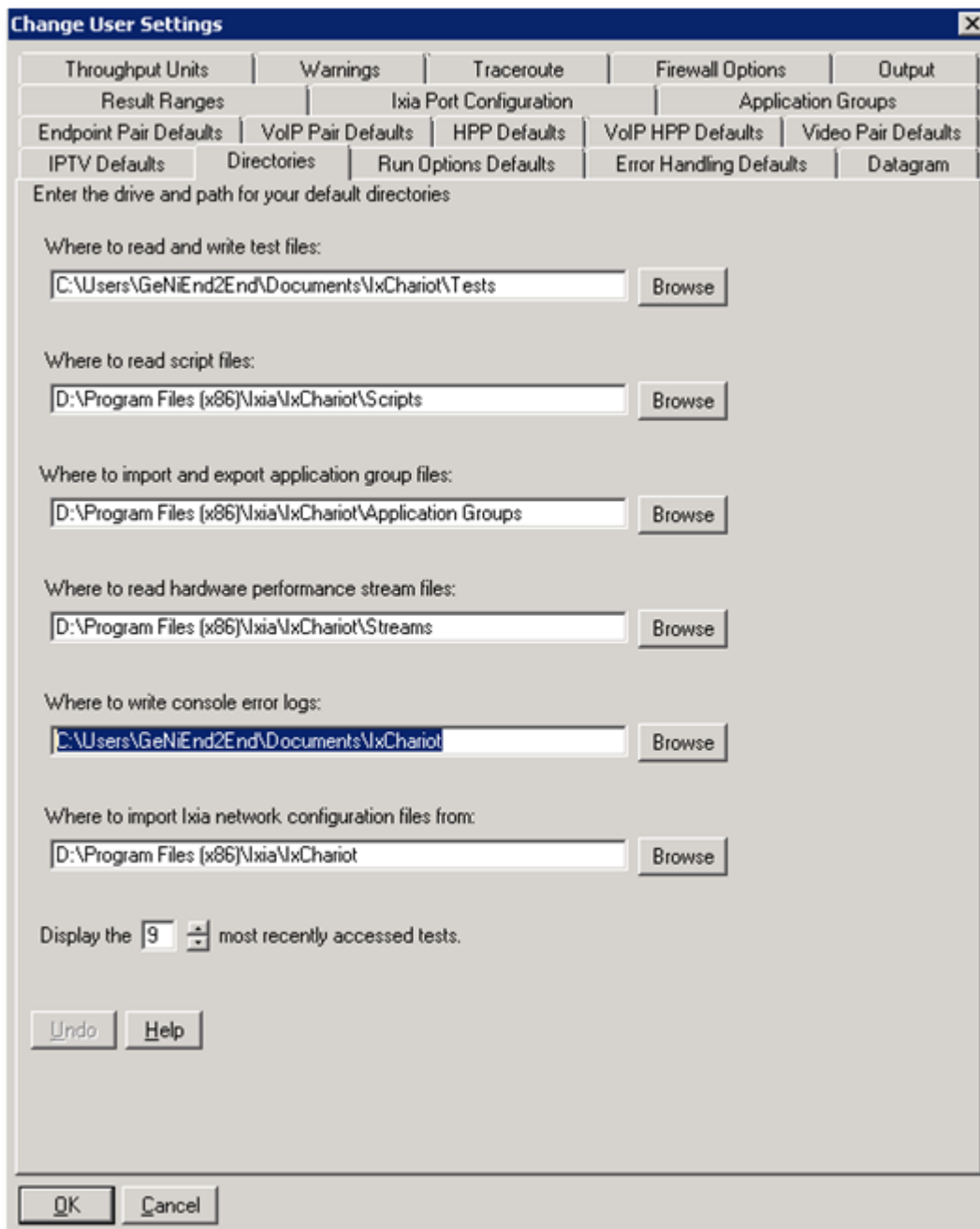
Tools > Options > User Settings.



Now click on the "Directories" tab.

In the Input field "Where to write console error logs:" enter the following path:

"C:\Users\GeNiEnd2End\Documents\IxChariot".



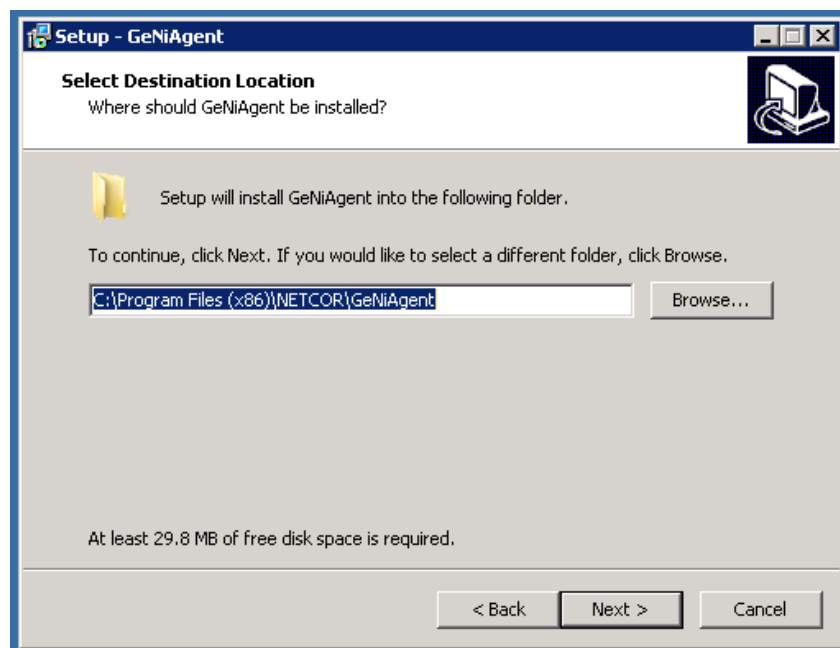
1.2.2 Default Installation

Note: Rerun this installer later if you want to reconfigure the GeNiAgent

Start the installer and click on [Next >].



Change the installation folder if you need to and click on [Next >] to install the GeNiAgent.

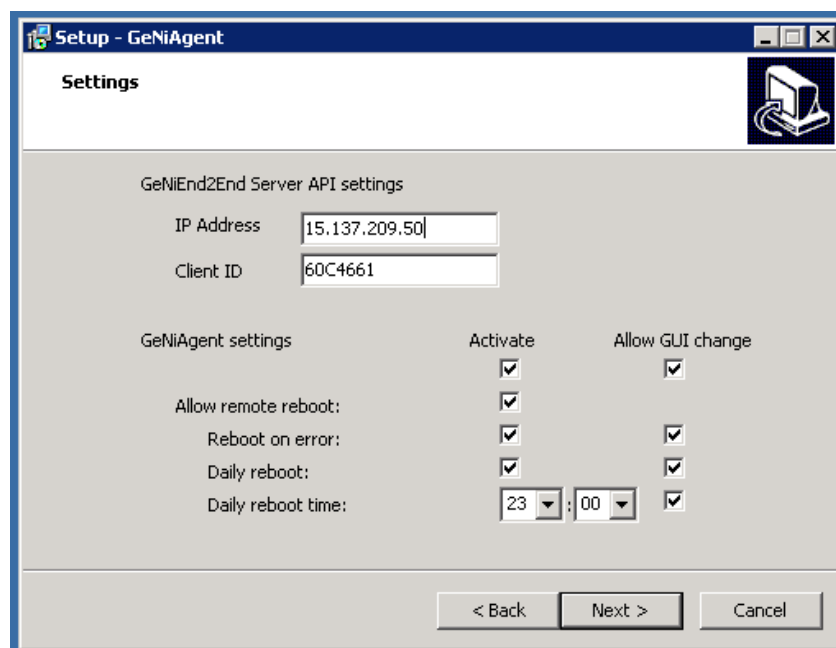


Confirm or set the IP Address of your GeNiEnd2End Server and edit the Client ID if needed.

Client IDs are usually assigned automatically to new items in the hierarchy. By entering an existing Client ID here, you can position this GeNiAgent in your hierarchy directly.

If you set the "Allow remote reboot" option, a reboot of the GeNiAgent can be triggered via the GeNiEnd2End GUI. The "Reboot on error" option sets the GeNiAgent to reboot automatically, in case an error occurs. These values can be changed via GUI later, if the "Allow GUI change" setting is activated.

Values that have "Allow GUI change" deactivated, can only be changed later by re-running this installer.
When done, click on [Next >].



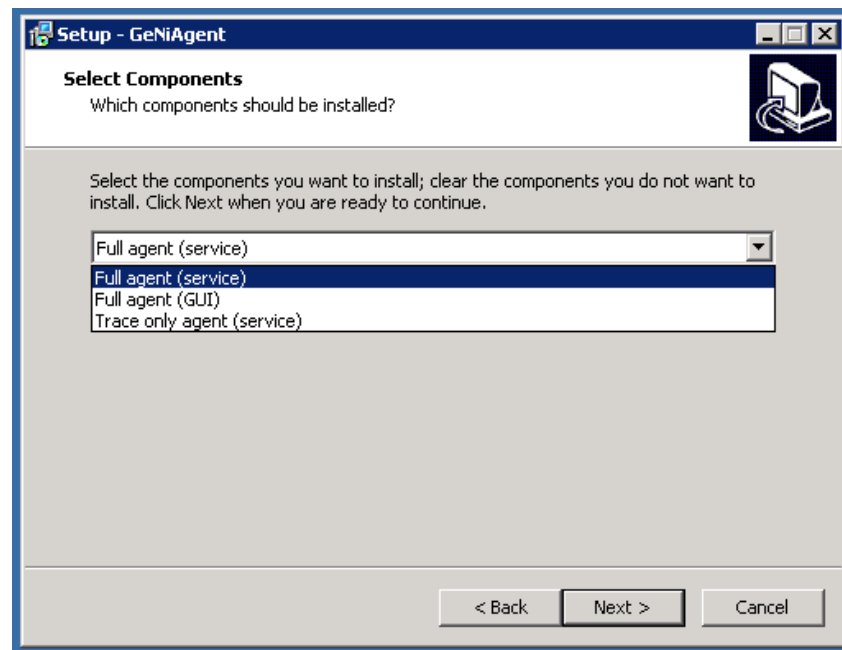
In the next step you are required to select one of the three types of the GeNiAgent:

Full agent (service): This GeNiAgent is the right choice for network tests (IxChariot) or other tests that don't require a GUI.

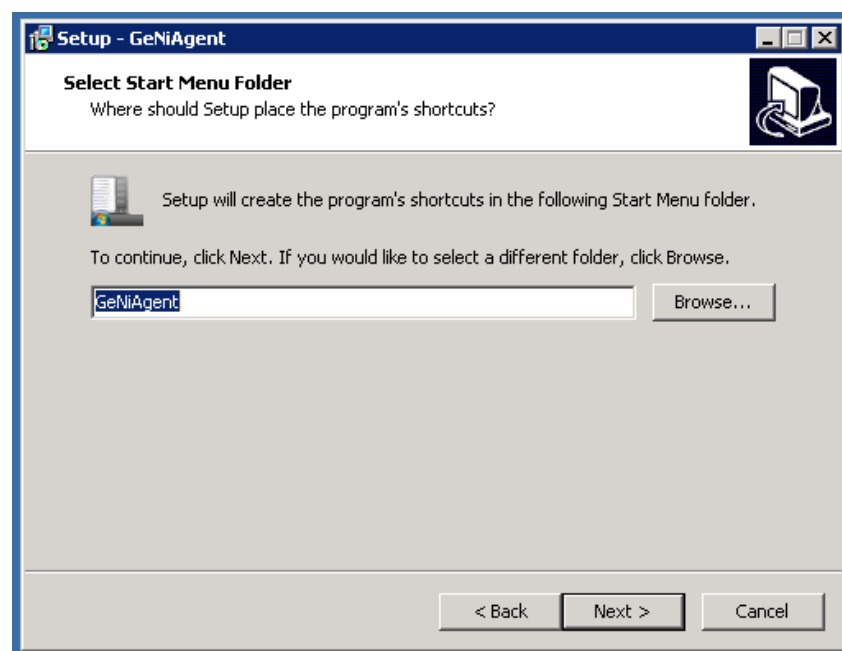
Full agent (GUI): This GeNiAgent is the right choice for application tests (AutoIt) that require a GUI environment. It can perform non-GUI tests, too.

Trace only agent (service): This GeNiAgent can solely be used for packet capturing.

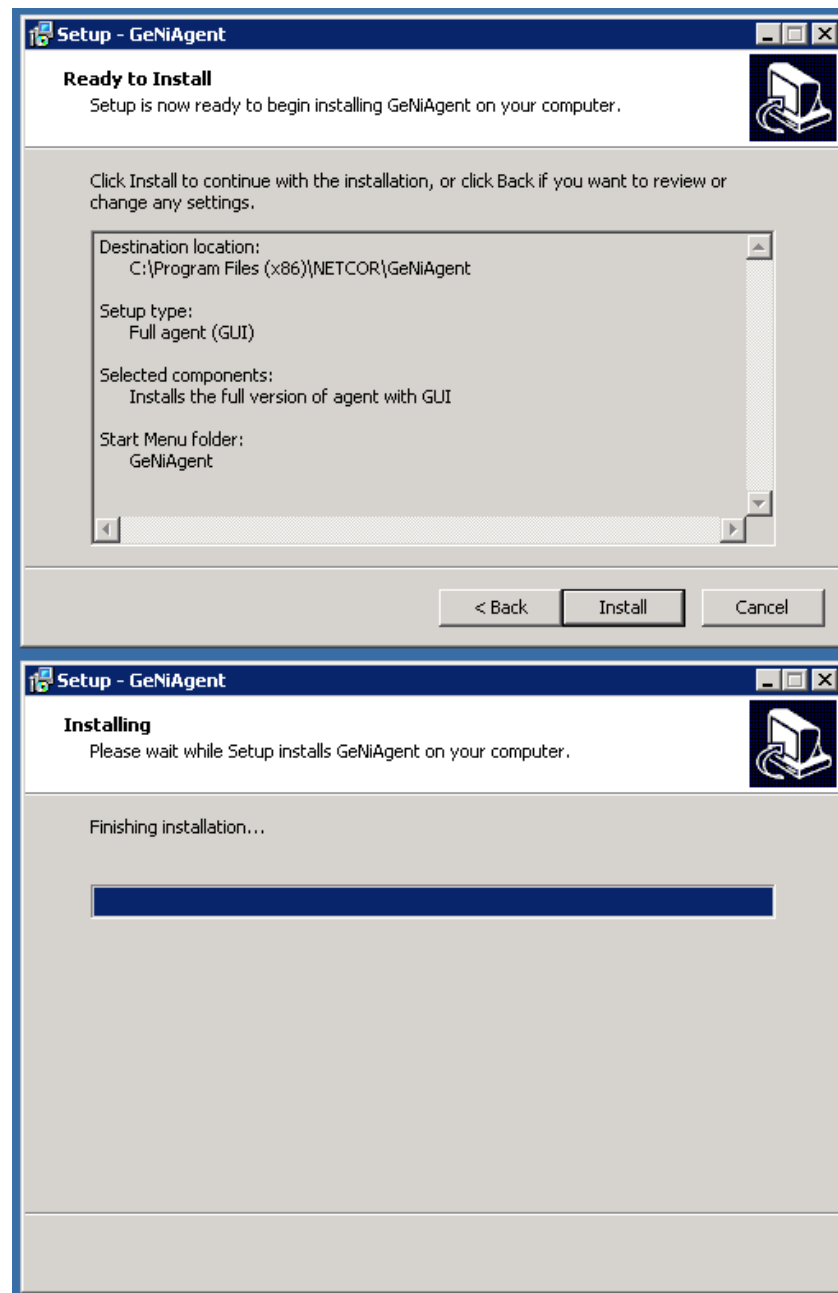
After you made your selection, click on [Next >].



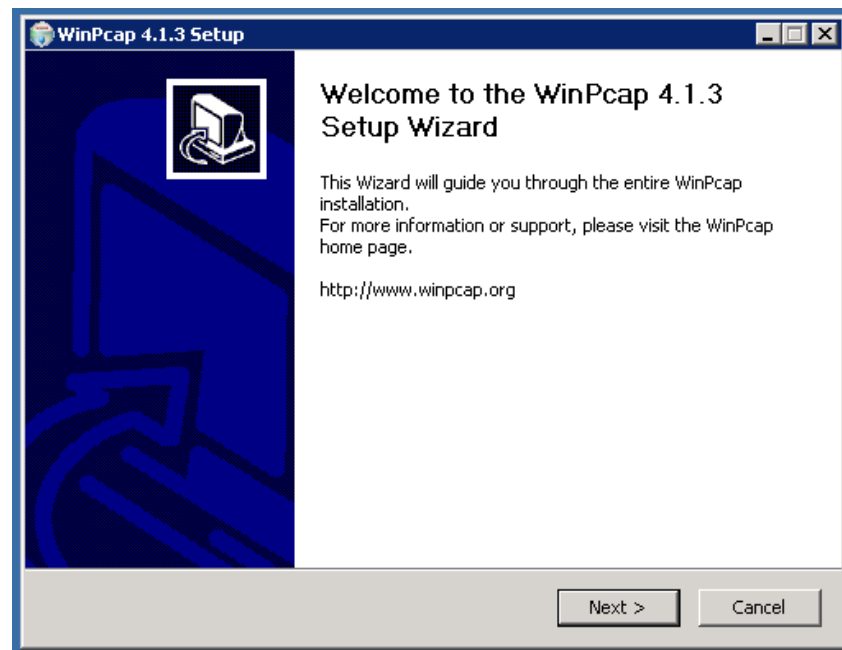
Set the path for the start menu folder and click on [Next >].



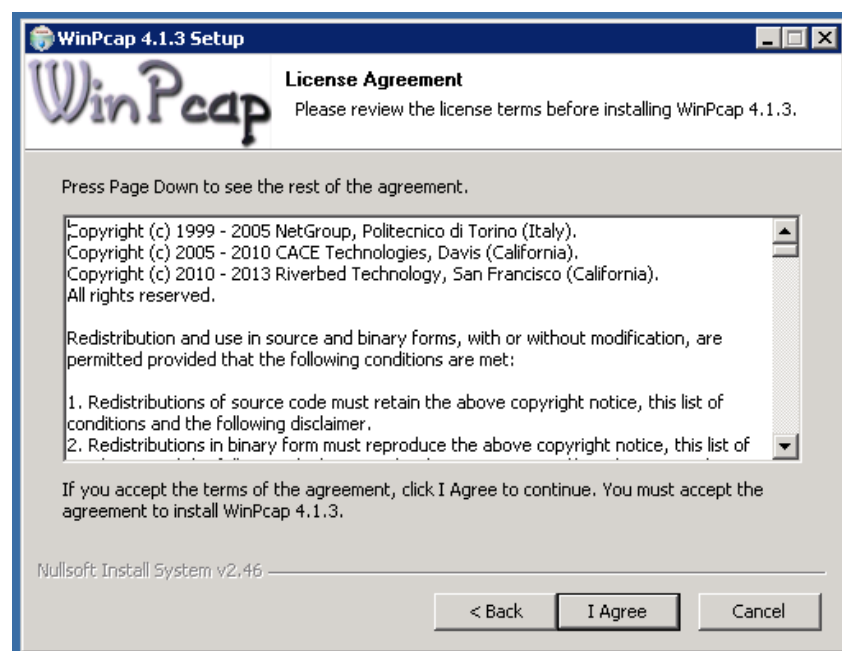
Click on [Install].



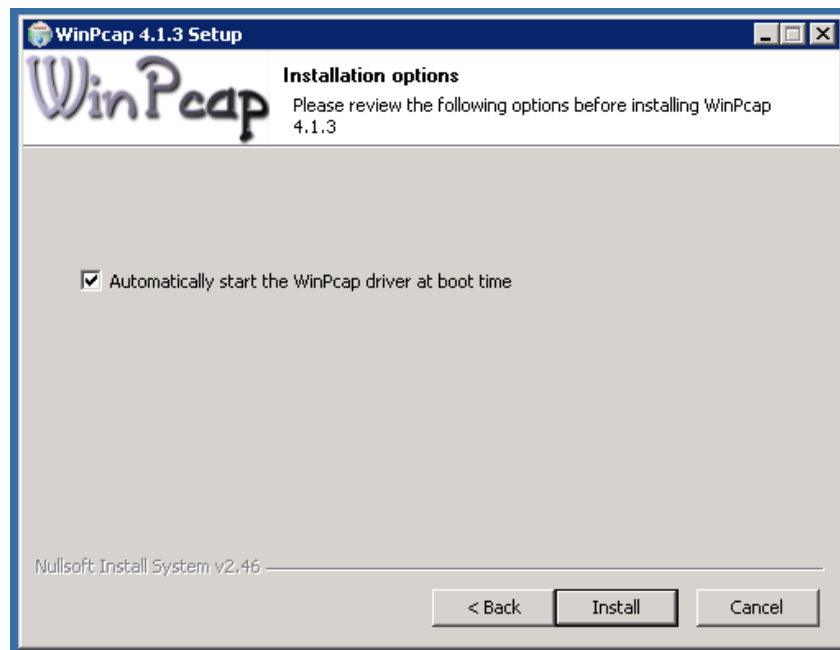
After the installation of the GeNiAgent, the installation of WinPcap is triggered.
Click on [Next >].



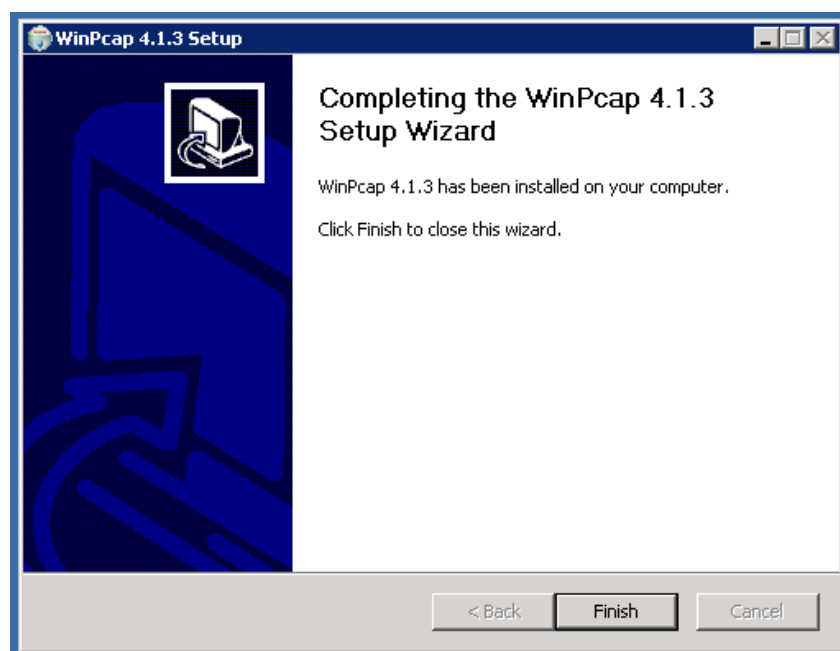
Click on [I Agree].



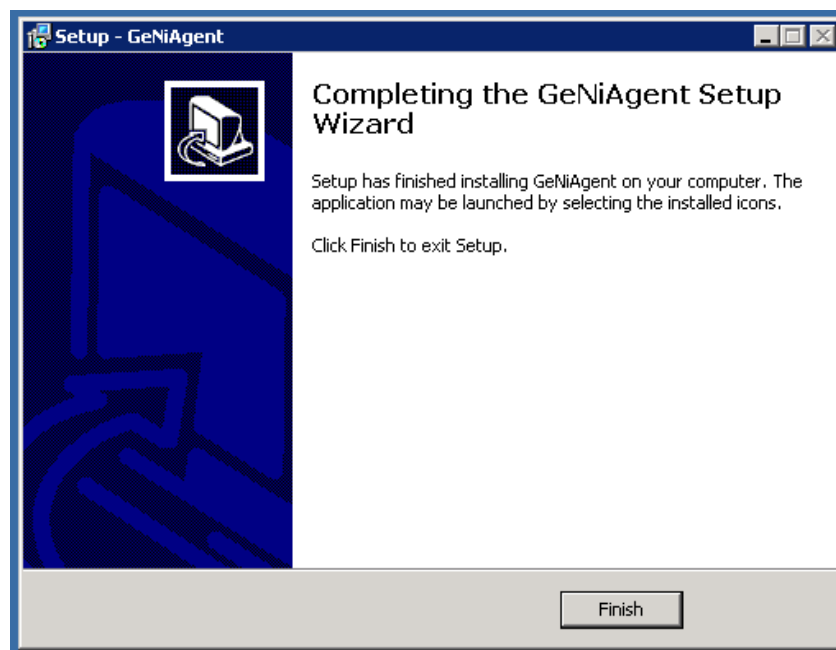
Please confirm, that the autostart option is activated and click on [Install].



Click on [Finish] to quit the WinPcap installation.



Click on [Finish] to exit the GeNiAgent Setup.



1.2.3 Silent Installation

It's possible to install the GeNiAgent "silent" mode (displays a GUI) or in "verysilent" mode (no GUI).

If you install the GeNiAgent in silent or verysilent mode, the WinPcap installation will not be triggered! WinPcap is required for packet tracing.

Options

Installation without asking, but with GUI:

- /silent

Installation without asking and GUI:

- /verysilent

Agenttype (service, GUI or trace):

- /type=gui
- /type=service
- /type=trace

Allow reboot on error (1 or 0; Default: 1):

- --reboot_on_error

Allow daily reboot (1 or 0; Default: 1):

- --reboot_daily

Allow remote reboot (1 or 0; Default: 1):

- --reboot_remote

Daily reboot time (00:00 - 23:59; Default: 23:00):

- --reboot_daily_time

Allow remote change of reboot time (1 or 0; Default: 1):

- --time_web_change

Examples**Install without reboot:**

- Setup.exe /verysilent --reboot_on_error 0 --reboot_daily 0 --reboot_remote 0 --time_web_change 0

Install as GUI with reboot:

- Setup.exe /verysilent /type=gui

Changed reboot time:

- Setup.exe --reboot_daily_time 12:59

1.2.4 Auto Login**IMPORTANT:**

- GeNiAgent will start automatically after the computer is fully booted.
- Scripts that interact with gui programs, require the GUI type of GeNiAgent to be installed and a user logged in.

The latter can be achieved by enabling autologon on the computer. GeNiAgent is installed and tests are scheduled. After successfully enabling autologon, you can lock the computer.

Instructions to turn on auto logon:

Download the "Autologon" tool from:

<http://technet.microsoft.com/en-en/sysinternals/bb963905>

Start the tool and enter valid user credentials.

Note: The tool writes the credentials encrypted into the registry!

Alternatively, you can achieve this manually:

- Run regedit.exe
- Locate the registry key:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WindowsNT\CurrentVersion\Winlogon
- Add the following keys, replace the values with valid ones:
 - "DefaultUserName"="Name"
 - "DefaultDomainName" = "DomainName"
 - "DefaultPassword"="password"
 - "AutoAdminLogon"="1"

1.2.5 Security Information

GeNiEnd2End User

During the installation of GeNiEnd2End we created a user with Administrative rights on your system.

The username is: GeNiEnd2End

The default password is: Hsd23%x1

Please change the password!

Do it for your own safety.