



# NetIQ Advanced Authentication Framework - Authenticore Server

## **Installation Guide**

Version 5.1.0

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# Introduction


## About This Document


### Purpose of the Document

This Authenticore Server Installation Guide is intended for system administrators and describes how to install NetIQ Advanced Authentication Framework Authenticore Server.


### Document Conventions

This document uses the following conventions:

 **Warning.** This sign indicates requirements or restrictions that should be observed to prevent undesirable effects.


 **Important notes.** This sign indicates important information you need to know to use the product successfully.

 **Notes.** This sign indicates supplementary information you may need in some cases.

 **Tips.** This sign indicates recommendations.

- Terms are italicized, e.g.: ***Authenticator***.
- Names of GUI elements such as dialogs, menu items, and buttons are put in bold type, e.g.: the **Logon** window.

## System Requirements


 Installing and removing Authenticore Server requires **Local Admins + Authenticore Admins** rights.


Before installing the product, the following system requirements should be fulfilled:

- Microsoft Windows Server 2008 R2 SP1/Microsoft Window Server 2012/ Microsoft Windows Server 2012 R2
- Domain functional level should be set to Microsoft Windows Server 2008 R2 SP1 or newer (Microsoft Windows Server 2000/Microsoft Windows Server 2003 domain functional level is not supported)
- 100 Mb free disk space

# Installing and Removing Authenticore Server

**Authenticore Server** is intended for processing requests for biometric authentication coming from the NetIQ Advanced Authentication Framework system users. There should be at least one Authenticore Server in the domain to provide system workflow.

 To increase performance, it is recommended to install several Authenticore Servers in the domain. In this case, the servers will automatically join in a cluster and function as an integral authentication service. It will increase not only the speed of the requests processing, but also the safety of the whole system. Installing several Authenticore Servers also increases fault tolerance. If for some reason one of the servers stops, the user still has a possibility to logon by authenticator.

 It is recommended to deploy the Authenticore Servers in Active Directory sites with at least one Domain Controller available, because the Authenticore Server connects random Domain Controller in the same Active Directory site and if Domain Controllers are not available in the same site, Authenticore Server will go to a random Domain Controller.

To install the first Authenticore Server, follow the steps below:

- [Installing Authenticore Server](#)
- [Configuring Enterprise Key](#)
- [Applying Licenses](#)

Authenticore Server is installed by the installer program. Configuring Enterprise Key and applying licenses is performed manually.

## Installing Authenticore Server

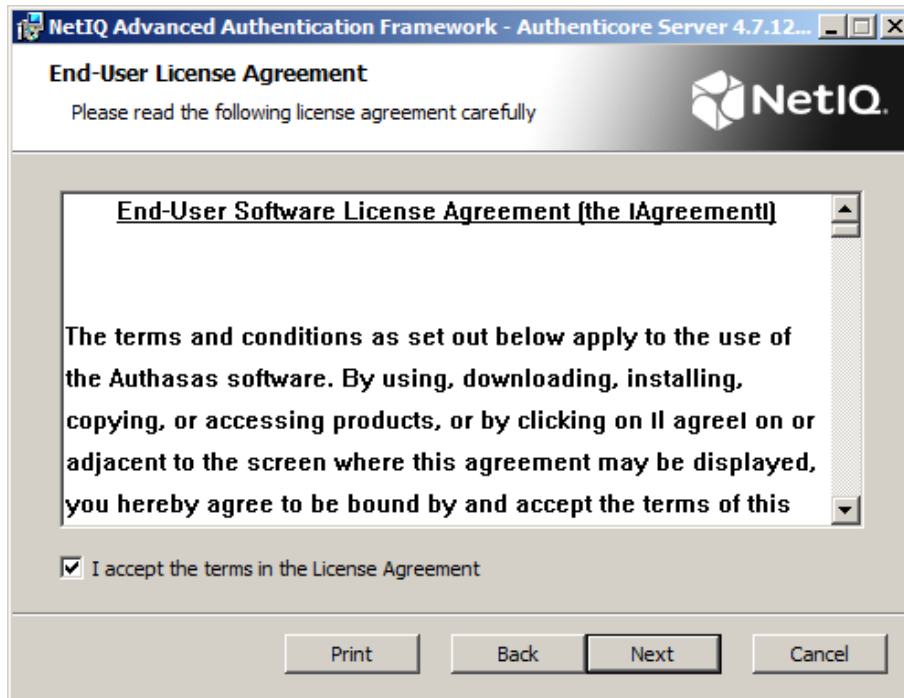
- \* Authenticore Servers can be installed only on member servers, not on Domain Controllers.
- \* The start of installation may be frozen for a time up to 1 minute in the case of offline mode. This delay occurs due to check of digital signature of component.

To install Authenticore Server via Setup Wizard:

1. Run **Autorun.exe** from NetIQ Advanced Authentication Framework distribution kit. Tick **Authenticore Server** in the list of components and click **Continue**.
2. Click **Next** to continue.



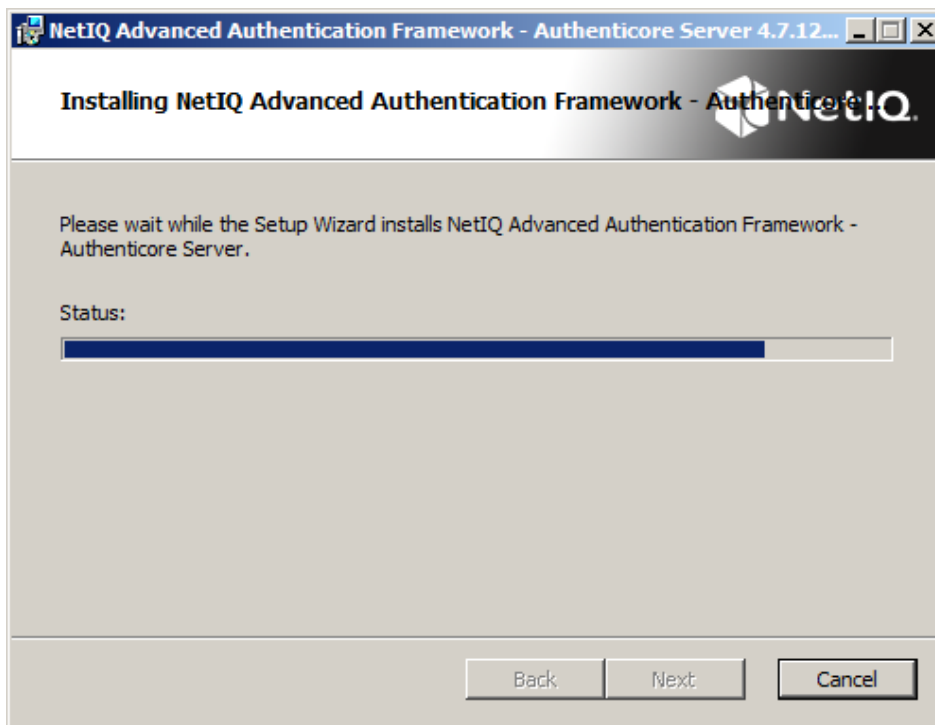
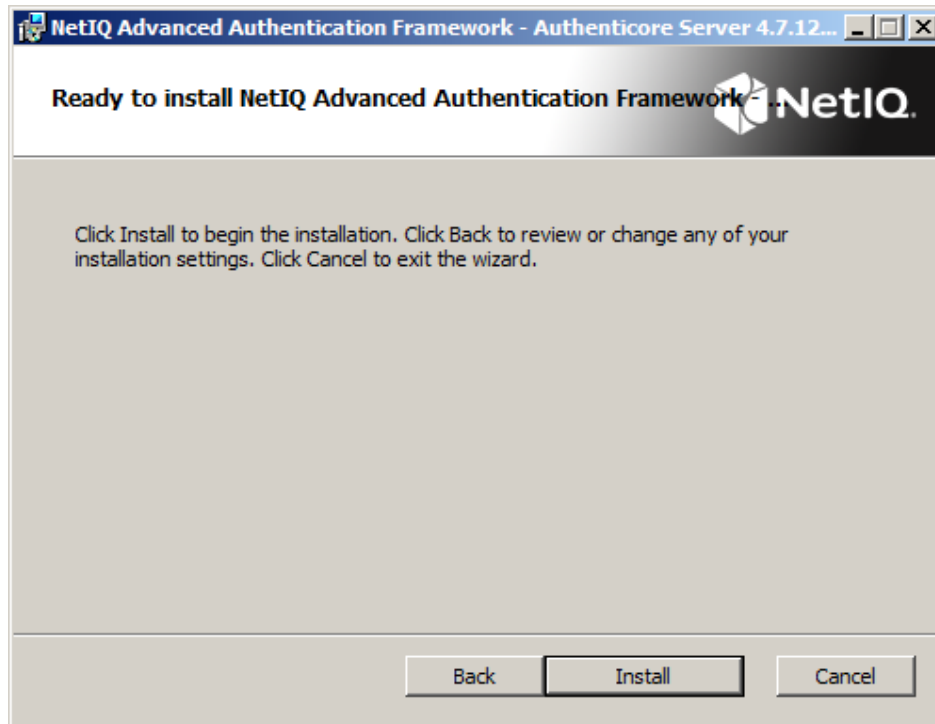
3. Read the **License agreement**. Select the **I accept the terms in the license agreement** check box and click **Next**.



4. Check the destination folder and path.

- To change the destination folder, click the **Change...** button.
- To continue, click **Next**.


5. Click **Install** and wait until the component is installed.



6. Click **Finish** to close the Wizard.



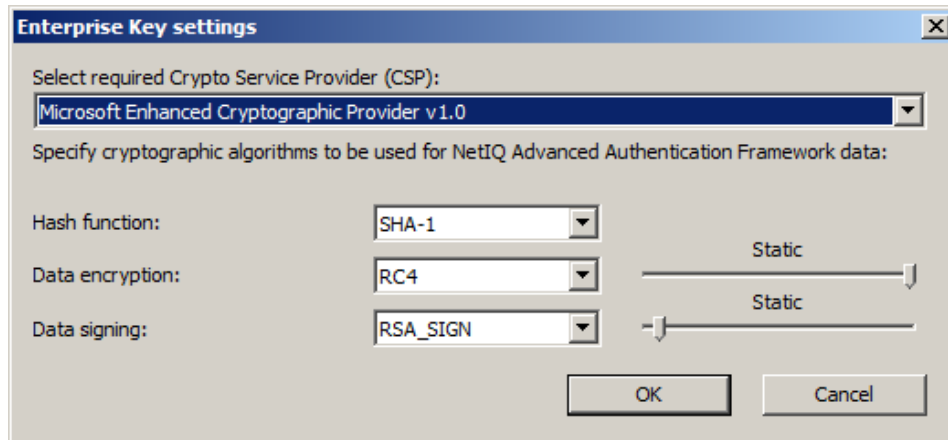


 To complete the installation of the first Authenticore Server, it is required to restart the computer.

7. Generate a new Enterprise Key (in case of installation of the first Authenticore Server) or restore Enterprise Key (in case of upgrade of the Authenticore Server or installation of additional Authenticore Servers) through **Authenticore Tray Manager** manually.

## Configuring Enterprise Key

**Enterprise Key settings** are available in the dialog, which appears after the start of manual generation of the Enterprise Key through Authenticore Tray Manager:



To modify **Enterprise Key settings**:

1. Select Crypto Service Provider (CSP). The main CSP types are:
  - **Microsoft Base Cryptographic Provider v 1.0** – basic cryptographic functionality that can be exported to other countries or regions.
  - **Microsoft Strong Cryptographic Provider** – extension of the Microsoft Base Cryptographic Provider available with Windows 2000 and later.
  - **Microsoft Enhanced Cryptographic Provider v1.0** (default) – the Enhanced Provider supports stronger security through longer keys and additional algorithms. It can be used with all versions of CryptoAPI.



The list of available CSPs may vary depending on what CSPs are installed on the local PC.

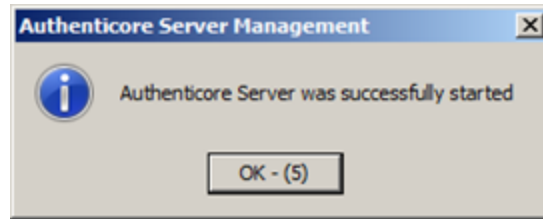


The Microsoft Strong Provider and the Enhanced Provider are backward-compatible with the Base Provider except that the providers can only generate RC2 or RC4 keys of default key length. The default length for the Base Provider is 40 bits. The default length for the Enhanced Provider is 128 bits. Thus the Enhanced Provider cannot create keys with Base Provider-compatible key lengths. However, the Enhanced Provider can import RC2 and RC4 keys of up to 128 bits. Therefore, the Enhanced Provider can import and use 40 bit keys generated using the Base Provider.

2. Select encryption algorithms.
3. Set the key length (the upper slider) and the length of data signature (the lower slider).

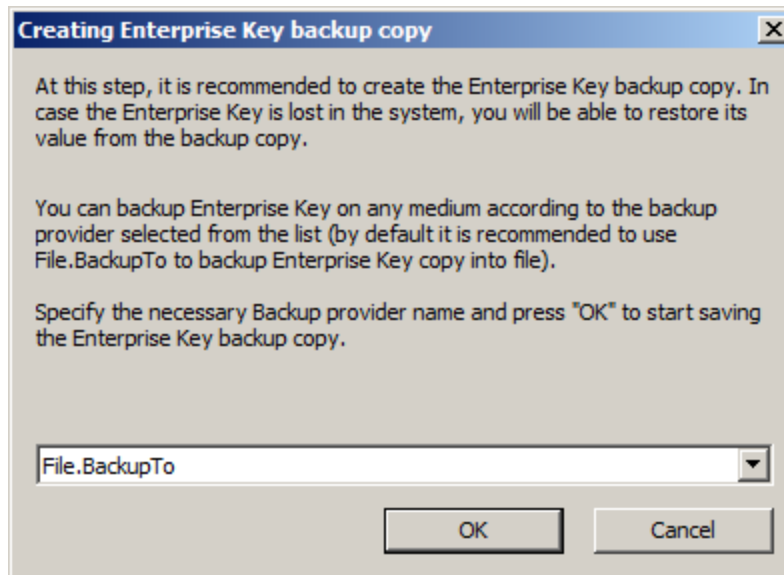
4. Click **OK**.

The Authenticore Server is started with notification:



**i** Once Enterprise Key parameters are defined and applied, you should create a backup copy, from which you can restore the Key, if it is lost or corrupted. Restoring the Enterprise Key from the backup copy is also helpful when the Authenticore server is reinstalled. Re-installing the Authenticore server means generating a new Enterprise Key. The Enterprise Key is used to encrypt all data in Active Directory, that is why when a new Enterprise Key is generated, the Authenticore Server cannot decrypt the data encrypted with the previous Key. To avoid resetting users' passwords and re-enrolling their patterns after the Authenticore server has been re-installed, you should back up the Enterprise Key while installing the first Authenticore server and then restore it on the new Authenticore server.

5. You are prompted to select a backup provider.



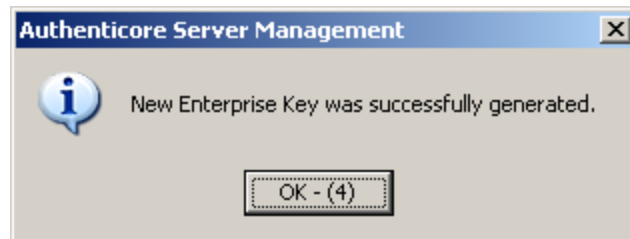
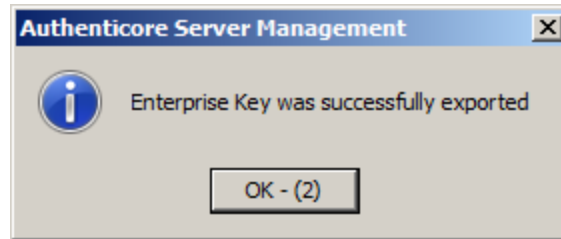
Choose **File. BackupTo** (default).

Once the provider is selected, click **OK**.

6. The **Enterprise Key** backing up dialog is displayed:

- Enter the file name and specify the path in the **File name** box or use the **Browse** button to select the path to backup file.
- To set password for the file, check the **Set password for the file** box, and then enter and confirm the password.
- Click **OK**.

Enterprise Key is exported and generated with notifications:



## Managing Licenses

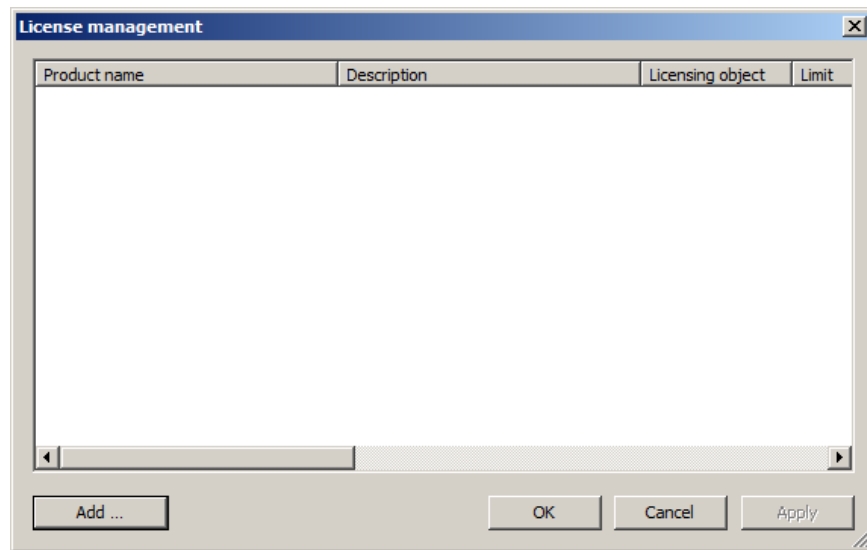
NetIQ Advanced Authentication Framework requires that server and user licenses are applied.

- A **server license** defines the maximum number of Authenticore Servers in your domain.
- A **user license** defines the maximum number of NetIQ Advanced Authentication Framework users in your domain.

Every time you install an additional Authenticore Server, it checks whether the server limit is exceeded. If it is, the server will stop its work.

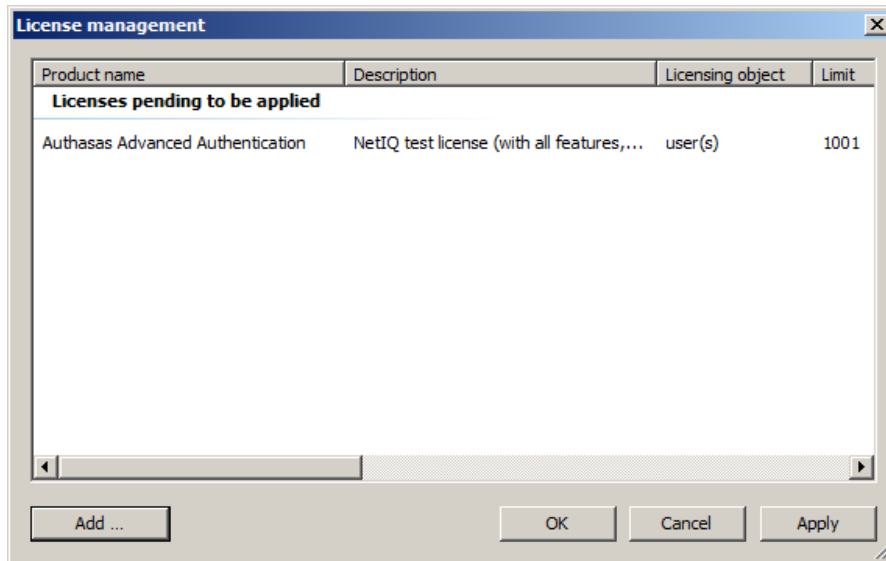
The same check is performed every time you create an NetIQ Advanced Authentication Framework user.

After Enterprise Key has been successfully generated, the **License management** dialog appears.

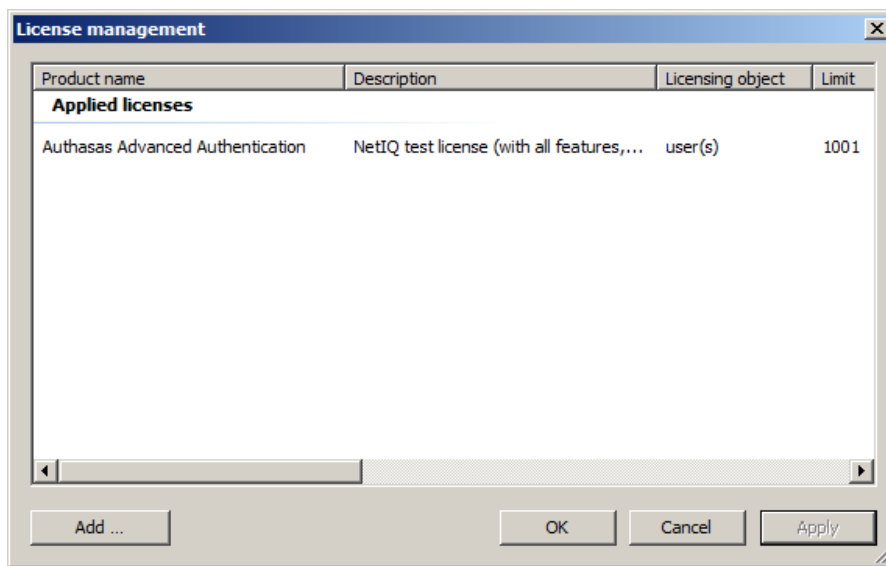


To add and apply server and user licenses:

1. Click **Add**, select and open a license file.
2. The licenses you add are displayed as pending to be applied:



3. Click **Apply**. The licenses are displayed as applied:



Click **OK**.

License details		
Name	Value	
Product name	Authasas Advanced Authentication	
Description	NetIQ test license (with all features,...	
Licensing object	user(s)	
Limit	1001	
Current	1	
Client	Authasas	
Domain	authasas.local	
Begin date	11.05.2013	
End date	Unlimited	
ID	141	
Product version	4	

Features... Close

If you click the **Features** button, you will be provided with an opportunity to view the list of all licensed components of the solution.

## Removing Authenticore Server

In this chapter:

- [Microsoft Windows Server 2008 R2](#)
- [Microsoft Windows Server 2012/2012 R2](#)



Authenticore Server should be removed **only** after the removal of **all** other components of NetIQ distribution kit.

### Microsoft Windows Server 2008 R2

1. In the **Start** menu, select **Control panel** and then double-click **Programs and Features**.
2. Select **NetIQ Advanced Authentication Framework – Authenticore Server** and click **Uninstall**.
3. Confirm the removal.
4. Wait a few seconds until the removal is completed.

Once the removal is completed, you are prompted to restart the computer. This message can be ignored.

### Microsoft Windows Server 2012/2012 R2

1. In the **Search** menu, select **Apps > Control Panel > Programs > Programs and Features**.
2. Select **NetIQ Advanced Authentication Framework – Authenticore Server** and click **Uninstall**.
3. Confirm the removal.
4. Wait a few seconds until the removal is completed.



# Troubleshooting

**i** This chapter provides solutions for known issues. If you encounter any problems that are not mentioned here, please contact the support service.

## Cannot Install Authenticore Server

### Description:

Error appears when installing Authenticore Server on your computer.

### Cause:

- a. You are installing Authenticore Server on the network drive.
- b. You have no space left on the disk.
- c. You are installing Authenticore Server on the unsupported OS.
- d. You are installing Authenticore Server on the OS with the wrong bitness.

### Solution:

- a. Change the installation path.
- b. Free the amount of disk space needed for installation.
- c. Check the list of supported OS.
- d. Check your OS's bitness (only x64 is supported) and run the installer.

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