

# Attack Simulator

## Active Directory Integration

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# Introduction

The current document will teach you how to synchronize your Active Directory (AD) users and groups with your Attack Simulator (ATS) company. To set up this functionality you need to have the [prerequisites](#) ready and after that you can follow the [step by step instructions](#) to install and configure the AD integration program.

There are two important tools that manage how your AD users and groups are synced: ATS Service and the Console Application. The ATS Service performs the users and groups sync at certain intervals while the Console Application is a tool used to setup the environment and to manage the configuration. To learn more about the ATS Service you can check the [Active Directory Integration Service](#) section and to learn more about the Console Application you can check the [Console Application](#) section.

If you have any questions you can check the [Frequently asked questions \(FAQ\)](#) section to get a solution for the most common problems if the problem persists you can send us an email at [support@attacksimulator.com](mailto:support@attacksimulator.com).

# Prerequisites

This section will describe all the necessary prerequisites you need to check before the setup.

## Agent computer requirements

1. Windows 10; Windows 8/8.1 except RT and Starter Edition (32 or 64-bit); Windows 7 SP1 or higher, any Edition (32 or 64-bit).
2. 1 GB RAM or above.
3. 1 GB free space on the hard disk.
4. .NET Framework version 4.6.1 or higher
5. A connection to Active Directory Domain Controller's network via Intranet or Internet which will be used to retrieve the users and groups.
6. Internet connection to upload the users and groups to ATS platform.

## Active Directory Domain Controller

1. Connection parameters to Active Directory Domain Controller(IP and port).
2. Access credentials for an Active Directory account which has the read access for users and groups. This account will be used exclusively to read users and groups from Active Directory in order to sync them with the ATS platform.

## Step by step instructions

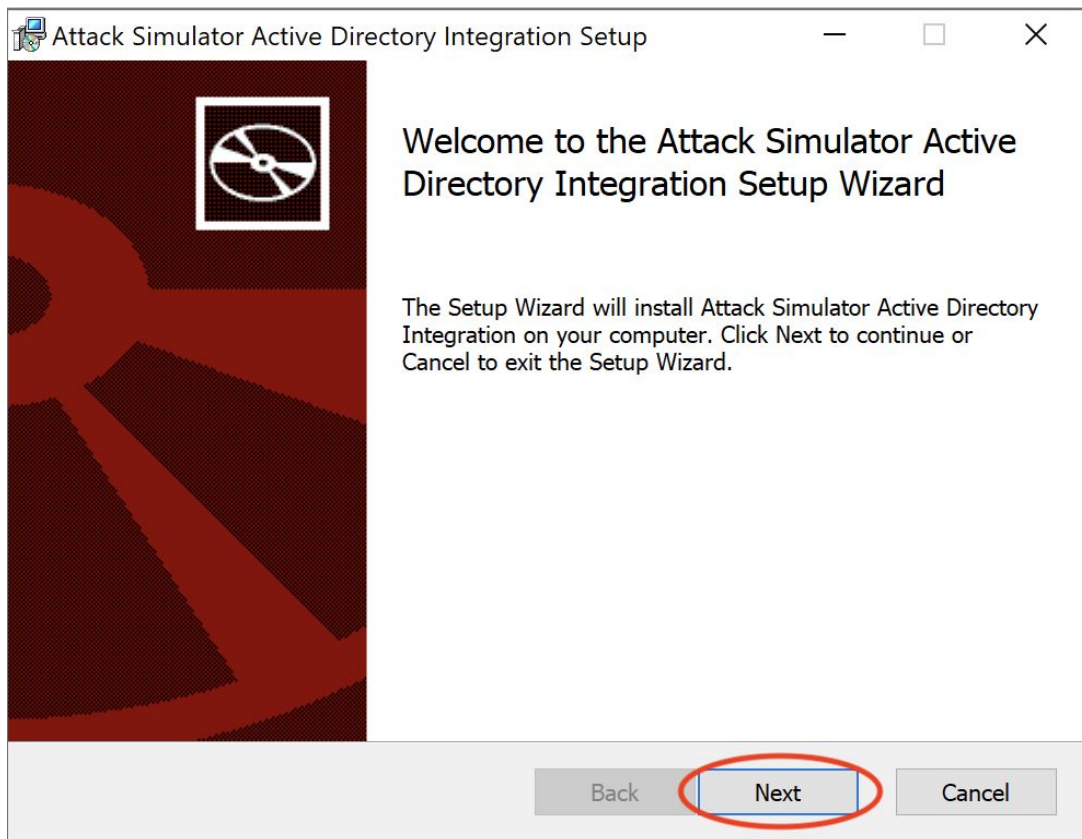
### Get the company API Key

1. Access the Attack Simulator site and log in into your account.
2. Navigate to **People** section and click the **Add People** button.
3. Copy the key from **Active Directory Integration** section.
4. Download the installer from **Active Directory Integration** section.

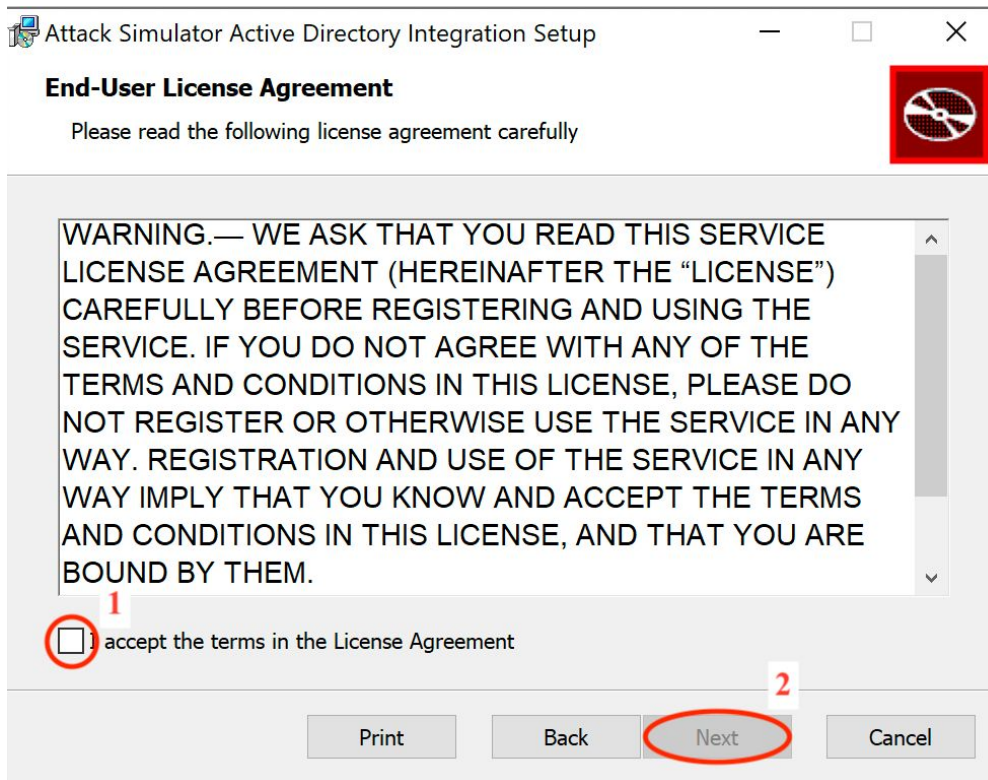
### Install the Agent software

To install the Agent software run the installer program you have from ["Download the installer"](#) step on your Agent machine, the next steps will guide you through the setup process.

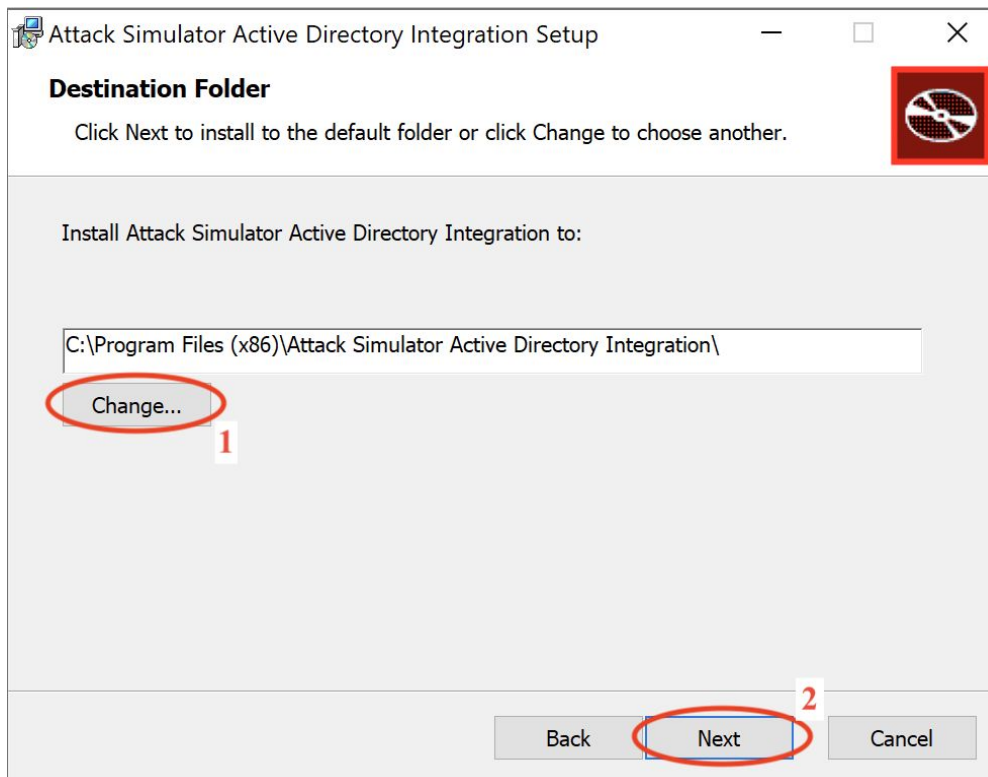
1. Select **Next** on the welcome screen.



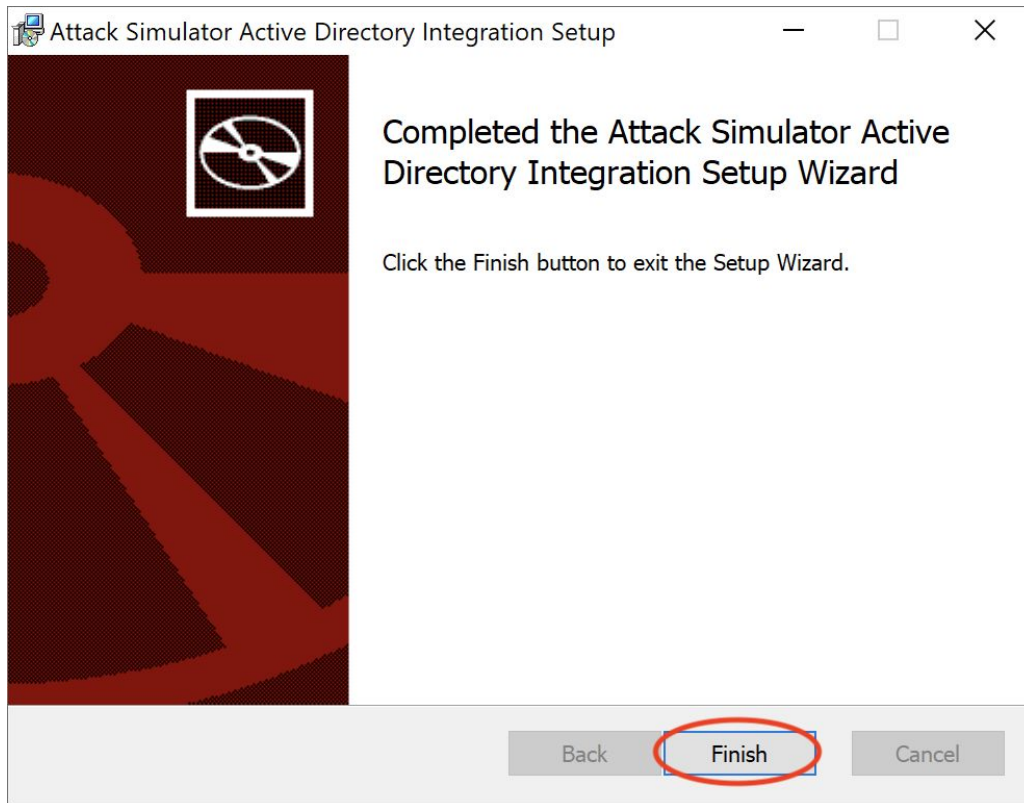
2. On the next screen accept the License Agreement and select **Next**.



3. Select the **drive location** to install the Agent program, we recommend you to keep the default location to ease the support in case of any issues, then select **Next**.



4. Select **Finish** on setup completion dialog



## Setup the Agent program

After finishing the install process a new window will pop up executing the Console application to configure the sync settings. The next steps will guide you through the configuration steps and you can also see some examples of data you can type for respective fields:

1. You need to enter the Active Directory Domain Controller IP(1), port(2), AD account username(3) and password(4), if you don't have this information please check the [Active Directory Domain Controller](#) prerequisites section.
2. Active Directory users query to have additional filtering on users(5). The default filter is just filtering out users without an email.
3. Active Directory groups query to have additional filtering on groups(6). The default filter is only filtering out the groups with name "Administrators".
4. An automatic test for the parameters will be performed at step(7). If the test fails you can change the wrong settings after the setup.
5. Enter the ATS company API Key(8), if you don't have this information please check the [Get the company API Key](#) section.

6. An automatic test will be performed to test the API Key. If the test fails you can change the wrong settings after the setup.
7. You can choose to save the configuration or to leave the setup without saving the settings. If both tests passed and you saved the settings then the setup process is done and the sync process will start running at set intervals. If one or more tests failed you can update the settings in the next screen. If you choose the exit option the setup will not complete and you will have to start the setup process again manually by running the [Console Application](#).
8. After the install is finished you will be displayed the main [Console Application](#) menu.

```

C:\Program Files (x86)\Attack Simulator Active Directory Integration\ADIntegrationConsole.exe
Setup Active Directory configuration
-----
Enter Active Directory Domain Controller IP:
10.15.233.19
-----
Enter Active Directory Domain Controller port:
389
-----
Enter Active Directory Domain Controller account username:
ADDomain\George
-----
Enter Active Directory Domain Controller account password:
*****
-----
Enter Active Directory users query additional filter:
(mail=*)
-----
Enter Active Directory groups query additional filter:
(!CN=Administrators)
-----
Checking Active Directory connection...
Success!
-----
Setup Active Directory configuration
-----
Enter ATS Services API Key:
b19512cfb1eb99c72542919a154e5918
-----
Checking ATS Services connection...
Success!
-----
Finish setup process
-----
1. Save configuration - Save the configuration
2. Exit - End the setup process without saving data
-----
Choose your option:

```

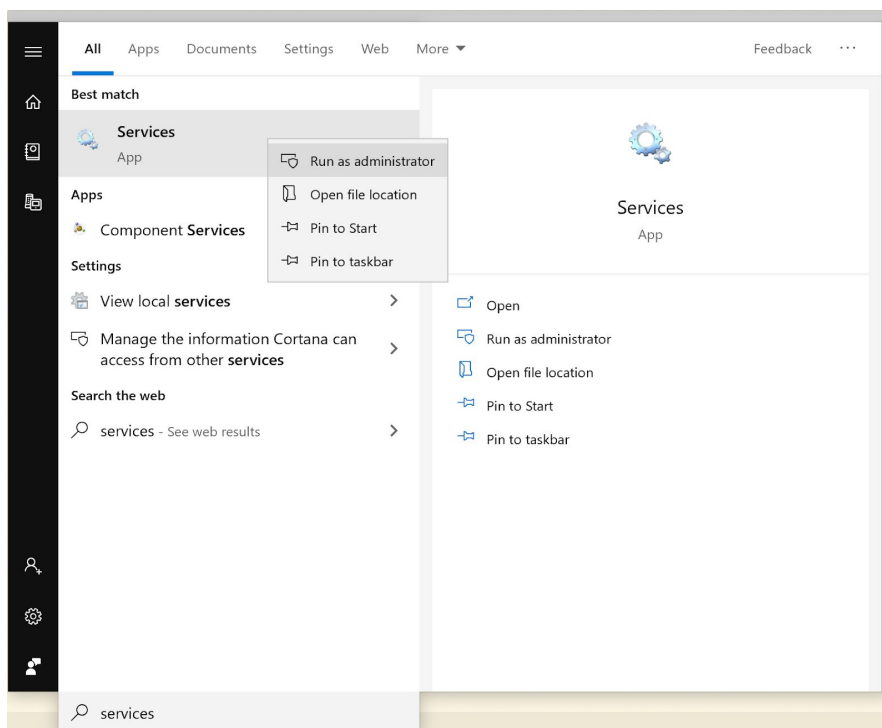
# Active Directory Integration Service

The ADIntegrationService is the component that synchronizes the Active Directory users and groups with Attack Simulator(ATS) Platform. It performs a sync at certain intervals to keep your ATS users and groups updated. After the [Step by step instructions](#) the ADIntegrationService will be installed and configured to start automatically with your computer. You can restart the service manually when needed to force a users and groups sync. Using the [Console Application](#) you can configure all parameters that are necessary to perform the sync operation. The next subsections will describe how to check the service status and how to restart it when it's needed.

## Checking the service status

In some situations you may want to check if the service is running. In order to achieve this you have to follow the next steps:

1. Run the **Windows Services Manager** tool to do this you can press the start button and type in “services”, then you can right click on the services program and run it as an administrator and you will open the **Windows Services Manager**.



2. Find the ADIntegration service in the services list and check its status

Services (Local)					
ADIntegrationService					
Description: Active Directory Integration Service					
Name	Description	Status	Startup Type	Log On As	
ActiveX Installer (AxInstSV)	Provides Use...		Manual	Local System	
ADIntegrationService	Active Direct...	Running	Automatic	Local System	

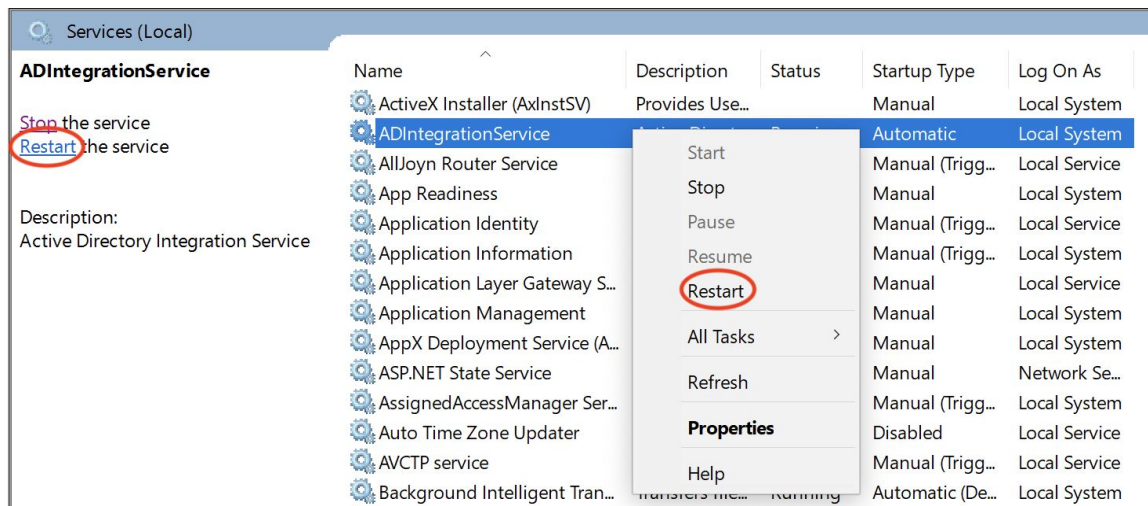


3. If the status is running it means that the service is currently active.

## Restarting the service

In some situations you may want to restart the service to force a users and groups sync immediately. To accomplish this you have to follow the next steps:

1. Run the **Windows Services Manager** tool as described by [Checking the service status](#) subsection.
2. Select the ADIntegrationService from the list and select restart.



# Console Application

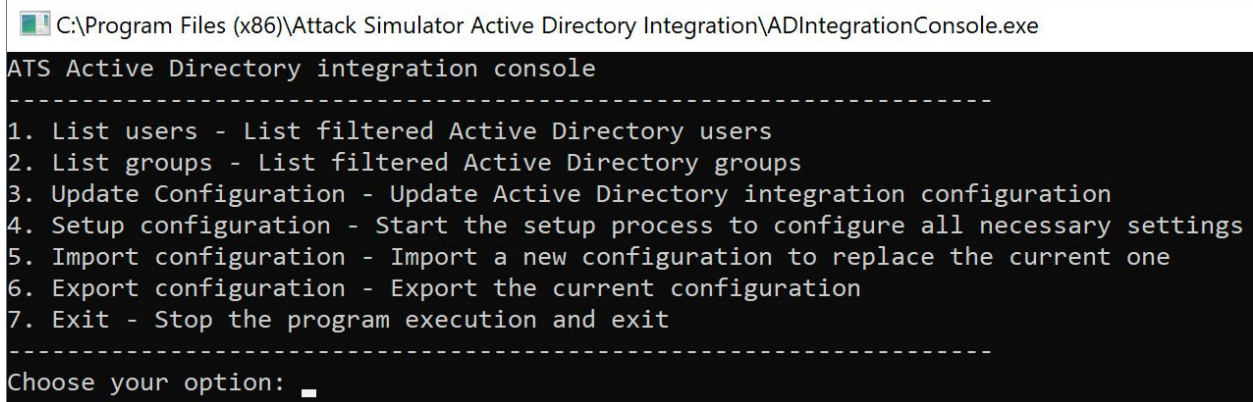
The Console Application is the component that provides basic access to [Active Directory Integration Service](#) settings to configure how users and groups are synced with the Attack Simulator(ATS) platform. You can use it to setup the connection parameters, to test the connection and to check the data that will be synced. The application executable is located in your installation folder and is named ADIntegrationConsole.exe .

If the configuration process finished successfully the main menu is the default view you will see when opening the application. Using the Console Application you can perform next tasks:

1. List users - Lists the AD users that will be synced with the ATS platform.
2. List groups - Lists the AD groups that will be synced with the ATS platform.
3. Update configuration - Displays another menu to update individual settings for Active directory and ATS platform. Can be used to update a single configuration item like Active directory IP or ATS Platform API Key. It can be used for testing the Active Directory and ATS platform config parameters.
4. Setup configuration - Starts a setup process to configure the AD connection settings and also the ATS platform API Key from scratch, it is useful for situations when you want to reset the whole configuration. The setup process starts automatically if you have no prior configuration.
5. Import configuration - Allows to import the configuration from an external file. It can be used to transport the configuration from one machine to another when necessary.

Note: if the configuration file is originated from an exported configuration file it does not contain the Active Directory account password. After the import you will have to update it manually.

6. Export configuration - Allows to export the current configuration to an external file. It can be used to provide the file for configuration import on another machine.



```
C:\Program Files (x86)\Attack Simulator Active Directory Integration\ADIntegrationConsole.exe
ATS Active Directory integration console
-----
1. List users - List filtered Active Directory users
2. List groups - List filtered Active Directory groups
3. Update Configuration - Update Active Directory integration configuration
4. Setup configuration - Start the setup process to configure all necessary settings
5. Import configuration - Import a new configuration to replace the current one
6. Export configuration - Export the current configuration
7. Exit - Stop the program execution and exit
-----
Choose your option: █
```

## Frequently asked questions (FAQ)

- **Q:** How can I check if the configuration is done correctly?  
**A:** To check the configuration you can test it. To check the Active Directory settings check [this](#) answer below and to test your Attack Simulator connection configuration check [this](#) answer below.
- **Q:** How can I check if the Active Directory parameters are correct?  
**A:** You can test the Active Directory config parameters using the [Console Application](#)'s menu option [Update configuration](#) by accessing the Active Directory submenu.
- **Q:** How can I check if the Attack Simulator parameters are correct?  
**A:** You can test the Attack Simulator config parameters using the [Console Application](#)'s menu option [Update configuration](#) by accessing the Attack Simulator submenu.
- **Q:** Why I cannot see the Active Directory users or groups on the Attack Simulator platform?  
**A:** This issue may be caused by several potential problems here are potential solutions:
  - a. Check if the service is running using the **Window Services Manager** tool as described in the "[Checking the service status](#)" section. If service is not running you need to start it. If you cannot start the service please contact us for support.
  - b. Ensure that your environment is setup properly(check this [answer](#) above). If the environment is not setup properly you can either correct the wrong settings or you can redo the setup process using the [Console Application](#)'s [Setup configuration](#) option.
  - c. If all the previous measures did not reveal any problems you can try and [restart](#) the service using your **Window Services Manager** to force a sync as described in the "[Restarting the service](#)" section.
- **Q:** If I want to sync the users right now, what can I do?  
**A:** To force a sync you can restart the ADIntegrationService from the **Windows Services Manager** tool as described in the "[Restarting the service](#)" section.
- **Q:** How can I check what users or groups are sent to Attack Simulator platform?  
**A:** You can check what users or groups are sent to Attack Simulator platform using the [Console Application](#) by accessing the [List users](#) or [List groups](#) option.

- **Q:** How can I customize what users are sent to Attack Simulator platform?  
**A:** You can customize what users are sent to Attack Simulator platform using the [Console Application](#) by accessing the [Update configuration](#) option. There you can update the users query to control what users are sent to the Attack Simulator platform.
- **Q:** How can I customize what groups are sent to Attack Simulator platform?  
**A:** You can customize what groups are sent to Attack Simulator platform using the [Console Application](#) by accessing the [Update configuration](#) option. There you can update the users query to control what groups are sent to the Attack Simulator platform.
- **Q:** Why users or groups still appear on Attack Simulator platform even after they were deleted from the Active Directory or filtered out?  
**A:** Due to how the sync is performed users and groups do not disappear instantly from the Attack Simulator platform after they are deleted. You have to wait up to 24 hours for users or groups to be removed from the ATS Platform.