NetIQ Advanced Authentication Framework - Administrative Tools

Installation Guide

Version 5.1.0

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Introduction

About This Document

Purpose of the Document

This Administration Tools Installation Guide is intended for system administrators and describes how to install NetIQ Advanced Authentication Framework administrative components.

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.

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NetIQ Advanced Authentication Framework™ Overview

About NetIQ Advanced Authentication Framework™

NetIQ Advanced Authentication Framework™ is a software solution that enhances the standard user authentication process by providing an opportunity to log on with various types of authenticators.

Why choose NetIQ Advanced Authentication Framework™?

NetIQ Advanced Authentication Framework ™...

• ...makes the authentication process easy and secure (no complex passwords, "secret words", etc.).
• ...prevents unauthorized use of your computer and mobile devices.
• ...protects you from fraud, phishing and similar illegal actions online.
• ...can be used to provide secure access to your office.

What is NetIQ Advanced Authentication Framework™?

NetIQ Advanced Authentication Framework™ is a system made up of 3 sets of components (Server components, Administrative components, Client components).

Administrative components are used to create, edit and remove NetIQ Users. They are also used to create, edit and remove users' authenticators and to enable or unable caching. Administrator components allow using User Viewer.
Server components are used for working with data storage. They check user authentication requests and modify data storage.
Administrator components and **Server components** may be installed both, on the same or separate servers.
Client components perform user authentication. They are also used to create, edit and delete authenticators on behalf of the user.

• NetIQ Advanced Authentication™ is intended for the use within corporate environment.
• Users data stored in Active Directory database are protected by ***Enterprise Key*** (see Enterprise Key).

NetIQ Advanced Authentication™ system includes the following additional module:

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• **RTE** (Runtime Environment), which allows to use SDK with no need to install "NetIQ Advanced Authentication – Client" component. It is helpful when you would like to use NetIQ Advanced Authentication™ to secure access to certain applications only, without changing the regular Windows logon procedure.

NetIQ Advanced Authentication Framework™ Technology

NetIQ Advanced Authentication Framework™ technology relies on **authenticator.**

Although password authentication is simple and the most common, it has a number of disadvantages:

- a simple password is both easy to remember and to obtain. They can easily be guessed or hacked;
- a complex password is both hard to obtain and to remember. However, users tend to write their long complex passwords down and keep then on their workplaces where anyone else can see them.
- a password can be communicated to anyone else.

Authenticators are better, because they do not complicate logon procedure, but allow users to give up passwords and thus keep access to their information secure. NetIQ Advanced Authentication Framework™ gives users an opportunity to use hardware authentication devices and retains an opportunity to log on by password (on permission from the system administrator).

Authentication devices supported by NetIQ Advanced Authentication Framework™ include biometric scanners, smart cards, tokens, memory cards, etc.

- An authenticator can be enrolled (created) at first logon or at any time later.
- The number of authenticators you can have is defined by NetIQ administrator.
- NetIQ Advanced Authentication Framework™ allows users to manage their authenticators: enroll, re- enroll (edit), test, delete. All these actions require permission from NetIQ administrator.
- The client part of NetIQ Advanced Authentication Framework™ system is similar in look and feel to Windows Logon application, which is familiar to all users.

NetIQ Advanced Authentication Framework™ Administrative Tools

• Due to **Enhanced User Creation Wizard**, you may create an NetIQ Advanced Authentication Framework user when creating an Active Directory user account. When creating a new user, you can enroll and manage user's authenticators.

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• When managing user properties, you have an opportunity to manage user authenticators (if you were delegated control over the corresponding rights from NetIQ Advanced Authentication Framework User/Computer settings management).

Delegating control option doesn't work for ADLDS/ADAM configurations. In that case, you will need Authenticore Admins group rights to edit NetIQ Advanced Authentication Framework user settings.

• You have an opportunity to edit properties of multiple users and allow authenticators caching on multiple computers at a time via **Properties** of selected users or **Organization Unit Properties and Group Properties.**

• **NetIQ Advanced Authentication Framework User Viewer MMC snap-in** allows you to view the list of users, check authentication methods used by the users, modify user properties and manage their authenticators.

• A number of group policies allow you to manage NetIQ Advanced Authentication Framework™ system. The policies are divided into sections depending on their scope (Security policies, Event Log policies, Workstation policies, Repository policies, UI Look & Feel policies).

• Enabling **Allow caching of user authenticators on this computer** box for particular computer allows you also to cache authenticators for RTE, even if "NetIQ Advanced Authentication Framework – Client" component is not installed.

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System Requirements

Installing and removing this product requires Local Administrator privileges.

Before installing the product, check that the following system requirements are fulfilled:

- Microsoft Windows Server 2008 R2 SP1/ Microsoft Windows Server 2003 (x64/x86) SP2/ Microsoft Windows Server 2003 R2 (x64/x86) SP2/ Microsoft Windows Server 2012;
- Microsoft Windows XP SP3 x86 (with installed adminpak.msi), Microsoft Windows 7 SP1 x86/x64 (with installed RSAT).

It is strongly recommended that you fully install the necessary **Remote Server Administration Tools** OS feature (**Remote Server Administration Tools > Role Administration Tools>AD DS and AD LDS Tools > AD DS Tools** for Microsoft Windows 2008 Server).

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Installing and Removing NetIQ Advanced Authentication Framework Administrative Components

Administrative Components are a set of tools allowing the administrator to control the NetIQ Advanced Authentication Framework system.

Administrator Components include:

• **ADUC MMC Console Extension** – an extension to "Active Directory Users and Computers" MMC snap-in implemented as the **NetIQ Advanced Authentication Framework** page for "User" and "Computer" objects;

• **NetIQ Advanced Authentication Framework – User Viewer MMC Snap-in** – a tool allowing you to view and edit user properties;

• **Security Policies Templates** – group policy templates allowing configuration of NetIQ Advanced Authentication Framework security parameters;

• **Delegation Wizards** – Delegation of Control Wizards used to delegate authority to edit NetIQ Advanced Authentication Framework settings to a specific user or a group of users;

• **Administrator's Manual** – NetIQ Advanced Authentication Framework Administrative Tools Administrator's Guide, a help document in .pdf format with instructions on how to work with administrative tools.

Installing Administrative Components

The starting of installation can be frozen for a time up to 1 minute in the case of offline mode. This delay occurs due to checking of digital signature of component.

To install Administrative Components via Setup Wizard:

1. Run **Autorun.exe** from NetIQ Advanced Authentication Framework distribution kit. Tick **Administrative Tools** in the list of components and click **Continue**.

2. Click **Next** to continue.

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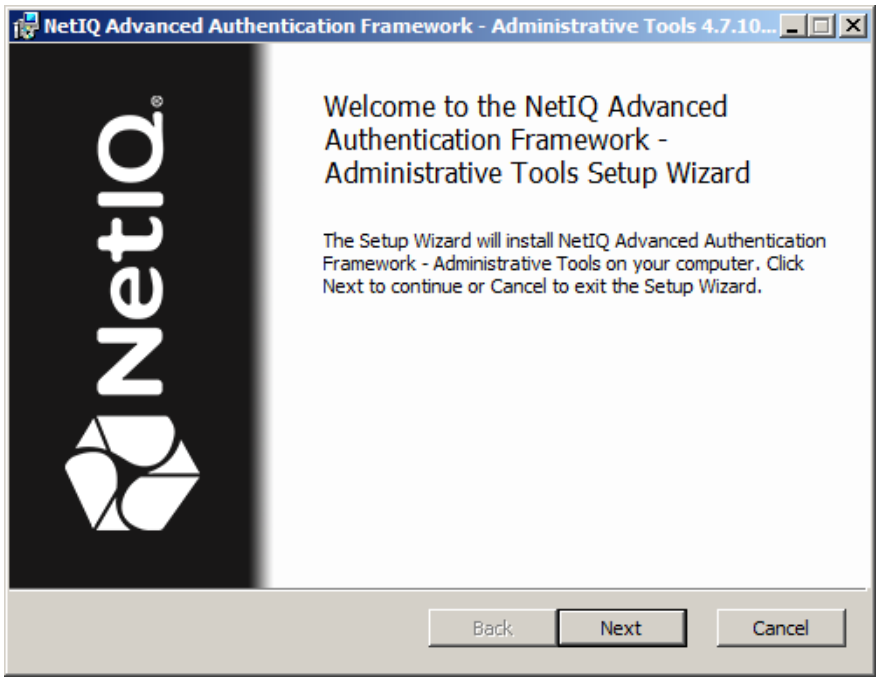
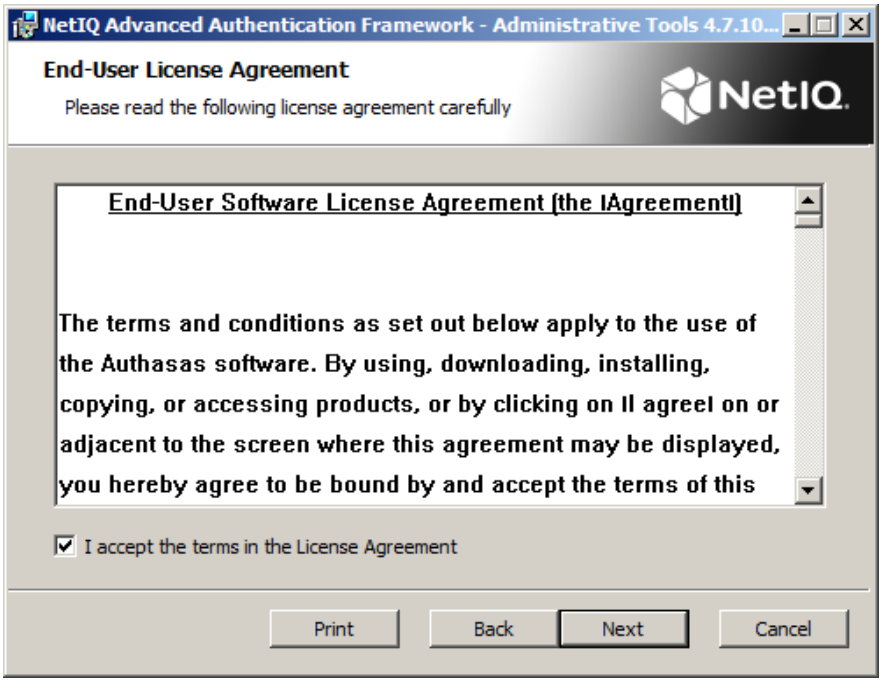


3. Read the License agreement. Click **I accept the terms in the license agreement** and then click **Next**.



4. Check the destination folder and path.

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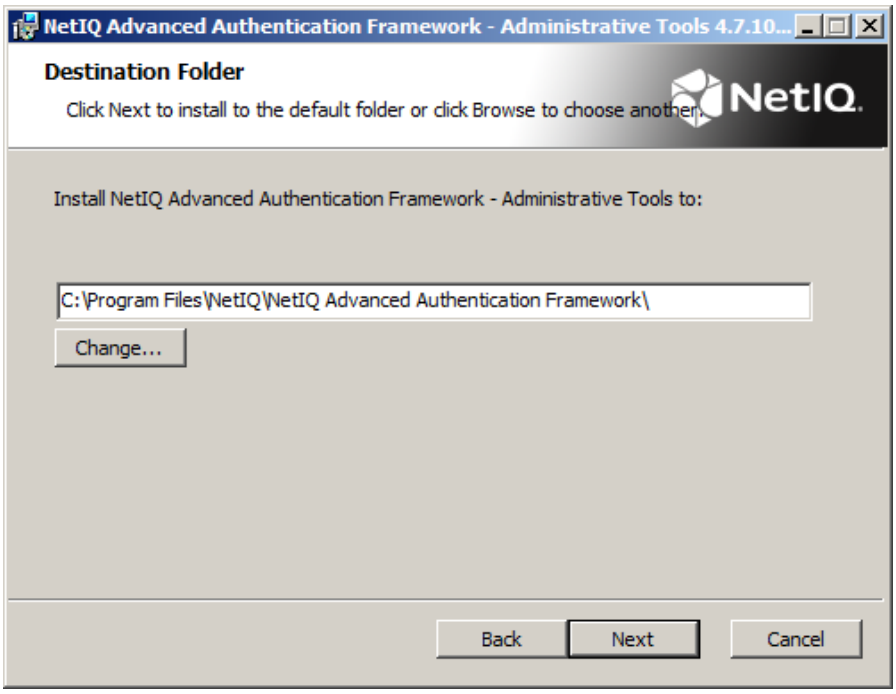
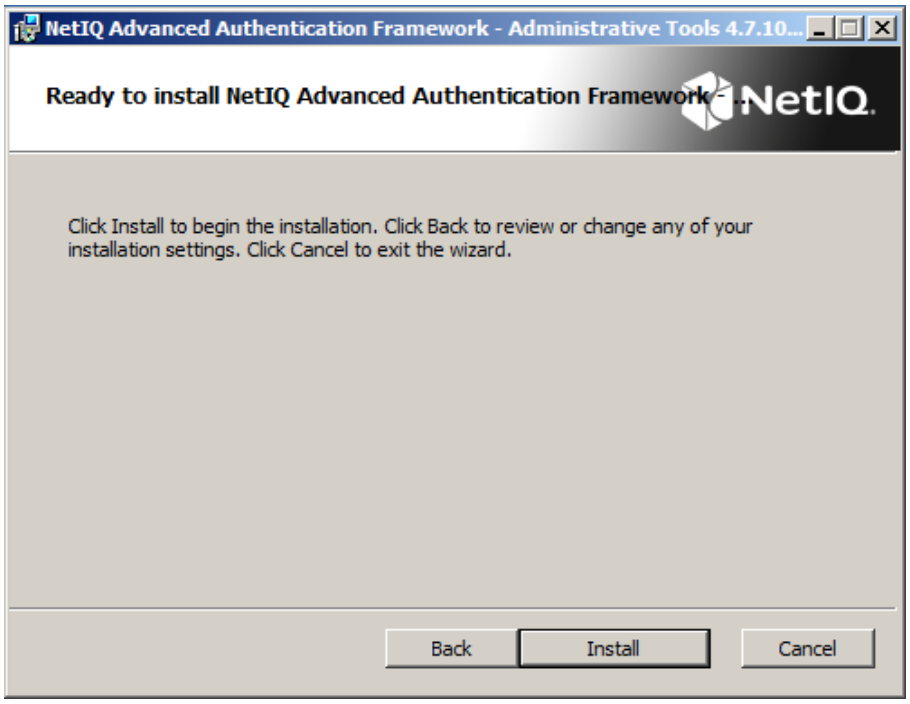


• To change the destination folder, use the **Change** button.

• To continue, click **Next**.

5. Click **Install** and wait until the components are installed.



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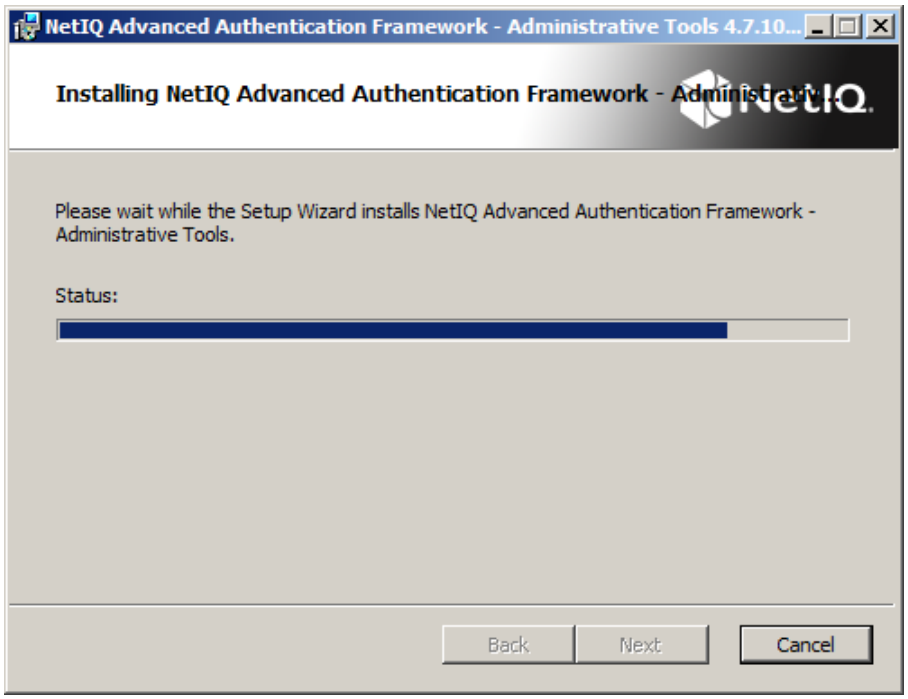
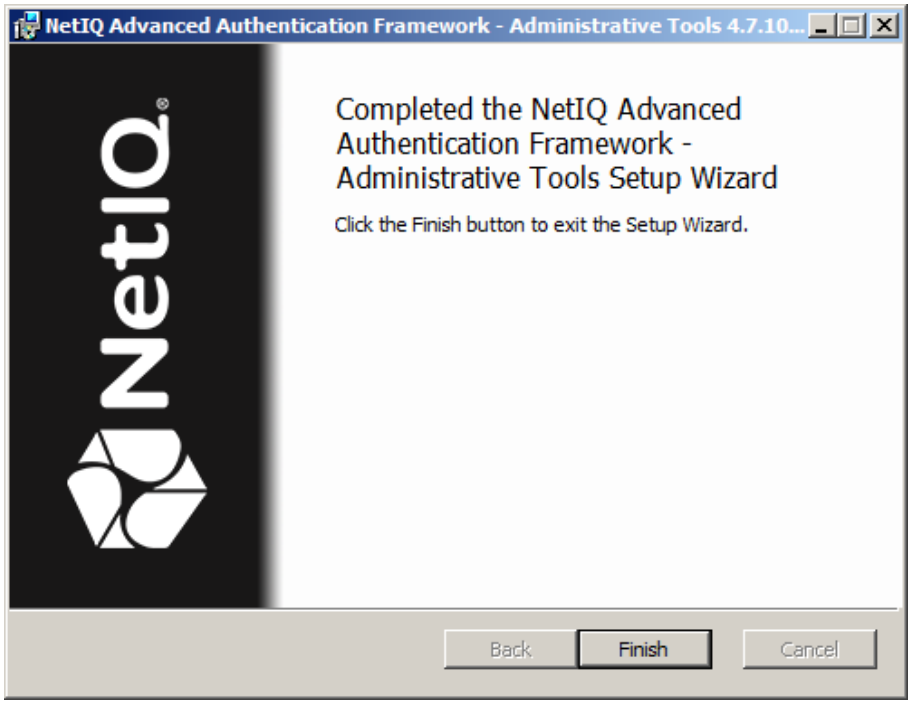


6. Click **Finish** to close the Wizard.



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Removing Administrative Components

Microsoft Windows Server 2008

1. In the **Start** menu, select **Control panel** and then double-click **Programs and Features**.

2. Select **NetIQ Advanced Authentication Framework – Administrative Components** and click **Uninstall**.

3. Confirm the removal.

4. Wait a few seconds until the removal is completed.

Microsoft Windows Server 2003

1. In the **Start** menu, select **Settings** > **Control Panel** > **Add or Remove Programs**.

2. Select **NetIQ Advanced Authentication Framework – Administrative Components** and click Remove.

3. Confirm the removal.

Microsoft Windows Server 2012

1. In the **Search** menu, select **Apps** > **Control Panel** > **Programs** > **Programs and Features**.

2. Select **NetIQ Advanced Authentication Framework – Administrative Components** and click **Uninstall**.

3. Confirm the removal.

4. Wait a few seconds until the removal is completed.

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Upgrading Administrative Components

It is highly recommended that you close active Directory Users and Computers before upgrading your NetIQ Advanced Authentication Framework Administrative Components version.

In order to upgrade NetIQ Advanced Authentication Framework Administrative Administrative Tools, begin installing the new version. You will receive a notification about already existing previous version. Continue the standard installation procedure and your NetIQ Advanced Authentication Framework Administrative version will be automatically updated.

After upgrading is complete, the installer can ask you to restart a computer.

You do not need to remove the previous NetIQ Advanced Authentication Framework Administrative version in order to upgrade Administrative Components.

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Installing and Removing NetIQ Advanced Authentication Framework Components via Group Policy

It is recommended that Microsoft Windows Server 2003 users should install Group Policy Management Console.

To install/remove NetIQ Advanced Authentication Framework Modules, use

- **Group Policy Management Console (GPMC)**, which is installed by default on a Domain Controller. To open GPMC, click **Start** and select **Administrative Tools > Group Policy Management**.
- **Group Policy Management Editor (GPME**), which can be opened from GPMC. To open GPME, under domain right-click the group policy object (GPO) you are using to install the software and select Edit.

It is highly recommended that you do not use Default Group Policy, because it's applicable to entire domain. It is not recommended to install/upgrade client components for all workstations at the same time.

To create new Group Policy and configure it:

1. Create new global security group and new group policy object.
2. Connect them:

a. Open created group policy object properties;
b. Go to the **Security** tab;
c. Remove **Apply Group Policy** option for **Authenticated Users** group;
d. Add created group and mark **Apply Group Policy** option for it.

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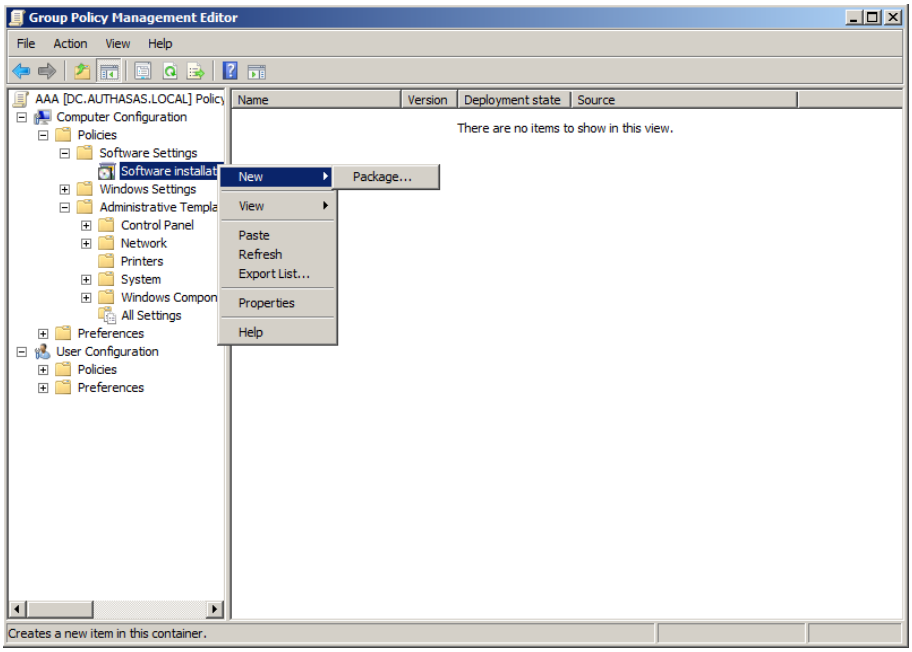
Installing NetIQ Advanced Authentication Framework Components via Group Policy

To install an NetIQ Advanced Authentication Framework package using the group policy:

1. In GPME, in the selected GPO under **Computer configuration** > **Policies** > **Software Settings**, right-click **Software Installation** and select **New** > **Package**.



2. Specify the network path to the installer package.

The directory you are willing to install should be located on network drive.

3. In the **Deploy Software** dialog, click **Assigned** and then click **OK.**

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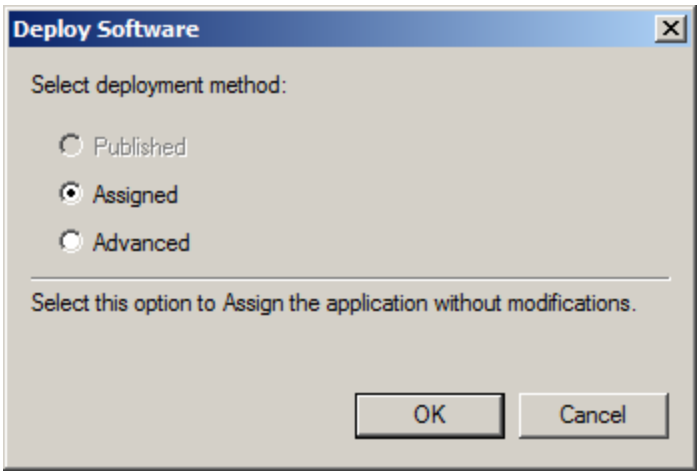
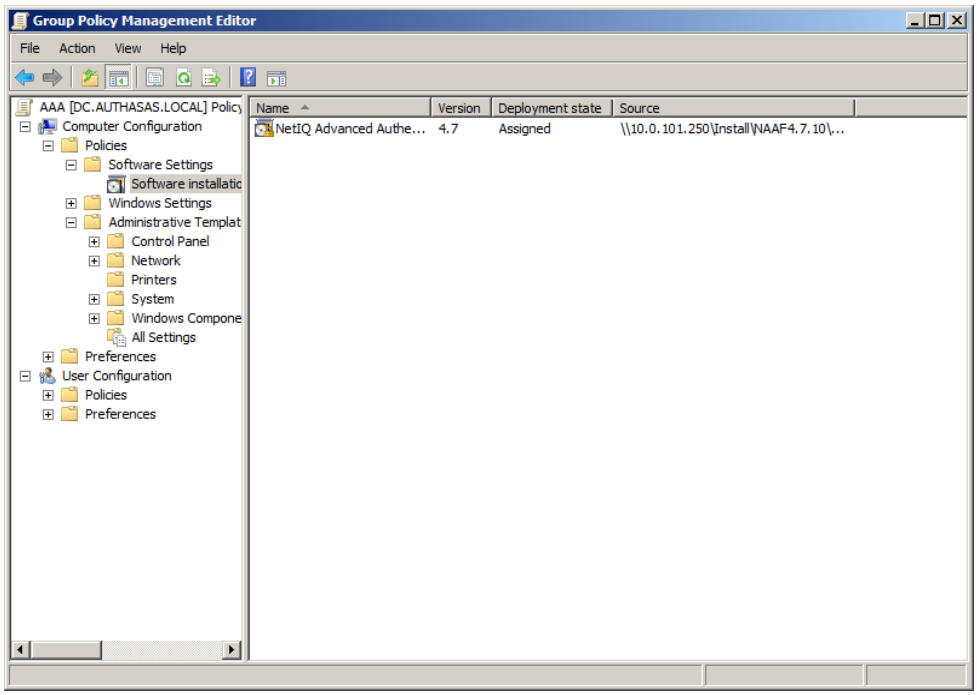


4. The installer package name, version, state and path are displayed in Group Policy Object Editor.



5. Open package properties:

a) On **Deployment** tab: remove option **Uninstall this application when it falls out of the scope of management**. It is done to prevent undesirable uninstallation in case of problems as well as for the upgrade to go properly.

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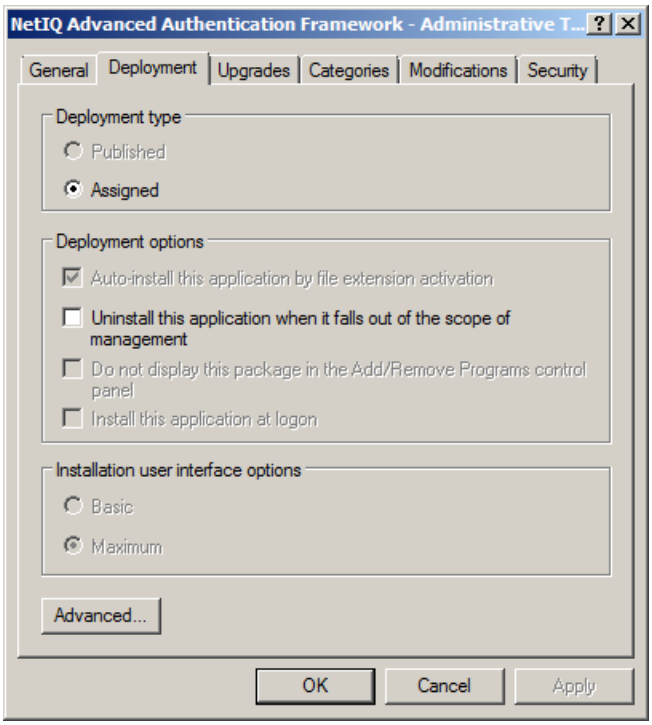
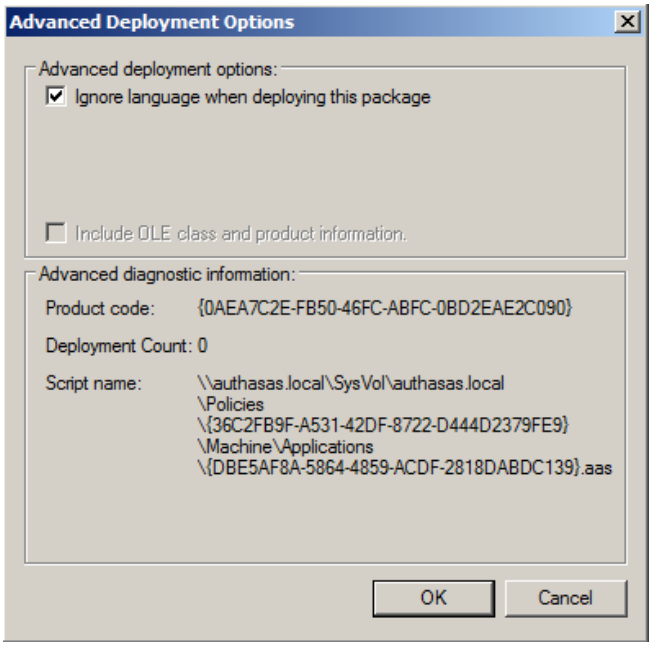


b) On **Deployment** tab press **Advanced** button: set option **Ignore language when deploying this package.** If you don't set this option the package will install only on OS with package's language.



c) Remove option **Make this 32-bit X86 application available to Win64 machines** (if this option is available).

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6. Add appropriate 64-bit installer to this group policy object and use settings 5a)-5b).

The assigned package is installed after you have updated the domain policy and restarted your computer. To update the domain policy immediately, use the gpupdate /force command.

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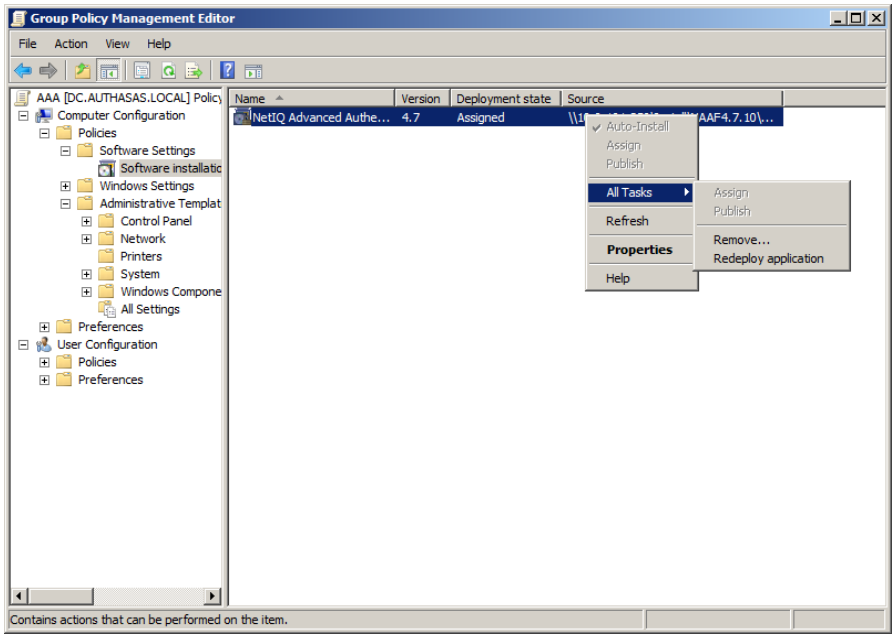
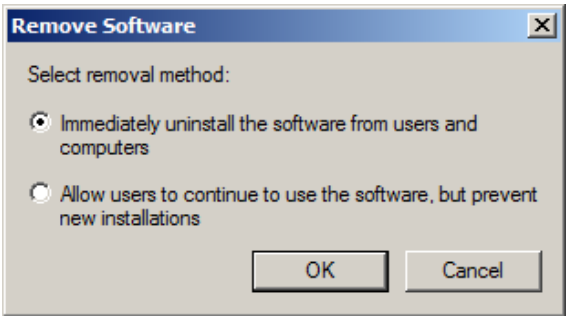
Removing NetIQ Advanced Authentication Framework Components via Group Policy

To remove NetIQ Advanced Authentication Framework Components using the group policy:

1. In GPOE, under **Computer Configuration > Software Settings > Software installation**, right-click the deployed package and select **All tasks > Remove**.



2. In the **Remove Software** dialog, click **Immediately uninstall the software from users and computers** and then click **OK**.



The package is removed after you have updated the domain policy and restarted your computer. To update the domain policy immediately, use the gpupdate /force command.

If you have removed option **Uninstall this application when it falls out of the scope of management** as it was recommended, software will not be uninstalled after selecting

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Immediately uninstall the software from users and computers. In this case, you will need to uninstall it via Programs and Features/Add or remove programs. See Removing Administrative Components chapter.

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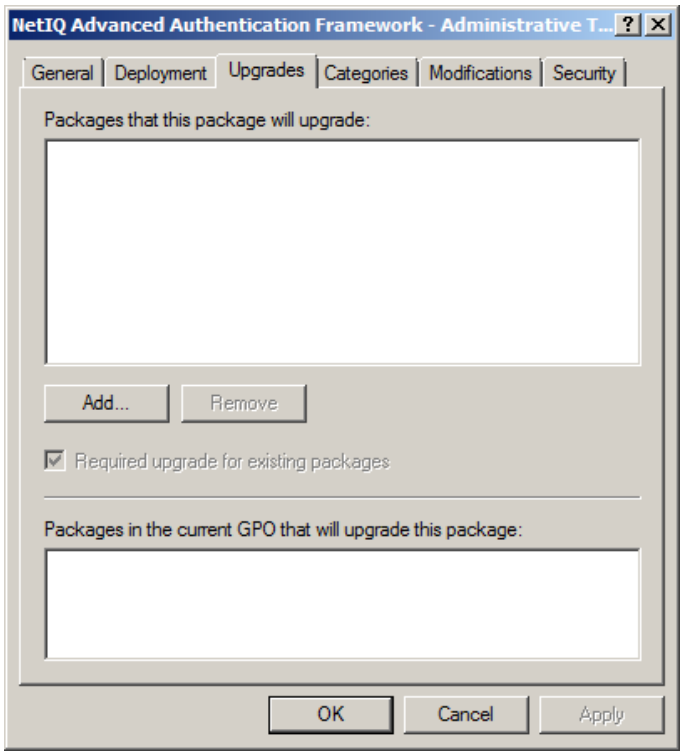
Upgrading NetIQ Advanced Authentication Framework Components via Group Policy

Option 1: You can add .msi package with new component version to an existing group policy object. However, this option doesn't prove to be good, because in case of any problems in new version of component, these problems spread on all computers in installation group.

Option 2: The more reliable upgrading procedure implies creating new group policy object for new installers:

1. Create new installation group and new Group Policy Object (GPO), add a new .msi package in it;

2. After having configured software installation, go to **Upgrades** tab of package properties;



3. Press **Add** button;

4. In **Add Upgrade Package** dialog please select **A specific GPO** option;

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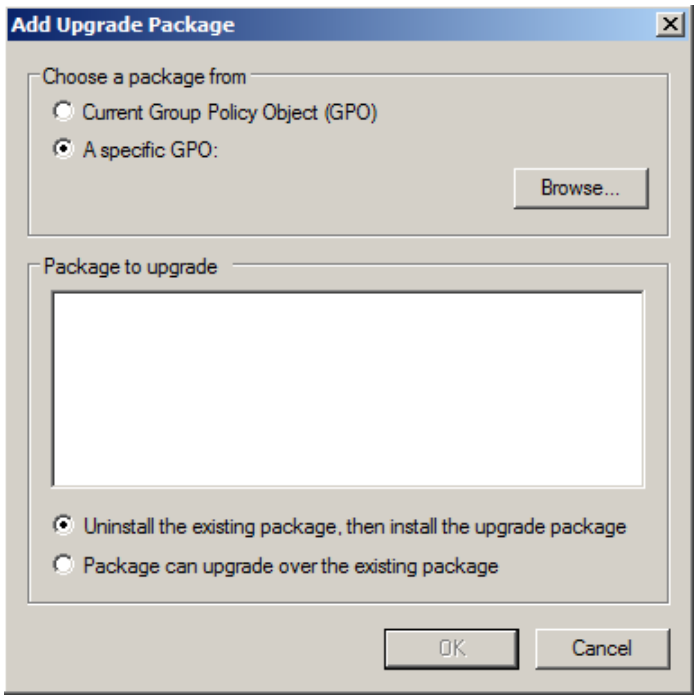

5. Select a GPO which was used for installation of previous NetIQ Advanced Authentication Framework version;

6. Select .msi package name;

7. Select option **Uninstall the existing package, then install the upgrade package**.

Make sure that your new GPO is above the old one in the GPO list.

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Troubleshooting

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

Cannot Install NetIQ Advanced Authentication Framework – Administrative Components

Description:

Error appears when installing NetIQ Advanced Authentication Framework – Administrative Components on your computer.

Cause:

a) You are installing NetIQ Advanced Authentication Framework – Administrative Components on the network drive.

b) You have no space left on the disk.

c) You are installing NetIQ Advanced Authentication Framework – Administrative Components on the unsupported OS.

d) You are installing NetIQ Advanced Authentication Framework – Administrative Components 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 (x64/x86) and run the corresponding installer (x64/x86).

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