

# Data migration from APE to AMS



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# 1 Overview

This document describes the process of data migration from the Access Professional Edition 3.8 (APE 3.8) software to the Access Management System (AMS) software (version 3.0 onwards).

**Note:** The Access Management System (AMS) software should not be installed on the computer where Access Professional Edition (APE) is installed.

## 2 Migration support tools

The data migration from APE to AMS is supported by tools that can be found in the AMS installation media in the folders:

```
\AddOns\Standard\ImportExport\  
\AddOns\Standard\ImportExport\APE Migration\  

```

- `APE migration.exe` - exports APE data and creates the necessary output files for a successful data migration.
  - `ACEAuthorizations.csv`
  - `ACEPersons.csv`
  - `ACEVisitors.csv`
  - `Photos.zip`
- `ImportExportInstaller.exe` - installs the Importer-Exporter tool to import APE data into the AMS system.

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### Notice!

These tools migrate only personnel data.

Authorizations used in APE are migrated with their respective validity periods.

The authorizations of a person and the corresponding period are visible in the **Persons** dialog.

All authorizations assigned to a person are visible in the **Authorizations** dialog. If you also migrate `ACEAuthorizations.csv`, you will also see the unassigned permissions.

However, the hardware configuration requires manual intervention:

First, create the device structures in the target system, for example, MAC, AMC, entrances.

Next assign the entrances to the authorizations manually.

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## 3 Migrating the data

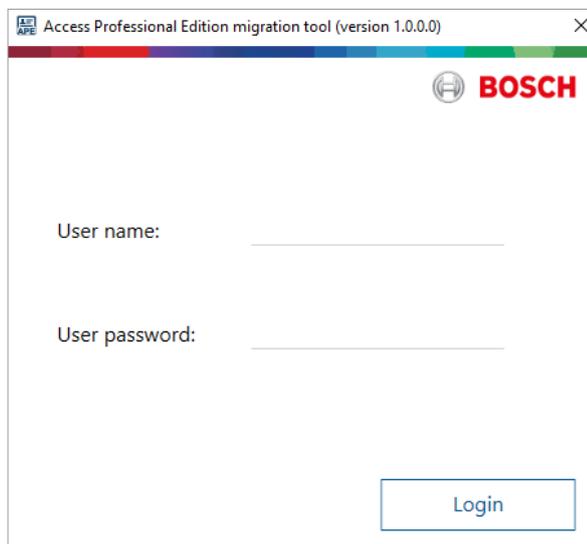
### 3.1 Exporting the data

#### Prerequisites:

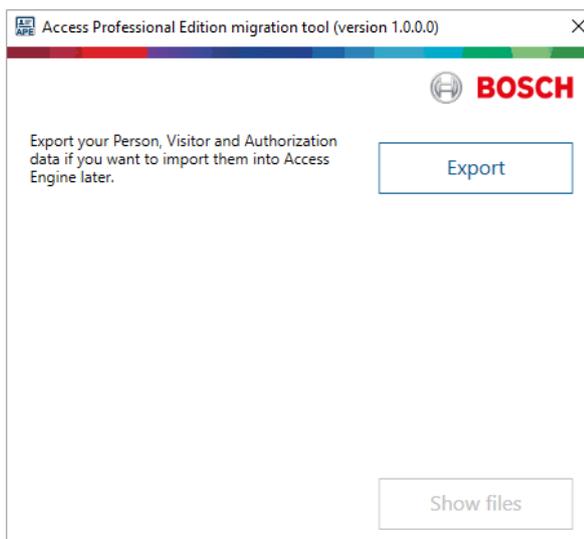
- APE is installed.
- The APE SDK is installed from the same installation media as the APE version that you have installed. This is to ensure that the versions of APE and its SDK are compatible.
- The following folder is copied from the AMS installation media to the computer where APE is running. `\AddOns\Standard\ImportExport\APE Migration\`  
It contains the executable `APEMigration.exe` and its auxiliary files.

#### Procedure

1. On the computer where APE is running, start `APEMigration.exe` from the folder that you copied as a prerequisite above.
  - A login dialog box opens.



2. Enter your APE administrator user credentials.
3. Click **Login**.
4. Click **Export**.

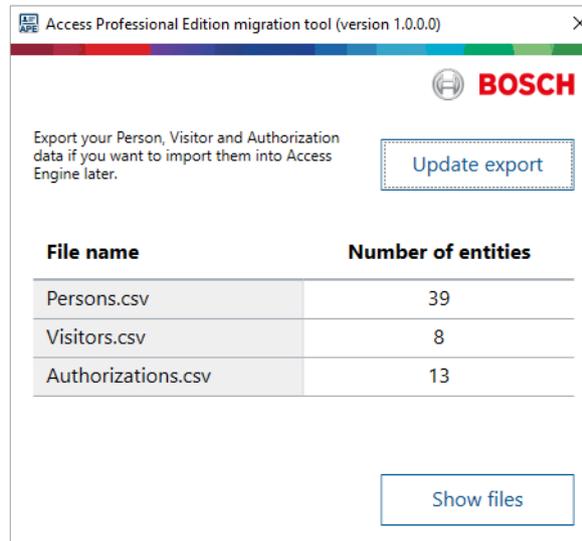


- Personnel data is exported and four output files are created:

- ACEPersons.csv
- ACEVisitors.csv
- ACEAuthorizations.csv
- Photos.zip

**Notice!**

Photos.zip is not shown in the dialog box, but has been exported.



5. Click **Show files** to open the file location, or click **Update export** to restart the export.

**Notice!**

The exported files will be the input for the **AMS ImportExportTool** and must be available when starting the tool.

**Notice!**

Import the data once only, and thereafter, keep both systems (APE and AMS) updated manually.

**Notice!**

Make sure that all personal data stored during the migration is handled according to GDPR conformity (applicable to EU citizens only).

## 3.2

### Importing the data

**Prerequisites:**

- Have AMS (version 3.0 or later) installed.
- Have the APE data export files available.
- Have the latest version of the **AMS Import Export Tool** installed. It is found on the AMS installation media in the folder: `\AddOns\Standard\ImportExport`
- Have a user with SDK rights configured in AMS.

**Notice!**

Make sure that the user that will be importing the data has the user rights to use the AMS SDK, otherwise it is not possible to use the AMS Import Export Tool.

**Notice!**

Import the data once only and keep both systems (APE and AMS) updated manually. For detailed information on how to manually configure the data in AMS, see chapter **Creating and managing personnel data**, in the **AMS Configuration and Operation** manual. The **AMS Configuration and Operation** manual can be found in the Help file of AMS, or in the Bosch Security Systems online product catalog, in the [AMS product page](#), under **Downloads > Literature**.

1. Start the **AMS Import Export Tool**.
2. Enter your **User Name** and **Password**, and click **Log in**.

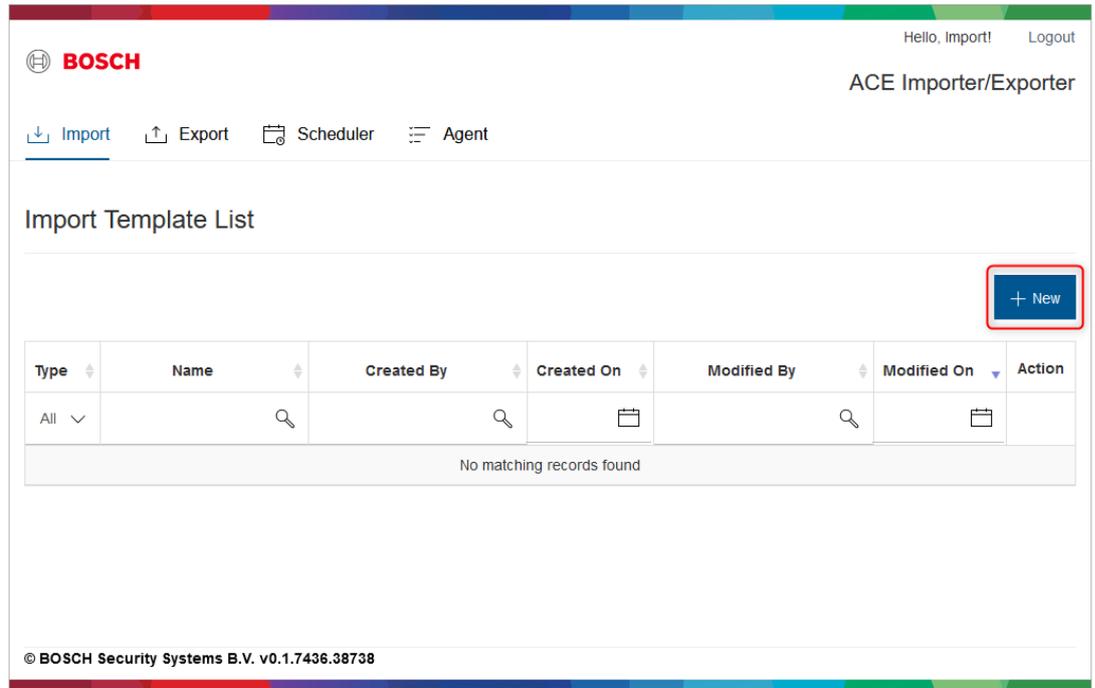
The screenshot shows the login interface for the ACE Importer/Exporter tool. At the top left is the Bosch logo. At the top right, there is a 'Log in' link and the text 'ACE Importer/Exporter'. The main content area is titled 'Log in' and includes the instruction 'Use ACE account to log in'. Below this are three input fields: 'ACE Authority' with the value 'APEWIN10TESTEN', 'User Name', and 'Password'. A blue 'Log in' button is positioned below the password field. At the bottom of the page, the copyright notice '© BOSCH Security Systems B.V. v0.1.7436.38738' is displayed.

3. Make sure that the log files are configured correctly (see *Configuring log files*, page 16).

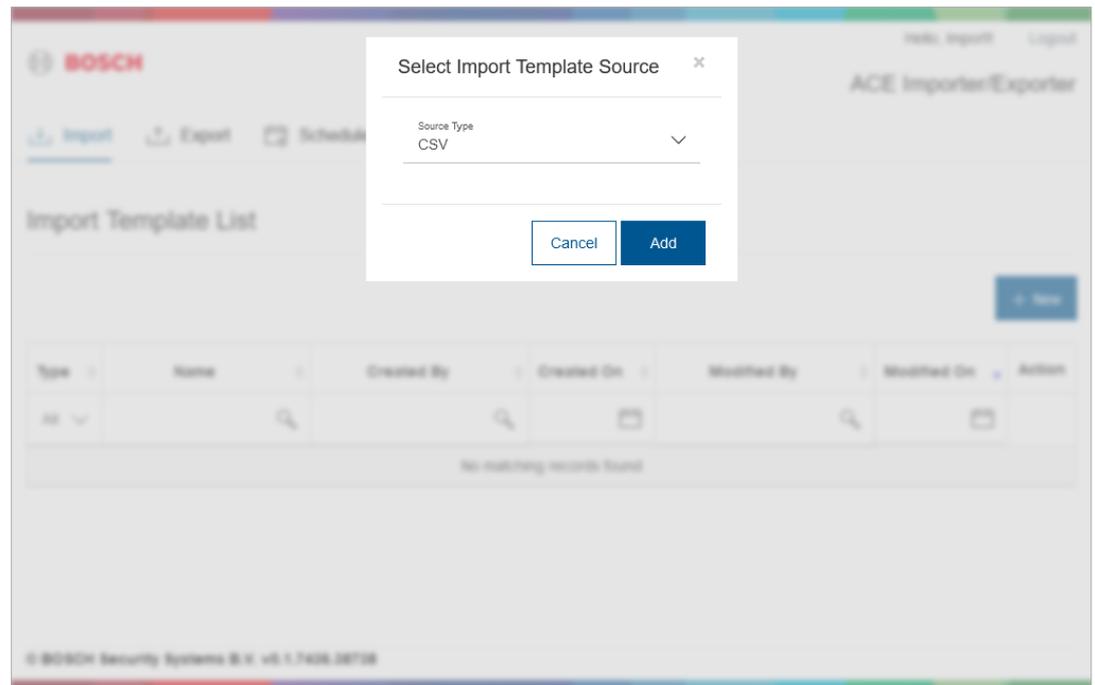
**Notice!**

Create a template for every export file. You will end up with 3 templates: one for the `ACEPersons.csv`, one for the `ACEVisitors.csv`, and one for the `ACEAuthorizations.csv`.

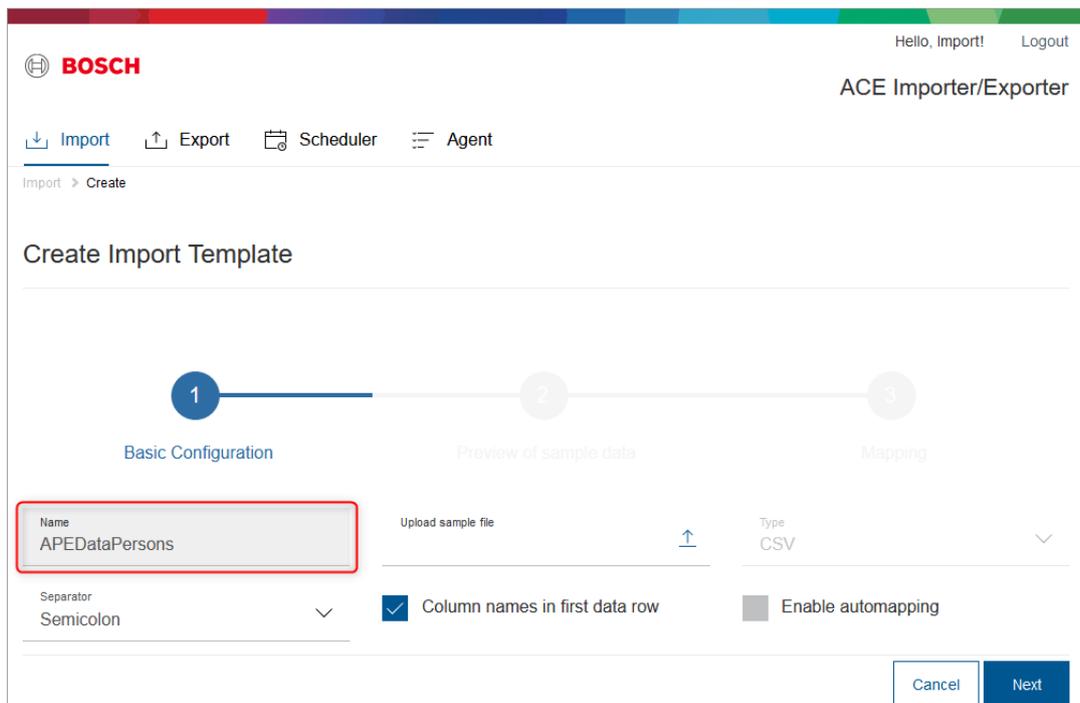
- 4. In the **Import** section, click **+ New** to create a new template to configure the data structure.



- 5. In the **Select Import Template Source** dialog box, select the source type **CSV** from the drop-down list.
- 6. Click **Add**.
- You are redirected to the **Create Import Template** area, **1 - Basic Configuration**.



- Under **Name**, enter a name for your import (e.g. APEDataImportPerson).

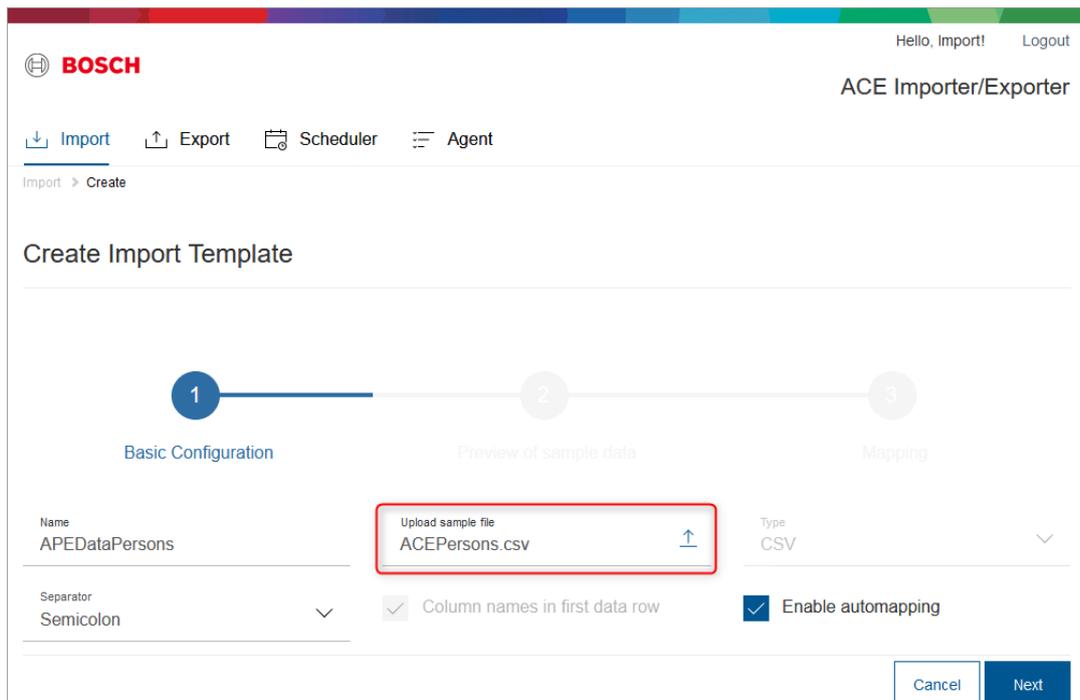


The screenshot shows the 'Create Import Template' page in the ACE Importer/Exporter application. The page has a header with the Bosch logo, user name 'Hello, Import!', and a 'Logout' link. Below the header are navigation tabs: 'Import', 'Export', 'Scheduler', and 'Agent'. The main heading is 'Create Import Template'. A progress indicator shows three steps: '1 Basic Configuration', '2 Preview of sample data', and '3 Mapping'. The 'Basic Configuration' step is active. The form contains the following fields and options:

- Name:** APEDataPersons (highlighted with a red box)
- Upload sample file:** An upload button with an upward arrow icon.
- Type:** CSV (dropdown menu)
- Separator:** Semicolon (dropdown menu)
- Column names in first data row:**
- Enable automapping:**

At the bottom right, there are 'Cancel' and 'Next' buttons.

- Under **Upload sample file**, select one of the files that has been previously exported from APE 3.8 (e.g. ACEPersons.csv).



The screenshot shows the 'Create Import Template' page in the ACE Importer/Exporter application, similar to the previous one. The progress indicator shows the '2 Preview of sample data' step is active. The 'Upload sample file' field is highlighted with a red box and contains the text 'ACEPersons.csv'.

The form contains the following fields and options:

- Name:** APEDataPersons
- Upload sample file:** ACEPersons.csv (highlighted with a red box)
- Type:** CSV (dropdown menu)
- Separator:** Semicolon (dropdown menu)
- Column names in first data row:**
- Enable automapping:**

At the bottom right, there are 'Cancel' and 'Next' buttons.

9. Select the **Enable automapping** selection box.

**BOSCH** Hello, Import! Logout  
ACE Importer/Exporter

Import > Create

### Create Import Template

1 Basic Configuration 2 Preview of sample data 3 Mapping

Name: APEDataPersons  
Upload sample file: ACEPersons.csv  
Type: CSV  
Separator: Semicolon  
 Column names in first data row  
 **Enable automapping**

Cancel Next

10. Under **Additional data**, select the import photo mode **From Zip file** from the drop-down list.

Name: APEDataPersons  
Upload sample file: ACEPersons.csv  
Type: CSV  
Separator: Semicolon  
 Column names in first data row  
 **Enable automapping**

Skip rows:

#### Advanced configuration

**Default Formatting:**

Date: dd.MM.yyyy  
Time: HH:mm  
Date/Time: dd.MM.yyyy HH:mm  
Decimal separator: ,  
Decimal places: 0

**Additional data:**

Import photo mode  
Full path  
Relative path  
**From Zip file**

Cancel Next

11. Click **Next**.

- You are redirected to the **Create Import Template** area, **2 - Preview of sample data**.

12. Check the sample data preview.

Create Import Template

Persons.ExternalId ↕	Persons.FIRSTNAME ↕	Persons.LASTNAME ↕	Persons.DATEOFBIRTH ↕	Persons.Image ↕	Pers
1		001 Administrator		00000001.jpg	
2		002 Testperson1		00000002.jpg	
2		002 Testperson1		00000002.jpg	
2		002 Testperson1		00000002.jpg	
4		004 Test2			
5	Test4 Firstname	005 Test4			
5	Test4 Firstname	005 Test4			
5	Test4 Firstname	005 Test4			

Previous Cancel Next

13. Click **Next**.

– You are redirected to the **Create Import Template** area, **3 - Mapping**.

14. Select the **Add entities** selection box.

Create Import Template

Delete entities in ACE
 Destination  
Persons(w. attached authorizations, cards, c... ▾

**Add entities to ACE**

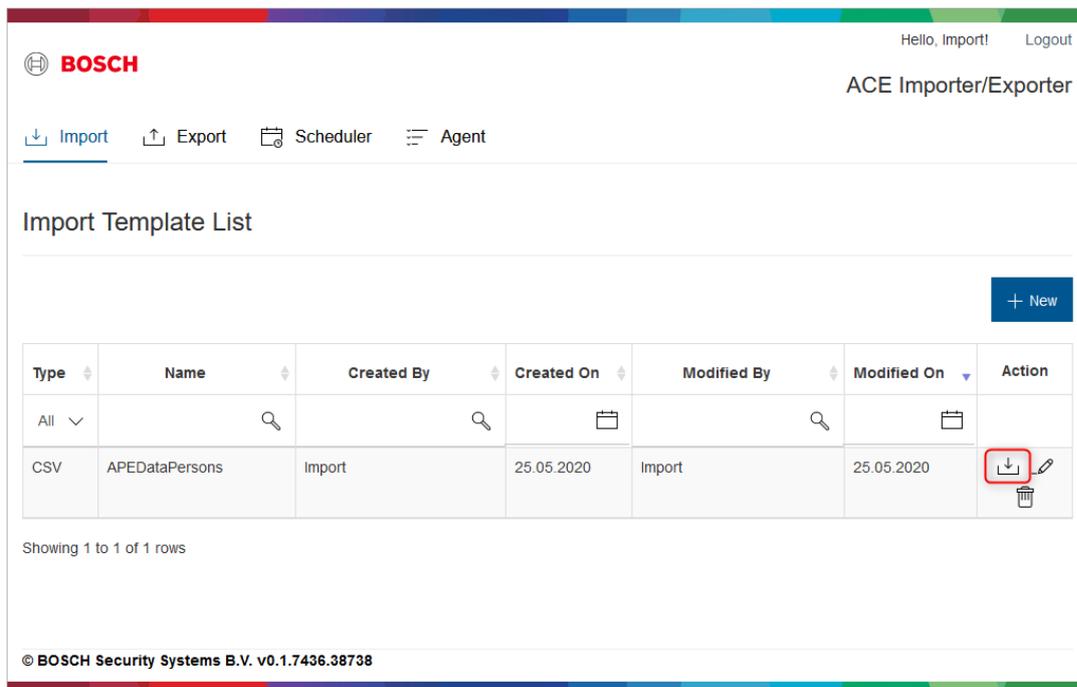
Column	First Row Preview	Destination	Is Mandatory	Is Unique	Rules And Formatting	Combine	Remo
1	Persons.ExternalId	Persons.ExternalId ▾	<input type="checkbox"/>	<input type="checkbox"/>			
2	Persons.FIRSTNAME	Persons.FIRSTNAME ▾	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
3	Persons.LASTNAME	Persons.LASTNAME ▾	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Previous Cancel Save

15. Click **Save**.

– You are redirected to the **Import** section.

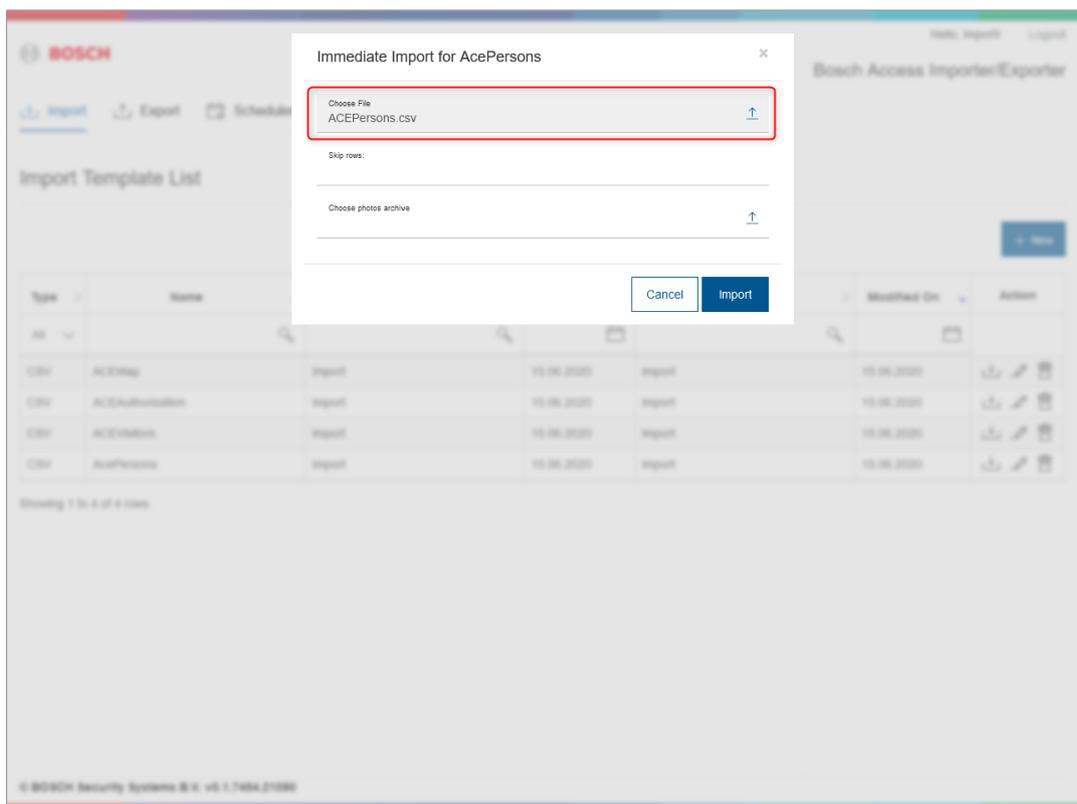
16. In the **Import Template List**, under **Action**, click on the import icon .



The screenshot shows the Bosch ACE Importer/Exporter interface. At the top, there is a navigation bar with the Bosch logo, user information 'Hello, Import!', and a 'Logout' link. Below the navigation bar, there are tabs for 'Import', 'Export', 'Scheduler', and 'Agent'. The main content area is titled 'Import Template List' and features a '+ New' button. A table lists the import templates with columns for Type, Name, Created By, Created On, Modified By, Modified On, and Action. The 'Action' column for the 'APEDataPersons' template has the import icon highlighted with a red box. Below the table, it says 'Showing 1 to 1 of 1 rows'. At the bottom, there is a copyright notice: '© BOSCH Security Systems B.V. v0.1.7436.38738'.

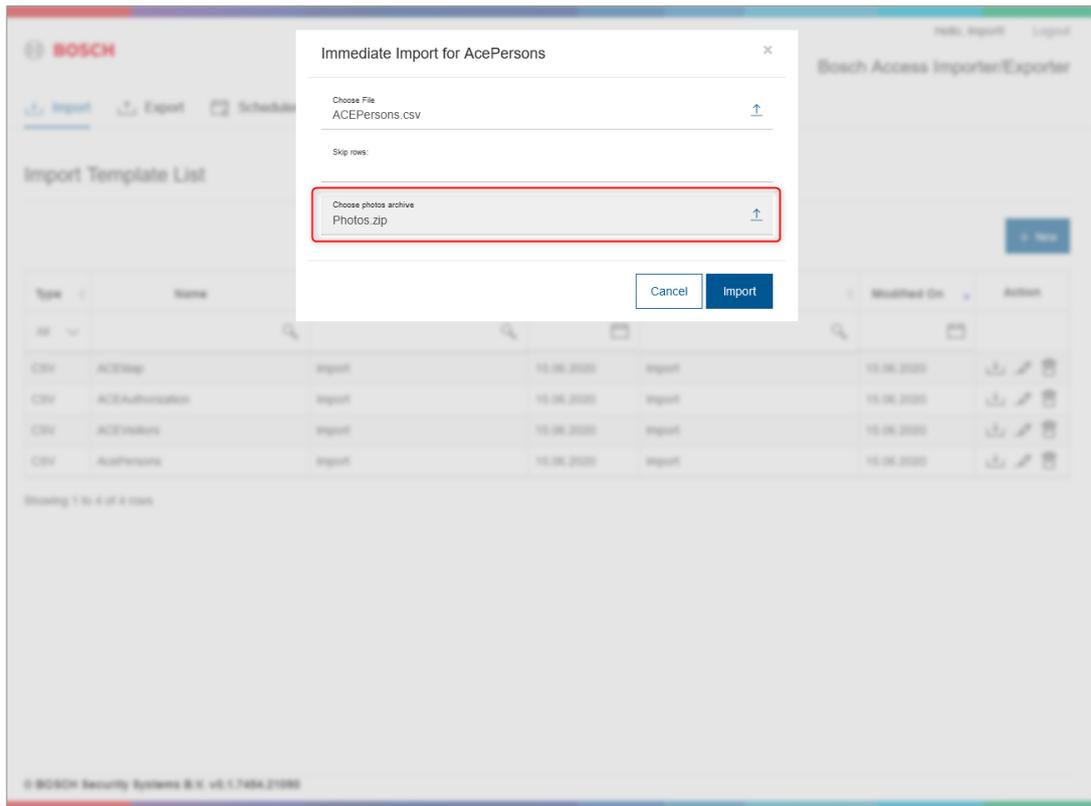
Type	Name	Created By	Created On	Modified By	Modified On	Action
All						
CSV	APEDataPersons	Import	25.05.2020	Import	25.05.2020	

17. In the **Immediate Import** dialog box, under **Choose file**, select the data file (e.g. ACEAuthorizations.csv) that you want to import.

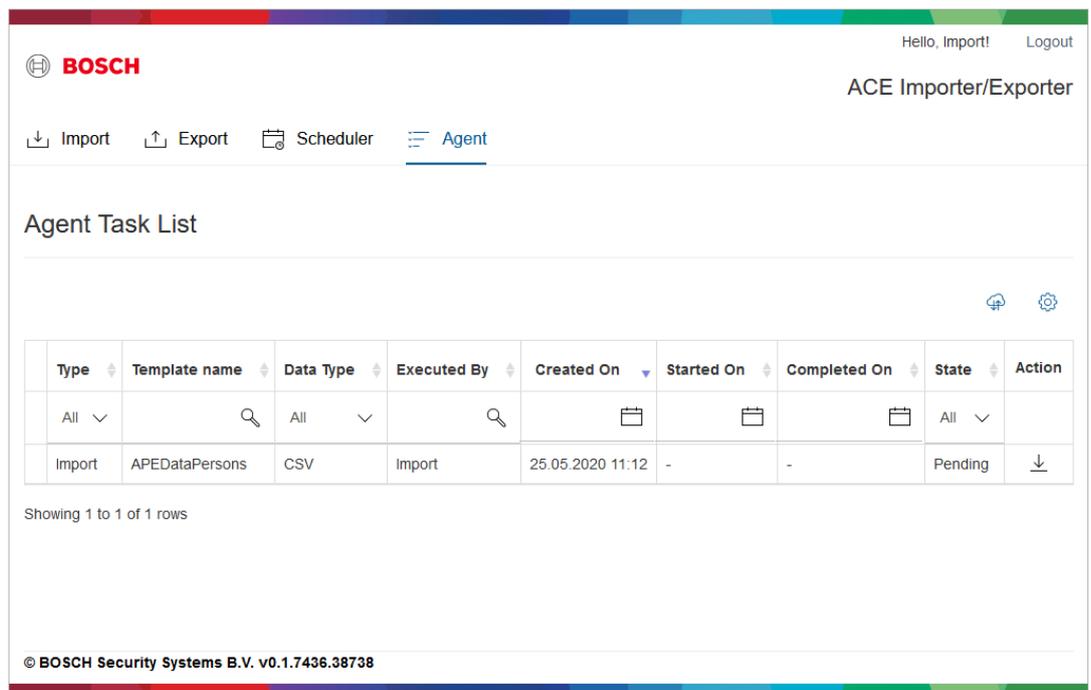


The screenshot shows the Bosch ACE Importer/Exporter interface with the 'Immediate Import for AcePersons' dialog box open. The dialog box has a title bar with a close button. It contains two sections: 'Choose File' and 'Skip rows:'. The 'Choose File' section has a text input field containing 'ACEPersons.csv' and an 'up' arrow icon. The 'Skip rows:' section has a text input field and an 'up' arrow icon. At the bottom of the dialog box, there are 'Cancel' and 'Import' buttons. The background shows the 'Import Template List' table with the 'ACEPersons' template selected.

18. In the **Immediate Import** dialog box, under **Choose photo** archive, select the photo archive (e.g. Photos.zip) that you want to import.



19. Click **Import**.
- You are automatically redirected to the **Agent** section and the import will start automatically.



**Notice!**

Repeat steps 1 to 9 for `ACEVisitors.csv` and `ACEAuthorizations.csv`. For the `ACEVisitors.csv` file, the `Photos.zip` must be selected again.

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**Refer to**

- *Configuring log files, page 16*

## 4 Configuring log files

1. Start the **AMS Import Export Tool**.
2. Enter your **User Name** and **Password**, and click **Log in**.
3. Click on the **Agent** section.
  - The **Preferences** dialog box opens.

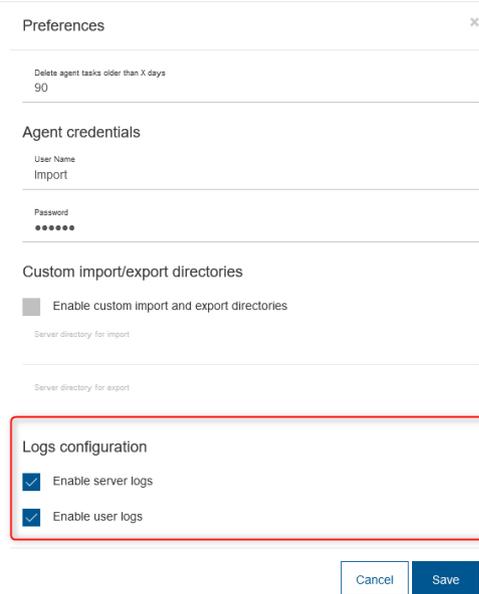
The screenshot shows the Bosch ACE Importer/Exporter web interface. The top navigation bar includes the Bosch logo, the user name 'Hello, Import!', and a 'Logout' link. Below the navigation bar are tabs for 'Import', 'Export', 'Scheduler', and 'Agent'. The 'Agent' tab is selected, displaying the 'Agent Task List' section. This section contains a table with columns for Type, Template name, Data Type, Executed By, Created On, Started On, Completed On, State, and Action. A single task is listed with Type 'Import', Template name 'APEDataPersons', Data Type 'CSV', Executed By 'Import', Created On '25.05.2020 11:12', Started On '-', Completed On '-', State 'Pending', and an Action icon. Below the table, it says 'Showing 1 to 1 of 1 rows'. At the bottom of the interface, the copyright notice '© BOSCH Security Systems B.V. v0.1.7436.38738' is visible.

Type	Template name	Data Type	Executed By	Created On	Started On	Completed On	State	Action
All		All					All	
Import	APEDataPersons	CSV	Import	25.05.2020 11:12	-	-	Pending	↓

4. Under **Agent credentials**, enter the password.

The screenshot shows the 'Preferences' dialog box. The 'Agent credentials' section is highlighted with a red box. It contains two input fields: 'User Name' with the value 'Import' and 'Password' with masked characters '\*\*\*\*\*'. Below this section, there is a checkbox for 'Enable custom import and export directories' which is currently unchecked. Underneath, there are two empty text input fields for 'Server directory for import' and 'Server directory for export'. At the bottom of the dialog, there are two checkboxes under 'Logs configuration': 'Enable server logs' and 'Enable user logs', both of which are checked. At the very bottom of the dialog are 'Cancel' and 'Save' buttons.

5. Select the selection boxes **Enable server logs** and **Enable user logs**.



Preferences ✕

Delete agent tasks older than X days  
90

Agent credentials

User Name  
Import

Password  
••••••

Custom import/export directories

Enable custom import and export directories

Server directory for import

Server directory for export

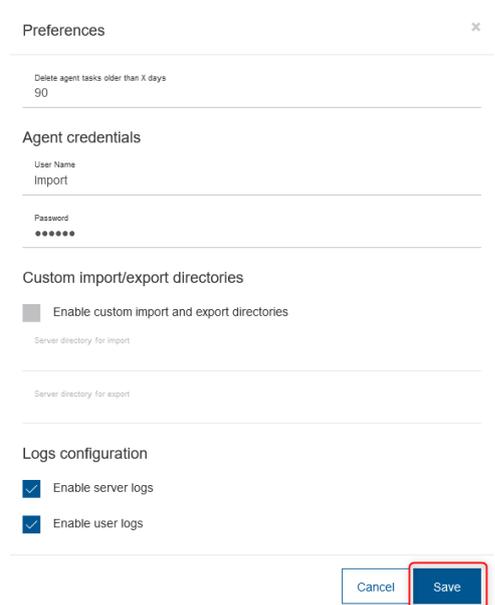
Logs configuration

Enable server logs

Enable user logs

Cancel Save

6. Click **Save**.



Preferences ✕

Delete agent tasks older than X days  
90

Agent credentials

User Name  
Import

Password  
••••••

Custom import/export directories

Enable custom import and export directories

Server directory for import

Server directory for export

Logs configuration

Enable server logs

Enable user logs

Cancel Save

**Refer to**

- *Importing the data, page 7*

## 5 Detailed overview of the migrated data

### ACEPersons.csv file

Data type	Description	Example
Persons.ExternalId	Reference ID created by the APE export tool	15
Persons.FIRSTNAME	First name of the person	Harry
Persons.LASTNAME	Last name of the person	Watkin
Persons.DATEOFBIRTH	Date of birth of the person	20.05.1995
Persons.IMAGE	Name of the JPEG file with the picture of the person	000002.jpg
Persons.AUTHFROM	Starting date to the validity of the person	01.04.2020
Persons.AUTHUNTIL	Ending date to the validity of the person	15.04.2020
Persons.REMARK	Additional remark	Next week scheduled for new badge.
Persons.VIP	Defines whether a person is included or excluded from random screening (true = person excluded; false = person included); to be considered, random screening must be configured	True
Persons.PERSNO	User specific reference number	12345
Persons.PIN	Personal Identification Number (PIN) used in combination with a physical credential to enforce greater security	001224
Companies.COMPANYNO	Name of the company* <sup>2</sup>	Bosch
Companies.NAME	Name of the company* <sup>2</sup>	Bosch
Authorizations.SHORTNAME	Name of the authorization given to the person* <sup>3</sup>	MainEntrance
Authorizations.NAME	Name of the authorization given to the person* <sup>3</sup>	MainEntrance
Authorizations.ValidFrom	Starting date to the validity of the authorization given to the person	19.02.2020

Data type	Description	Example
Authorizations.ValidUntil	Ending date to the validity of the authorization given to the person	23.02.2020
Cards.CARDNO	Part of the code data of the card that has been assigned to the person	6754821
Cards.Customercode	Part of the code data of the card that has been assigned to the person	9000

\*<sup>1</sup> Verification PIN unencrypted; during the migration, PINs with 4 digits are converted to PINs with 6 digits by adding leading zeros to the 4 digit PIN (e.g. 001224).

\*<sup>2</sup> `Companies.COMPANYNO` and `Companies.NAME` will always match. These data types are only differentiated on AMS, not on the APE system. You can update the data before starting the import, by editing the CSV file.

\*<sup>3</sup> `Authorizations.SHORTNAME` and `Authorizations.NAME` will always match. These data types are only differentiated on AMS, not on the APE system. You can update the data before starting the import, by editing the CSV file.

#### Notice!



On APE, the default length of a PIN is of 4 digits. On ACE, the default length of a PIN is of 6 digits. During the migration, PINs with 4 digits are converted to PINs with 6 digits by adding leading zeros to the 4 digit PIN (e.g. 001234).

After the migration, readers that are running on AMS will always expect the 6 digit PIN. The user can either enter the leading zeros, or enter # or E. These digits can signalize to the reader that the input is finalized.

**ACEVisitors.csv file**

<b>Data type</b>	<b>Description</b>	<b>Example</b>
Visitors.ExternalId	Reference ID from the APE export tool	14
Visitors.FIRSTNAME	First name of the person	Sarah
Visitors.LASTNAME	Last name of the person	Watkin
Visitors.DATEOFBIRTH	Date of birth of the person	25.08.1994
Visitors.Image	Name of the JPEG file with the picture of the person	000160.jpg
Visitors.AUTHFROM	Starting date to the validity of the person	02.04.2020
Visitors.AUTHUNTIL	Ending date to the validity of the person	16.04.2020
Visitors.REMARKS	Additional remark	Next week scheduled for new badge.
Companies.COMPANYNO	Name of the company* <sup>2</sup>	Bosch
Companies.NAME	Name of the company* <sup>2</sup>	Bosch
Authorizations.SHORTNAME	Name of the authorization given to the person* <sup>3</sup>	MainEntrance
Authorizations.NAME	Name of the authorization given to the person* <sup>3</sup>	MainEntrance
Authorizations.ValidFrom	Starting date to the validity of the authorization given to the person	20.02.2020
Authorizations.ValidUntil	Ending date to the validity of the authorization given to the person	24.02.2020
Cards.CARDNO	Part of the code data of the card that has been assigned to the person	765532
Cards.Customercode	Part of the code data of the card that has been assigned to the person	9001

\*<sup>2</sup> `Companies.COMPANYNO` and `Companies.NAME` will always match. These data types are only differentiated on AMS, not on the APE system. You can update the data before starting the import, by editing the CSV file.

\*<sup>3</sup> `Authorizations.SHORTNAME` and `Authorizations.NAME` will always match. These data types are only differentiated on AMS, not on the APE system. You can update the data before starting the import, by editing the CSV file.

**ACEAuthorizations.csv file**

Permissions that have not been assigned to anyone will be found in this file.

`Authorizations.SHORTNAME` and `Authorizations.NAME` will always match. These data types are only differentiated on AMS, not on the APE system. You can update the data before starting the import, by editing the CSV file.

<b>Data type</b>	<b>Description</b>	<b>Example</b>
<code>Authorizations.SHORTNAME</code>	Name of the authorization given to the individual	MainEntrance
<code>Authorizations.NAME</code>	Name of the authorization given to the individual	MainEntrance

## 6 Restrictions

### Data fields that are not migrated

Data field in APE	Description	Data field in AMS* <sup>4</sup>
Title	Job of a person, or a word used before the name to indicate the status of a person	Title
Memo	Additional note about the person	Remarks
Phone	Phone number of the person	Phone
External cardno	External card number given by the person	Does not exist in AMS.
Version	Administrative version of the card number	Version
Identification PIN	Personal Identification Number (PIN) that is the sole credential required for access	Identification PIN
Arming PIN	Personal Identification Number (PIN) that is used to arm an entrance	Arming PIN
Blocked persons	Person or list of persons who are blocked from an entrance	Blocking

\*<sup>4</sup> Dialog path: Main menu > **Personnel data** > <sub-dialogs>



### Notice!

For detailed information on how to manually configure the data in AMS, see chapter **Creating and managing personnel data**, in the **AMS Configuration and Operation** manual.

The **AMS Configuration and Operation** manual can be found in the Help file of AMS, or in the Bosch Security Systems online product catalog, in the [AMS product page](#), under **Downloads** > **Literature**.

### Other restrictions

- Cards to activate threat alert are imported as standard cards and will get the authorizations given to the cardholder.
- The migration of VIP flags works as follows:
  - **Persclass** must contain **VIP**
  - During the migration, the **ExcludeFromRandomAccess** flag will be set in AMS
  - Other VIP features will not be migrated. The chosen name with VIP is not relevant.
- Time models assigned to a person will not be migrated.  
(Create a new list and assign the time models manually on AMS.)
- Company names longer than 50 characters will not be migrated, i.e. the company name will be skipped.

- On the **Company** field with CR (carriage return), data until carriage return will be migrated (maximum of 50 characters).
- `Persons.AUTHUNTIL` will be changed from Date only format (e.g. 31.12.2020) to Date+Time format (e.g. 31.12.2020 00:00). Time is set to 00:00 by default. This means, the validity of the person will end at the beginning of the day.
- APE has two default personnel classes: "Employee" and "Visitor". It is possible to create new, customized personnel classes (e.g. "VIPEmployee" or "Foreign worker") in APE. During the migration, only default personnel classes are assigned. New, customized personnel classes from APE are either mapped to personnel class "Employee" or to personnel class "Visitor" during the migration.









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