

# 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).

## 2 Migration support tools

The data migration from APE to AMS is supported by these tools:

1. *APE migration.exe* - Tool that exports APE data and creates the necessary output files for a successful data migration.

Output files:

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

2. *ImportExportTool.zip* - IMPEX web application tool that imports APE data into the AMS. The file includes both tools and a version number (e.g. *AMS20\_Software\_AMS\_ImporterExporter\_Installer\_v0.1.7215.30352\_all\_73373777675.zip*).



### Notice!

The support tools can be found in the Bosch Security Systems online product catalog, in the [AMS product page](#), under **Downloads > Software > Software (Importer-Exporter)**.



### Notice!

Although these tools support the migration, they do not provide a migration of all data. Only personnel data is migrated.

Authorizations used in APE are migrated with information on the validity period. This means, 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, entrances that belong to these authorizations must be reassigned. This means, first, the hardware structure must be created (server, MAC, AMC, reader), and then, the entrances must be created and assigned to the authorizations manually.

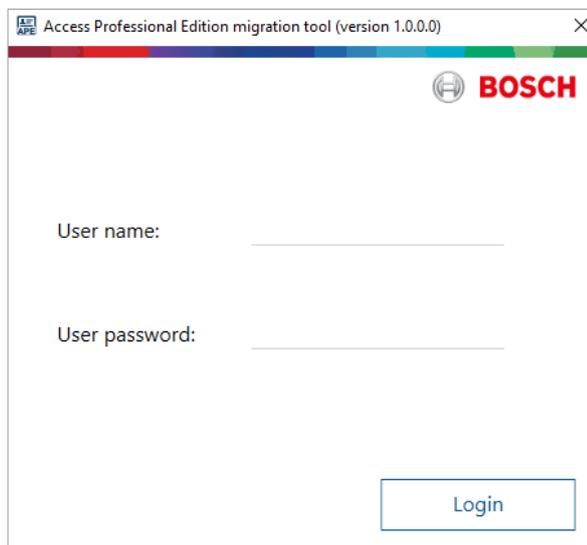
## 3 Migrating the data

### 3.1 Exporting the data

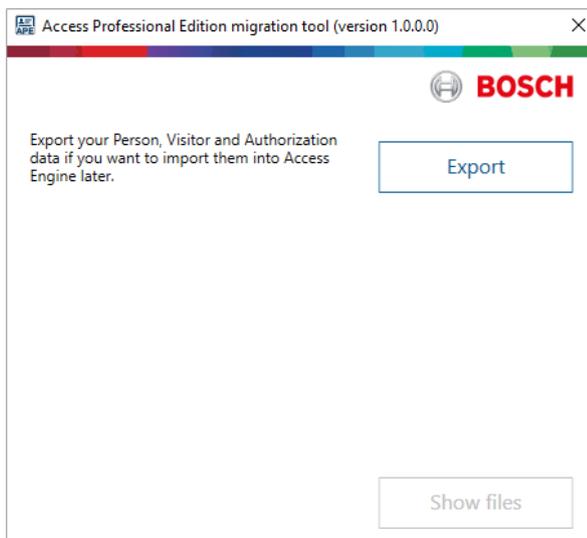
#### Prerequisites:

- 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.

1. On the computer where APE is running, start `APEMigration.exe`
  - A login dialog box opens.



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

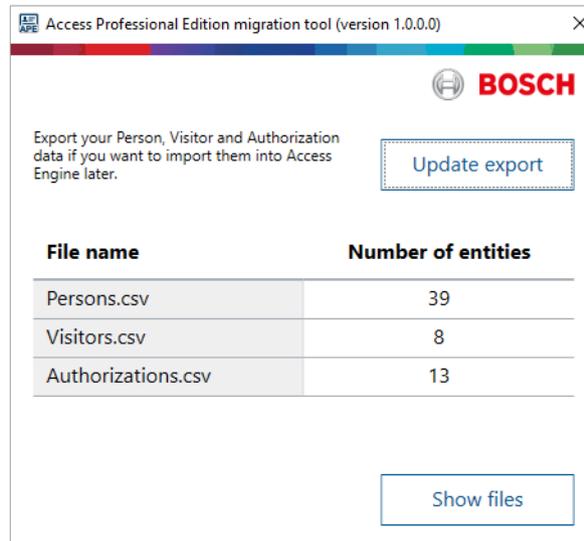


- Personnel data is exported and four output files are created:

- *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 keep both system (APE and AMS) updated manually.

**Notice!**

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

All the data must be deleted within the regulation period.

## 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.
- 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**.

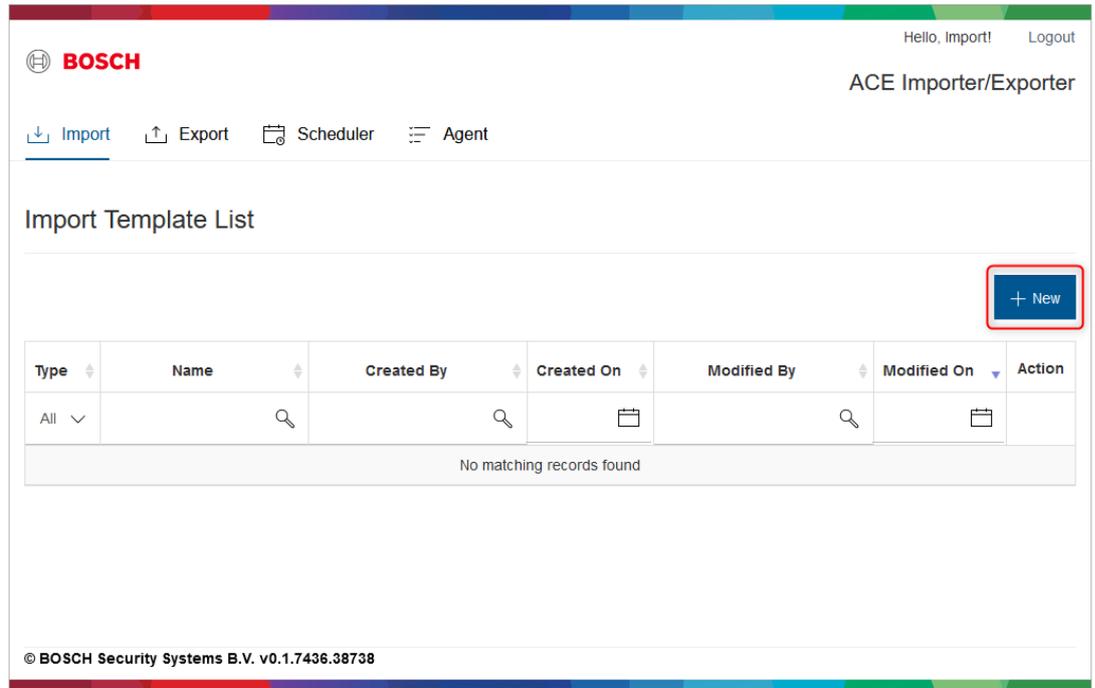
The screenshot shows the login interface for the ACE Importer/Exporter tool. At the top left is the Bosch logo. At the top right, there is a 'Log in' link and the text 'ACE Importer/Exporter'. The main content area is titled 'Log in' and includes the instruction 'Use ACE account to log in'. Below this 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).

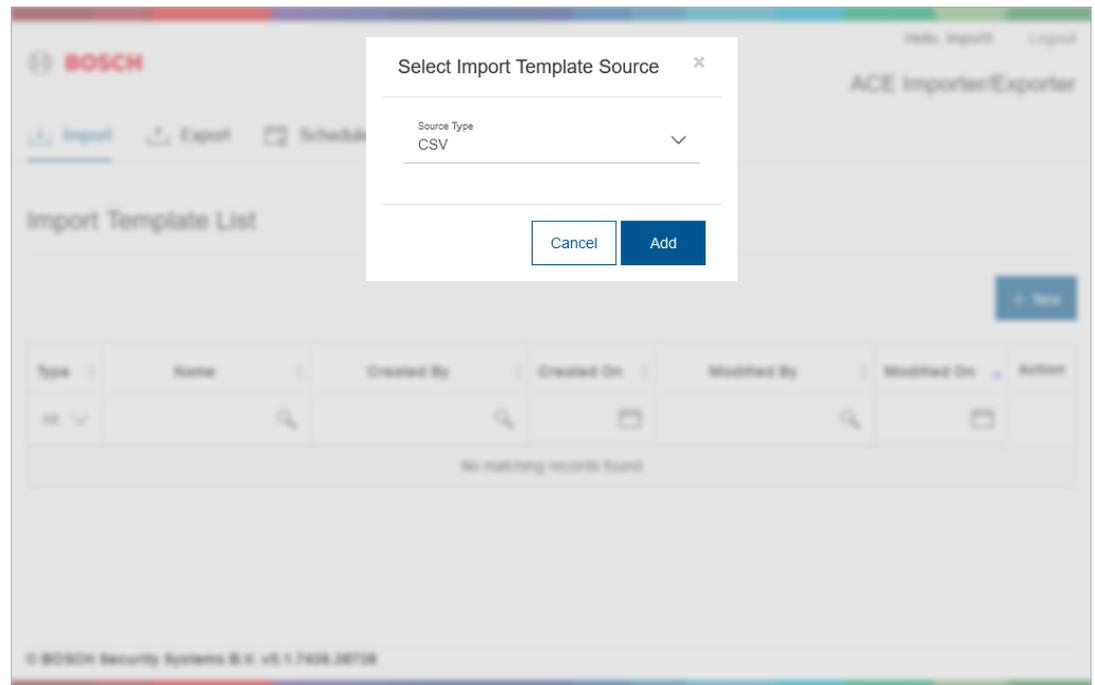
**Notice!**

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*.

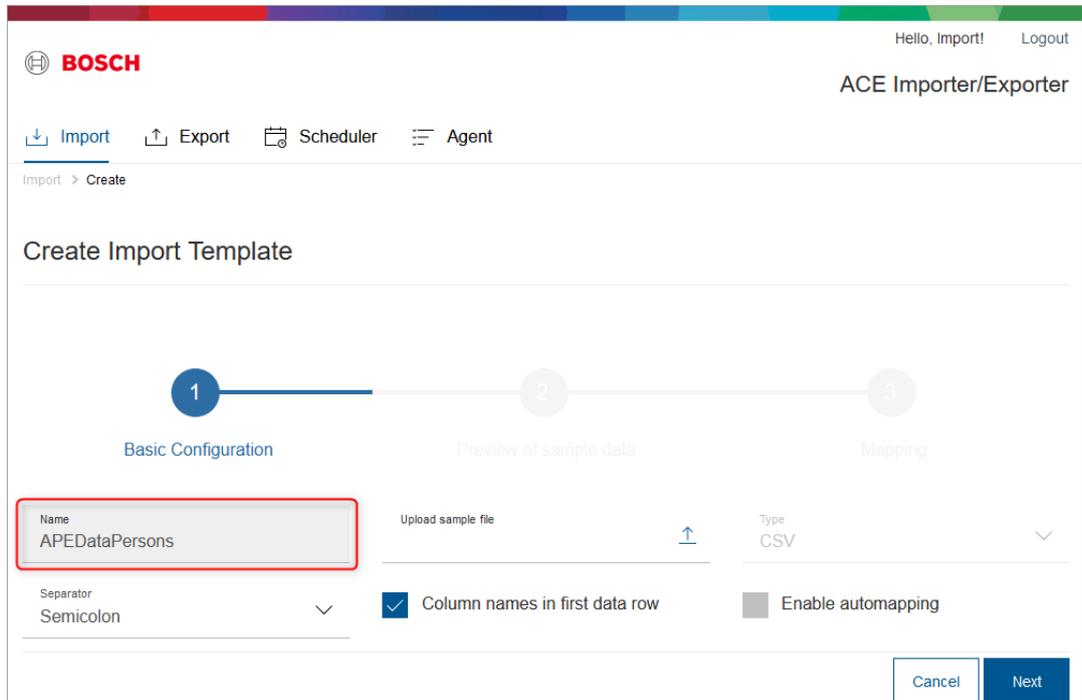
- 4. In the **Import** section, click **+ New** to create a new template to configure the data structure.



- 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**.

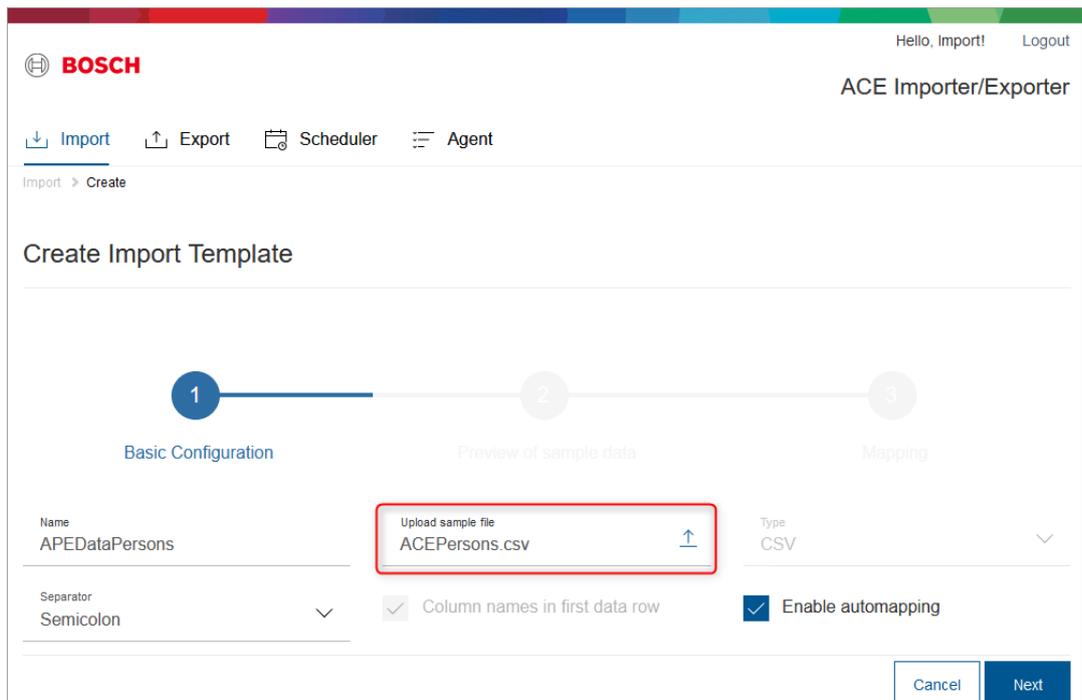


- Under **Name**, enter a name for your import (e.g. APEDataImportPerson).



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 current page is 'Import > Create'. The main heading is 'Create Import Template'. A progress bar at the top indicates three steps: 1. Basic Configuration (active), 2. Preview of sample data, and 3. Mapping. The 'Name' field is highlighted with a red box and contains the text 'APEDataPersons'. Below the name field is the 'Separator' dropdown menu, currently set to 'Semicolon'. To the right of the name field is the 'Upload sample file' button, which is currently empty. Below the name field are two checkboxes: 'Column names in first data row' (checked) and 'Enable automapping' (unchecked). At the bottom right 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. The page has the same header and navigation tabs as the previous screenshot. The 'Name' field contains 'APEDataPersons'. The 'Upload sample file' button is highlighted with a red box and contains the text 'ACEPersons.csv'. Below the name field, the 'Separator' dropdown menu is still set to 'Semicolon'. The 'Column names in first data row' checkbox is now checked, and the 'Enable automapping' checkbox is also checked. The 'Next' button is now highlighted in blue.

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

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**

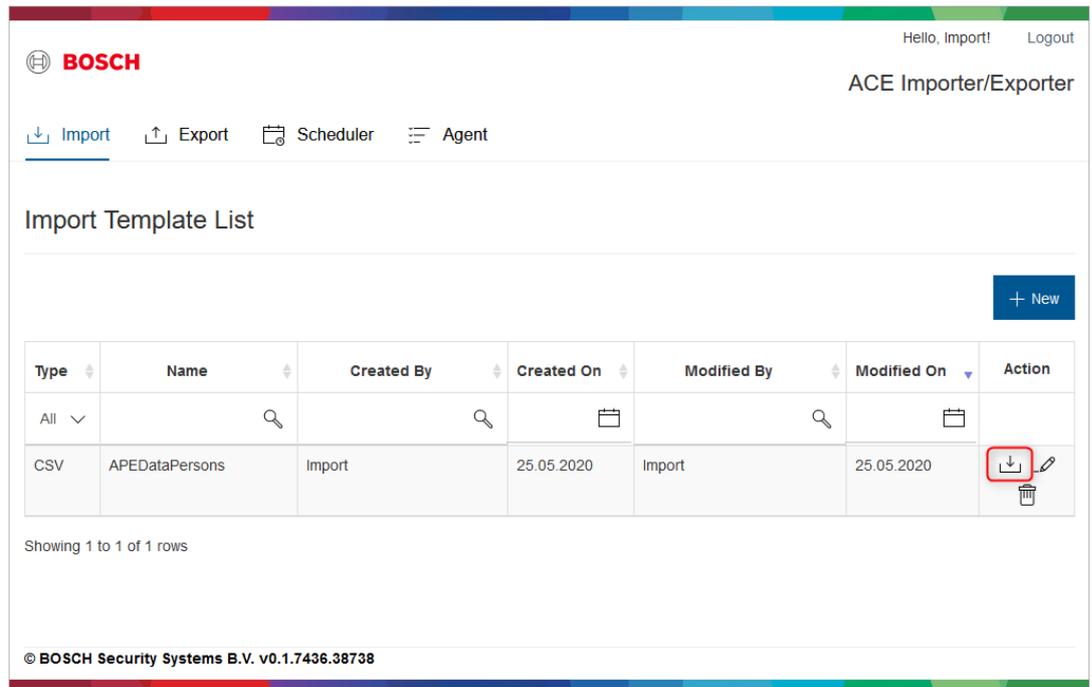
Column	First Row Preview	Destination	Is Mandatory	Is Unique	Rules And Formatting	Combine	Remo
1	Persons.ExternalId	Persons.ExternalId ▼	<input type="checkbox"/>	<input type="checkbox"/>			
2	Persons.FIRSTNAME	Persons.FIRSTNAME ▼	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
3	Persons.LASTNAME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

Previous Cancel Save

15. Click **Save**.

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

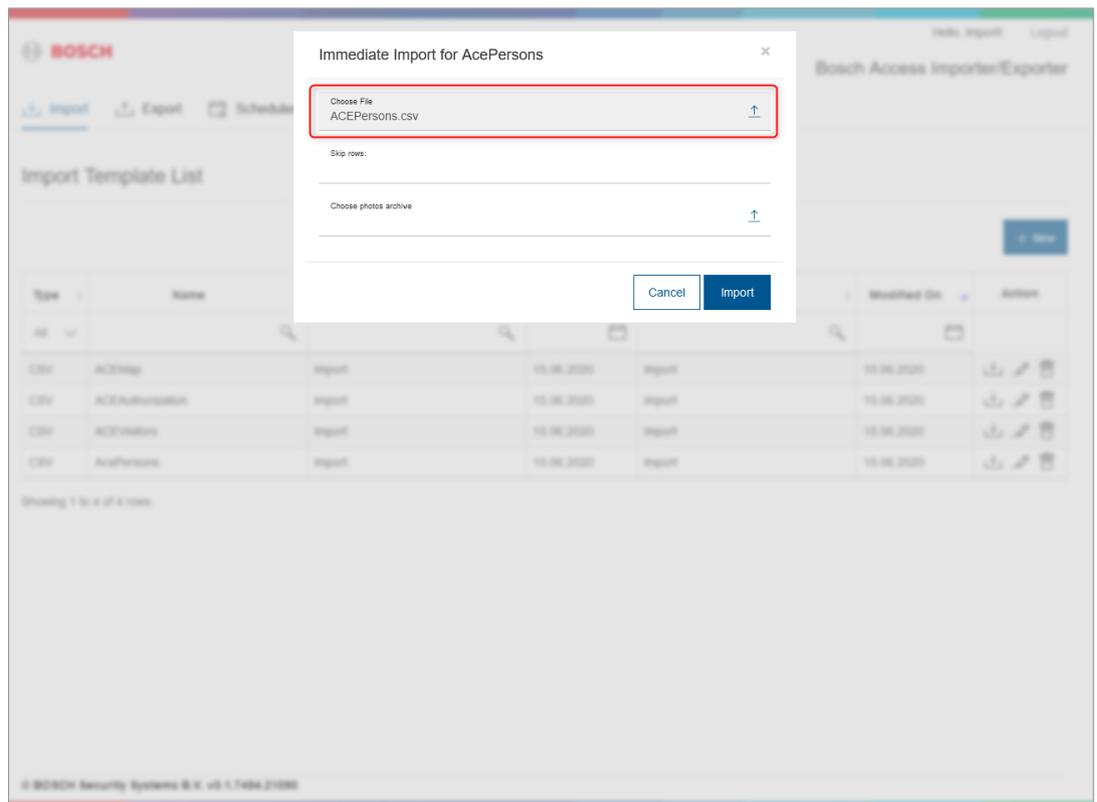
16. In the **Import Template List**, under **Action**, click on the import icon .



The screenshot shows the Bosch ACE Importer/Exporter interface. At the top, there is a navigation bar with the Bosch logo, the user name '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 table contains one row for 'APEDataPersons' with 'Import' as the creator and 'Import' as the modifier, both dated '25.05.2020'. The 'Action' column for this row contains an import icon (a downward arrow) and a delete icon (a trash can), with the import icon highlighted by 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'.

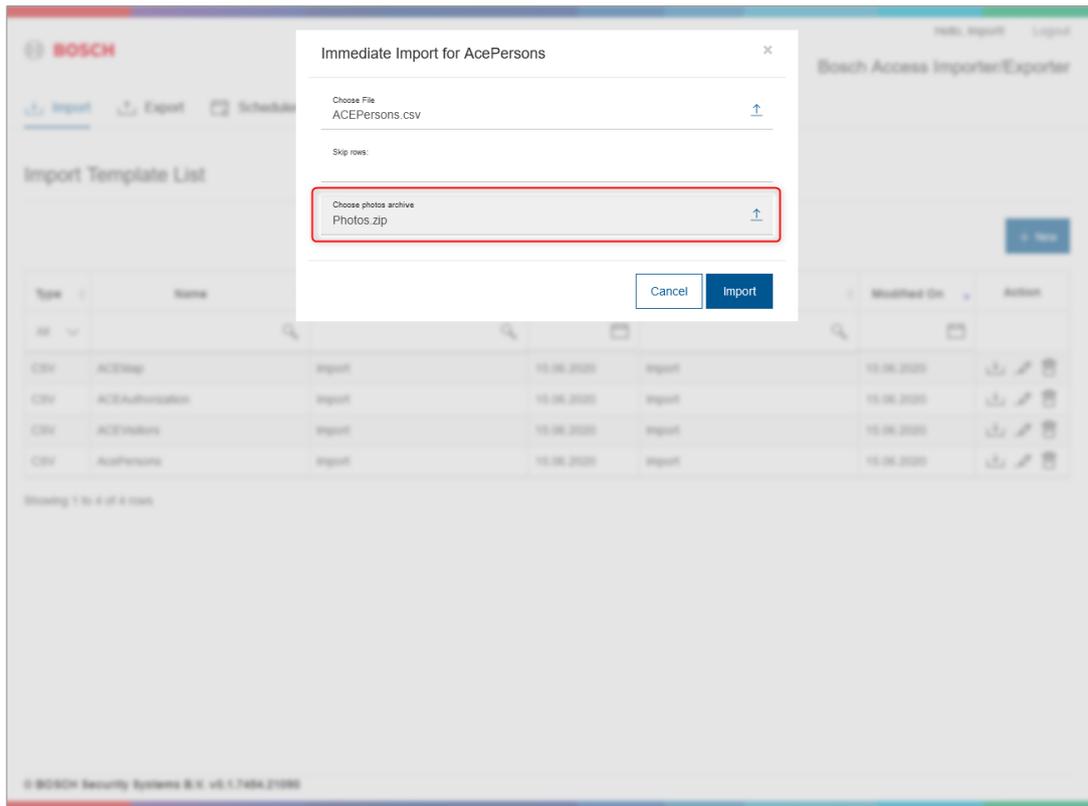
Type	Name	Created By	Created On	Modified By	Modified On	Action
All						
CSV	APEDataPersons	Import	25.05.2020	Import	25.05.2020	 

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

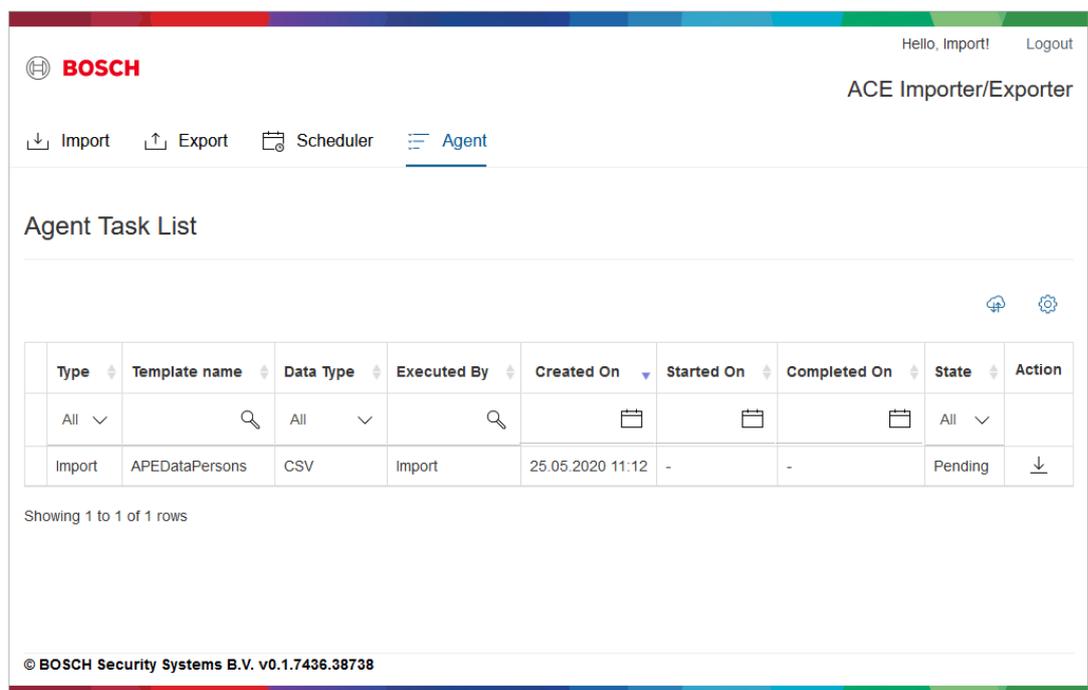


The screenshot shows the Bosch ACE Importer/Exporter interface with the 'Immediate Import for AcePersons' dialog box open. The dialog box has a title bar with a close button. It contains two sections: 'Choose File' and 'Skip rows:'. The 'Choose File' section has a text input field containing 'ACEPersons.csv' and an upward arrow icon. The 'Skip rows:' section has a text input field and an upward arrow icon. At the bottom of the dialog box, there are 'Cancel' and 'Import' buttons. The background shows the 'Import Template List' table with four rows, including 'ACEMap', 'ACEAuthorization', 'ACEActions', and 'AcePersons', all with 'Import' as the creator and 'Import' as the modifier, dated '15.05.2020'. The 'Action' column for each row contains an import icon and a delete icon. Below the table, it says 'Showing 1 to 4 of 4 rows'. At the bottom, there is a copyright notice: '© BOSCH Security Systems B.V. v0.1.7436.21082'.

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. At the top, there is a header with the Bosch logo, the user name 'Hello, Import!', and a 'Logout' link. Below the header, there are navigation tabs for 'Import', 'Export', 'Scheduler', and 'Agent'. The 'Agent' tab is selected, and the main content area displays the 'Agent Task List'. The table below shows a single task with the following details:

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	↓

Below the table, it says 'Showing 1 to 1 of 1 rows'. At the bottom of the interface, there is a copyright notice: '© BOSCH Security Systems B.V. v0.1.7436.38738'.

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 a masked password '\*\*\*\*\*'. Below this section, there are options for 'Custom import/export directories' and 'Logs configuration'.

**Preferences** [X]

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

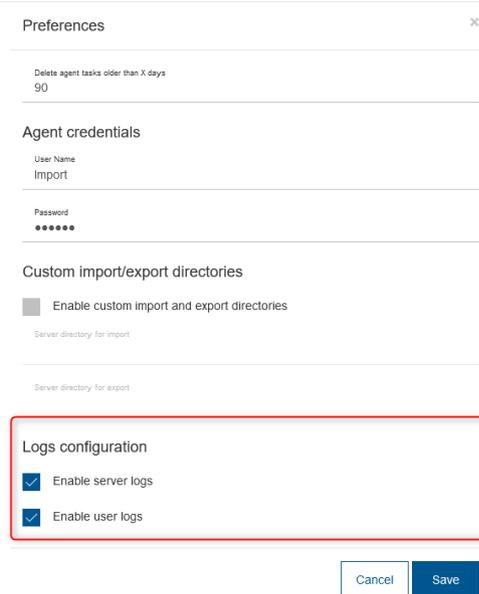
**Logs configuration**

Enable server logs

Enable user logs

Cancel Save

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

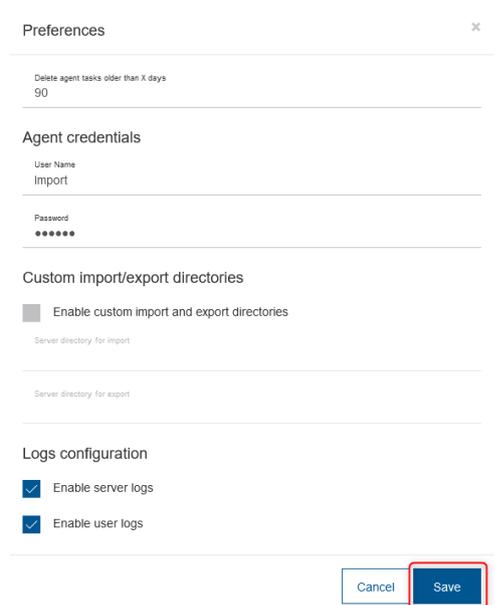
Logs configuration

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**

Data type	Description	Example
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>
Authorizations.SHORTNAME	Name of the authorization given to the individual	MainEntrance
Authorizations.NAME	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**4
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

\*4 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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