

Access Professional Edition

Installation



BOSCH

en Installation Manual

Table of contents

1	System Overview	5
1.1	Restrictions and options	6
1.2	Installation on one computer	9
1.3	Installation on multiple computers	10
1.4	System Prerequisites	12
1.5	Single-Board Computer	13
2	General	15
2.1	Introduction	15
2.2	User Login	18
2.3	Enrollment Configuration	21
2.3.1	Enrollment via AMC connected readers	23
2.4	SQL Server	27
2.4.1	SQL Server Support	27
2.4.2	Installation of SQL Database	31
3	Installation	38
3.1	Requirements	39
3.2	Beginning the Installation	40
3.3	Language Selection and Preparing	40
3.4	License Agreement	42
3.5	Customer Information	43
3.6	Choosing the type of Installation.	44
3.6.1	Entering the Server for Client installations	45
3.7	Choosing the installation path	45
3.8	Choosing Components	47
3.8.1	Client Installation	49
3.9	Selecting supported languages	50
3.10	Default configuration language (server only)	51
3.11	Confirming Choices	52
3.12	Setup Status	53
3.13	Installation completed	54
4	Product usage	55
4.1	Licensing	55
4.1.1	License packages and their content	56

4.1.2	Activating licenses	59
4.2	Setting Server access rights	62
4.3	Changing the backdrop	64
4.4	Language settings	65
4.5	Configuring the system to your needs	67
4.6	X-Protect Integration	68
5	Deinstallation - Reinstallation	70
5.1	Backup and Restore	70
5.2	Deinstallation	71
5.2.1	Windows Software	72
5.2.2	Initialization	73
5.2.3	Confirming the Deinstallation	73
5.2.4	Close all programs	74
5.2.5	Performing an Export	75
5.2.6	Declining the Export	76
5.2.7	DbiTool	76
5.2.8	Setup Status	78
5.2.9	Completion and Reboot	79
5.3	Modify the software	79
5.4	Reinstallation/Update	80
5.4.1	Import	82
5.4.2	DbiTool	84
5.4.3	Check the Configuration	84
5.4.4	Installation completed	85
6	User rights	86
7	UL 294 Requirements	87

1 System Overview

The Access Professional Edition System (hereunder referred to as **Access PE**) provides a self-contained access control for small and medium sized companies. It consists of several modules:

- LAC Service: a process which is in constant communication with the LACs (Local Access Controllers – hereafter referred to as Controllers). AMCs (Access Modular Controllers) are used as Controllers.
- Configurator
- Personnel Management
- Logviewer
- Alarm Management
- Video Verification

The modules can be divided into server and client modules.

The LAC service needs to remain in constant contact with the controllers because firstly it constantly receives messages from them regarding movements, presence and absence of cardholders, secondly because it transmits data modifications, e.g. assignment of new cards, to the controllers, but mainly because it carries out meta-level checks (access sequence checks, anti-passback checks, random screening).

The Configurator should also run on the server; however it can be installed on client workstations and operated from there.

The modules Personnel Management and Logviewer belong to the Client component and can be run on the Server in addition, or on a different PC with a network connection to the server.

The following Controllers can be used.

- AMC2 4W (with four Wiegand reader interfaces) - can be extended with an AMC2 4W-EXT
- AMC2 4R4 (with four RS485 reader interfaces)

1.1 Restrictions and options

You can use Access PE for systems that do not exceed the following thresholds for connectable components and manageable data volume.

- Max. 10,000 cards
- Up to three cards per person
- PIN length: 4 to 8 characters (configurable)
- PIN types:
 - Verification PIN
 - Identification PIN
 - Arming PIN
 - Door PIN
- Access variants:
 - Card only
 - Card with PIN (Verification PIN)
 - PIN or Card (Identification PIN)
- Max. 255 time models
- Max. 255 access authorizations
- Max. 255 area-time authorizations
- Max. 255 authorization groups
- Max. 16 workstations
- Max. 512 readers
- Max. 3 I/O extension boards (AMC2 8I-8O-EXT, AMC2 16I-16O-EXT or AMC2 16I-EXT) per Controller
- The following restrictions apply to each controller type:

Controller	APC-AMC2 4WCF	APC-AMC2 4WCF with API-AMC2 4WE	APC-AMC2 4R4CF
Readers/entrances			
Max. readers per AMC	4	8	8
Max. readers per interface/bus	1	1	8

Table 1.1: System limits – readers and entrances**Video system – restrictions and options**

- Max. 128 cameras
- Up to 5 cameras per entrance
 - 1 identification camera
 - 2 back surveillance cameras
 - 2 front surveillance cameras
 - You can configure one of these cameras as an alarm and log book camera.

Offline Locking System (OLS) – restrictions and options

- Max. 256 doors
- The number of entrances and authorization groups in the authorizations depends on the dataset length that can be written to the cards.
- Max. 15 time models
- Up to 4 periods per time model
- Max. 10 special days/holidays (from the online system)
- The OLS functionality is only given with card No.1.



Notice!

USB devices which are connected at a remote desktop as e.g. enrollment readers are not supported.

Consequences

1.2 Installation on one computer

The following figure shows a complete Access PE system installed on a single computer. Controllers can be connected via a TCP/IP network or a serial interface. If a dialog reader is used then this is also connected via a serial interface.

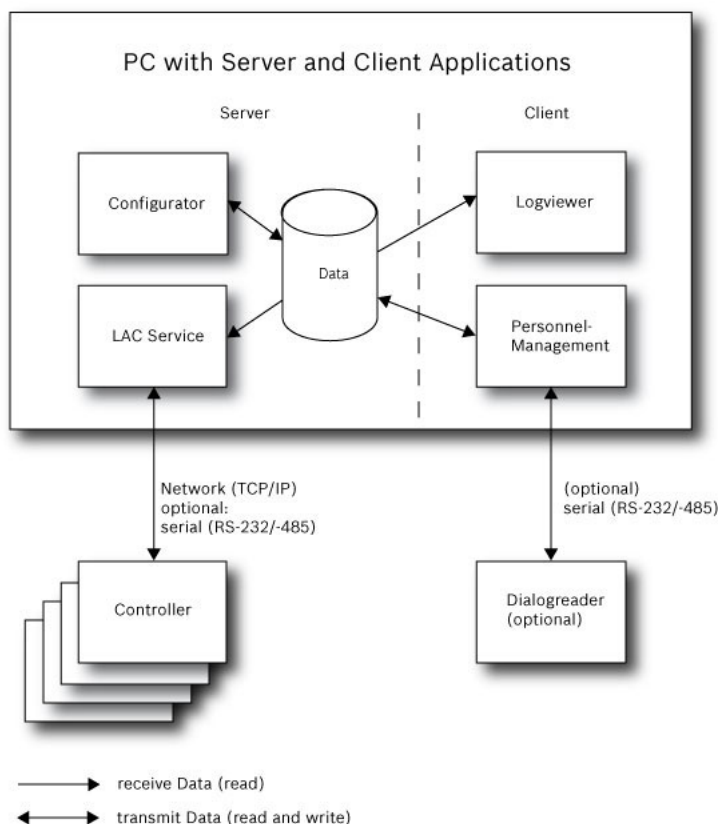


Figure 1.1: System Overview – Single Computer Configuration

1.3 Installation on multiple computers

The following figure shows an Access PE system distributed across 2 computers. This is particularly beneficial in cases where the Server to which the Controllers are connected is in a locked computer room, but the personnel data is maintained, for example, by the personnel department elsewhere.

The Access PE Client can be operated on up to 16 computers in parallel, which have access to common data on the Server via the network.

Client workstations can be configured to use two monitors.



Notice!

After an **Uninstall for Update** check if all files have been removed from the folder .. : \BOSCH\Access Professional Edition with the exception of the folder **SaveData**.

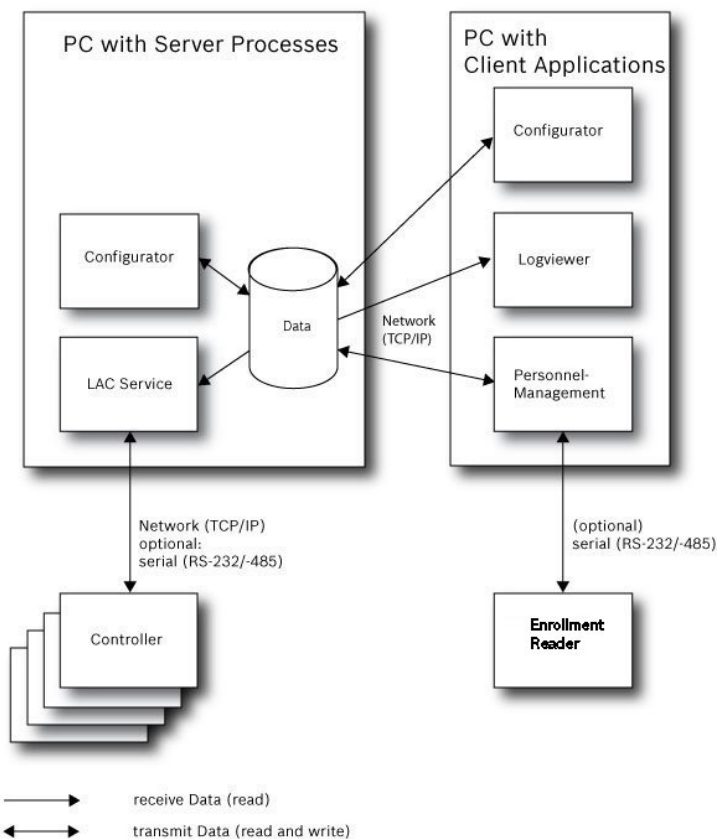


Figure 1.2: System overview – Distributed System

1.4 System Prerequisites

The installation of Access PE requires:

Operating Systems (one of):

- Windows 10 X64 professional
- Windows 2008 R2
- Windows 2008 Server
- Windows 7



Notice!

Microsoft Windows XP of all versions is not supported by the Access Professional Edition from version 3.1 onwards.

Hardware Requirements

Both Server and Client require a Standard Windows PC with:

- 2 GHz quad core or 3 GHz dual core CPU
- 4 GB RAM at least
- 20 GB free disk space (Server)
- 1 GB free disk space (Client)
- 100 Mbit Ethernet Network Card (PCI)
- Graphical adapter with 1024x768 resolution and 32k colors
- Resolution support:
 - 1024 by 768
 - 1280 by 1024
 - 1920 by 1080
 - 2560 by 1080

1.5 Single-Board Computer

It is possible to run the Access Professional Edition (APE) on a **Single-Board Bomputer (SBC)**.

Basically the capacity of an **SBC** as e.g. the Intel Compute Stick STK1AW32SC or other low-end hardware may **not correspond with the system prerequisites** of the Access Professional Edition (see chapter 1.4).

Notice!

An SBC can only be used if LAN or WIFI and the connected hardware are permanently available.



An SBC should be configured only with a reduced feature set as specified with the **Base License** (up to 16 readers).

Due to the low hardware performance a wireless connected SBC should **not** be used with the **Alarm Management** and **Video Management**, as the network stability is critical with these features.

The APE was tested on the following device which can be used as a reference for minimum system prerequisites for operating a Base License:

Intel Compute Stick STK1AW32SC

Product Name	Intel BOXSTCK1A32WFCR
Dimension	147 x 89 x 0.7 mm
Processor brand	Intel Atom x5-Z8-300, 4x1.44 GHz
RAM size	2 GB
Memory Technology	DDR3L
Computer Memory Type	DDR3 SDRAM
Hard Drive Size	32 GB

Product Name	Intel BOXSTCK1A32WFCR
Voltage	1.35 V
Wattage	4 W
Power Source	USB
Operation System	Windows 10

Windows Operating System preconditions

When working with a low-end hardware as e.g. an SBC, we recommend the following hardware- and operating system-specific settings and preconditions in order to ensure seamless operation of the APE software:

- Use fixed IP addresses.
- Disable all power saving options.
 - Select a high performance power plan.
 - Disable power savings within the USB settings.
- Disable Hibernate functions.
- Disable automatic Windows operating system updates.
- Apply a USB Ethernet Adapter in case the WiFi connection is unstable.
- Ensure that the screen resolution matches the SBC hardware requirements. For the exemplarily tested device the recommended resolution is 1920x1080.
- Ensure that sufficient memory is available. We recommend a free memory of 5GB for installing and operating the APE software. Use an external hard disk or apply a microSD to the SBC in case internal memory is not sufficient.
- Create Windows recovery CDs and save entry points on a regular basis.



Notice!

When using a Single Board Computer (SBC) it may not be possible to create a recovery CD or to use entry points.

2 General

2.1 Introduction

Access PE is an Access Control System which has been designed to offer the highest standards of security and flexibility to small and medium sized installations.

Access PE owes its stability and upgradeability to a 3-layer design: **The first layer** is the administration level with its controlling services. All administrative tasks are carried out here, e.g. the registration of new cards and the assignment of access rights.

The second layer is formed by the Local Access Controllers (LACs) which govern each group of doors or entrances. Even when the system is offline a LAC is able independently to make access b control decisions. LACs are responsible for controlling the entrances, governing door opening times or requesting PIN-codes at critical access points.

The third layer consists of card readers.

The communication between client, server, and cardholders is AES encrypted.

Access PE multi-user version allows multiple workstations to control the system. Customizable user rights levels regulate access and guarantee security. In this way it is possible, for example, to maintain card data from one workstation whilst using another to verify whether an employee is present in the building.

Access PE offers exceptionally flexible configuration of access rights, time models and entrance parameters. The following list gives an overview of the most important features:

Quick & Easy card Assignment

Cards (up to three) can be assigned to persons either manually or using a dialog reader connected to a PC via a serial connection. All assigned cards are active. When upgrading cards the old card is automatically overwritten and becomes invalid, thus preventing old cards from gaining access even if those responsible forgot or were unable to cancel them.

Access Rights (including Group Privileges)

Each person can inherit group privileges as well as having individual rights assigned to him. Privileges can be restricted by area and time to an accuracy of one minute. Group privileges can be used to grant and limit access rights for any or all cardholders simultaneously. Group privileges can be made dependent on time models which restrict their access to certain times of day.

Access tracking

By defining Areas it is possible to track and enforce a correct sequence of accesses. Even without monitoring, this configuration makes it possible to display a cardholder's location.

Anti-Passback

When a card has been read it can be blocked for a defined period from entering at the same access point. Hence it is possible to prevent "passback", where a user hands his card back across a barrier to provide access for an unauthorized person.

Automatic Cancellation of cards upon Expiration

Visitors and temporary staff frequently require access for a limited period only.

cards can be registered for a specific time period, so that they automatically lose their validity when that period expires.

Time Models and Day Models

A cardholder can be assigned to specific time models which regulate the hours in which that person has access. Time models can be defined flexibly using day models which determine how specific weekdays, weekends, holidays and special days deviate from normal working days.

Identification via PIN-Code

Instead of a card a person can use a special PIN-Code to enter.

Verification via PIN-Code

Particularly sensitive areas can be programmed to require additional PIN-Codes. This protection can in turn be made dependent on time models, so that, for instance, a PIN-Code is only required for access during holiday times or outside of defined working hours.

Flexible Door Management

Flexible parameterization of individual door models allows an optimum balance between security and comfort. The "shunt" or alarm suppression period can be individually specified to regulate for how long a door may remain open. In cooperation with an alarm system the access point can then optionally be locked.

Periodic Door Release

In order to facilitate access, door alarms can be shunted to release doors for specific periods. Door release periods can be defined manually or automatically via a time model.

Time and Attendance

Access points can be parameterized to record ingress and egress for time & attendance purposes.

Card Design

The graphical add-in module **Card Personalization** (CP) is fully integrated into the Access Control system to allow the operator to create cards without switching applications.

Assignment of Photos

If the add-in module **Card Personalization** (CP) is not activated photographic identification can nevertheless be imported and associated with cardholders.

Offline locking system

Areas which are not covered, for whatever reason, by the high-availability online access control system can nevertheless be locked offline.

Administration of video devices

Entrances can be equipped additionally with cameras to identify and track the movements of persons using them.

2.2 User Login

The following applications are available. The the respective User manuals for details:



Personnel Management



Configurator



Logviewer



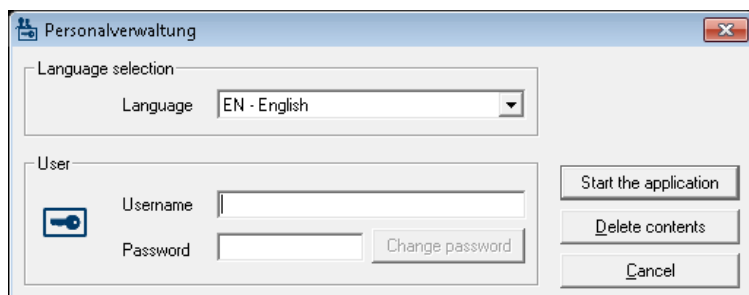
Map and Alarm Management



Video Verification

The system's applications are protected from unauthorized use.
The **default passwords** on first usage are:

- Username: **bosch**
- Password: **bosch**



The upper drop-down list can be used to select the desired interaction **language**. The default is that language which was used to install the application. If there is a change of user without restarting the application then the previous language is retained. For this reason it is possible for a dialog box to appear in an undesired language. In order to avoid this, please log in to Access PE again.

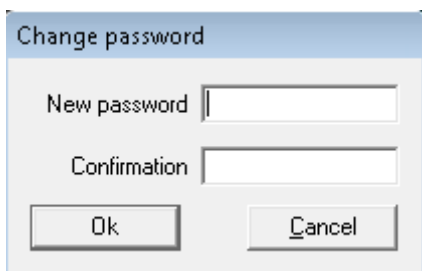
Access PE applications can be run in the following languages:

- English
- German
- French
- Japanese
- Russian
- Polish
- Chinese (PRC)
- Dutch
- Spanish
- Portuguese (Brazil)

Notice!

All facilities such as device names, labels, models and user-rights schemes are displayed in the language in which they were entered. Similarly buttons and labels controlled by the operating system may appear in the language of the operating system.

If a valid username/password pair are entered then the button : **Change Password** appears. This can be used to start a new dialog to change the password.

**Notice!**

Do not forget to change the password!

The button **Start the application** checks the user's privileges and, based on these, starts the application. If the system is unable to authenticate the login then the following error message appears: **Wrong username or password!**

2.3 Enrollment Configuration

Enrollment Readers (RS 232) > Tools > Settings calls a dialog in which it is possible to perform basic configuration tasks (activate, modify) from any workstation.

- Administrative workplaces, where persons are assigned cards, can be fitted with an enrollment reader. This must be parameterized and configured according to the manufacturer's specifications, or those delivered with the device. If an enrollment reader is set up then manual card checking is deactivated.

The required settings for supported readers are:

Reader name	BAUD	D	P	S
DELTA 1200 Prox RS232	9600	8	N	1
DELTA 1200 iClass RS232	57600	8	E	1
DELTA 1200 USB Hitag, Legic, Mifare	9600	8	N	1
DELTA 1200 RS232 Hitag, Legic, Mifare	19200	8	N	1
Rosslare ARD-1200EM USB	9600	8	N	1
LECTUS secure 5000 MD	9600	8	N	1

D =	Data bits	N =	none
P =	Parity	E =	even
S =	Stop bits	O =	odd

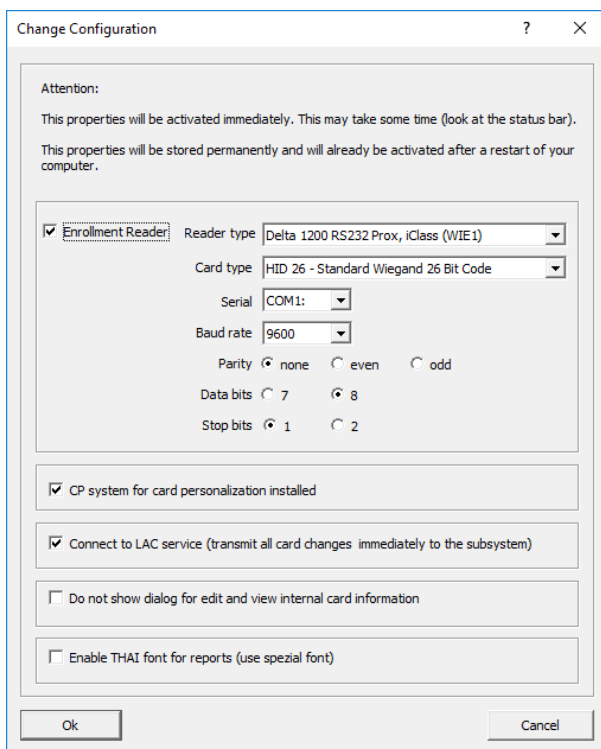


Notice!

The Delta 1200 Series and Rosslare ARD-1200EM Series were not evaluated by UL.
Consequences

- Chip card system**

Displays the card technology – MIFARE classic and Hitag1 can be used for Access PE.



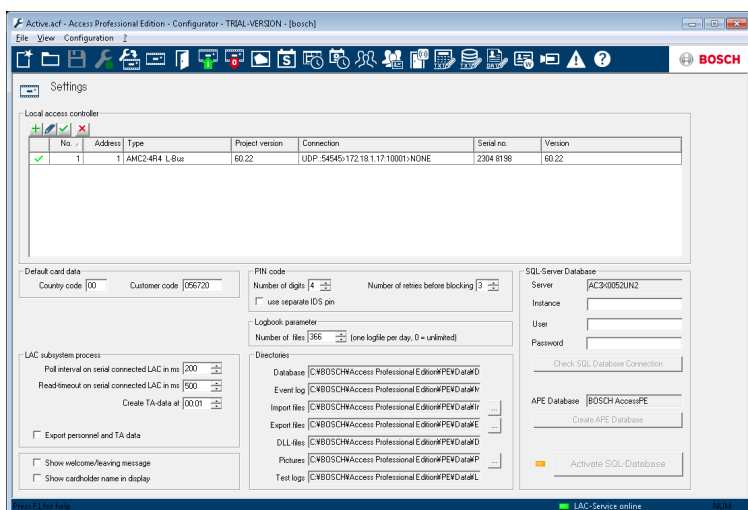
- If the system has been installed with the optional **Card Personalization** (CP) module then the corresponding check box is selected in settings. Unchecking this box blocks all functions for card design/creation.
- In addition the automatic transfer of personnel data via **Connection to the LAC Server** is also checked. This box should always remain checked.

- The display of card information during card assignment can be disabled here. This display is only necessary when, contrary to default settings (see General Settings in Access PE Configurator) card data are required which do not conform to the company standard settings.
- Click the check box **Enable THAI fonts for report**, if reports are required in Thai language and fonts. NOTE: This works only in the English language dimension.

2.3.1 Enrollment via AMC connected readers

Make sure that at least one reader is configured with a **Door Model 06c**, which is the door model for enrollment.

Start the **Configurator** and select a **Local Access Controller (LAC)** (e.g. AMC2...)



Click the **Entrances** symbol and add a new Entrance reader:

Define Entrance ? X

Description

Please configure LAC, GID and doormodel

LAC GID

Door model

☒ Video verification Surv. camera:

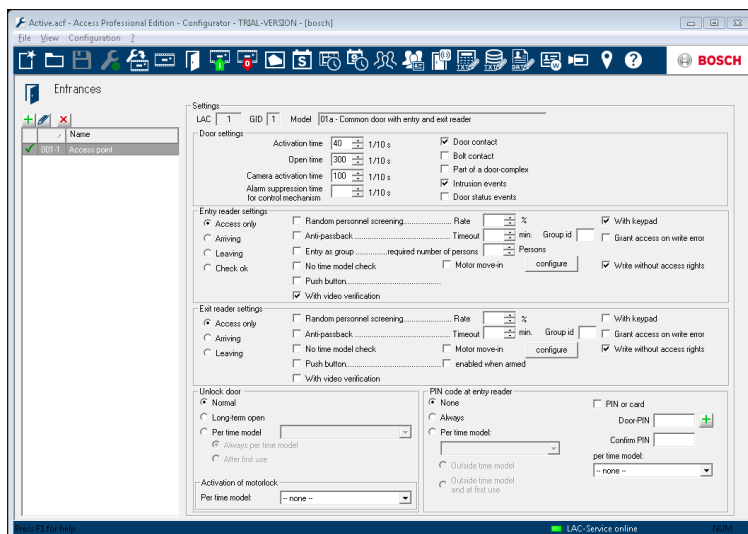
Reader configuration

	Reader type	Address	Write access
Entry-reader	<input type="text" value="RS485"/>	<input type="text" value="1"/> ✓	<input type="text" value="read only"/>
Exit reader	<input type="text" value="RS485"/>	<input type="text" value="1"/> ✓	<input type="text" value="read only"/>

Signal definition

	Signal description	On dev...	GID / Board	DID	Connection
✓	Revolving door in normal posit...				
✓	Pushbutton: Door open				
✓	Entrance locked				
✓	Sabotage signal				
✗	Open entry of revolving door				
✗	Open exit of revolving door				
✗	Lock opposite direction (to ot...				
✗	Alarm connection				

The dialog window **Entrances** opens:



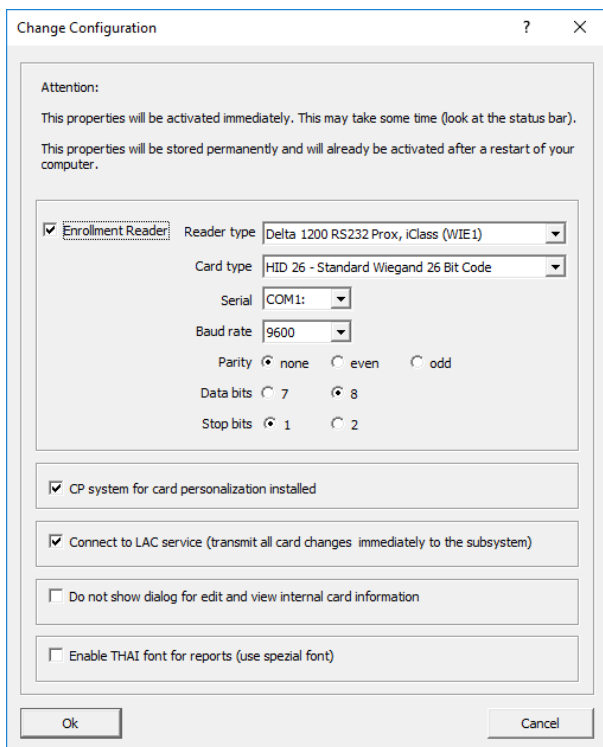
In this dialog:

- Enter a Description (e.g. Enrollment Reader AMC)
- Select a LAC and a group ID (GID)
- Select a reader type (e.g. Wiegand)
- Select a number between 1 and 8 as Access Reader Address

Click OK to conform the enrollment configuration.

To assign the configured enrollment reader to a specific workstation, you have to change to the APE client.

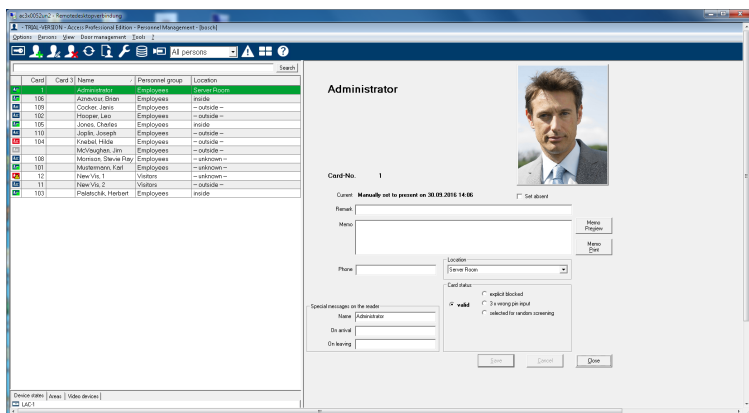
- Select Tool > Properties.



Select an available enrollment reader to activate the enrollment process.

Confirm that your enrollment reader is online.

If you don't get an immediate response, restart the Personnel Management dialog.



2.4 SQL Server

2.4.1 SQL Server Support

All data which are written into the event logfile, can also be stored in an SQL database. As a reference we suggest the Microsoft® SQLServer® 2014 Express, SP 1x 64 installed on Windows 10 x64 Pro.

An SQL server connection can be configured in the lower section on the right side of the **Settings** screen of the Configurator

For more details refer to the Configuration manual.



Notice!

Make sure to install the SQL database on the same physical or virtual machine as the APE server.

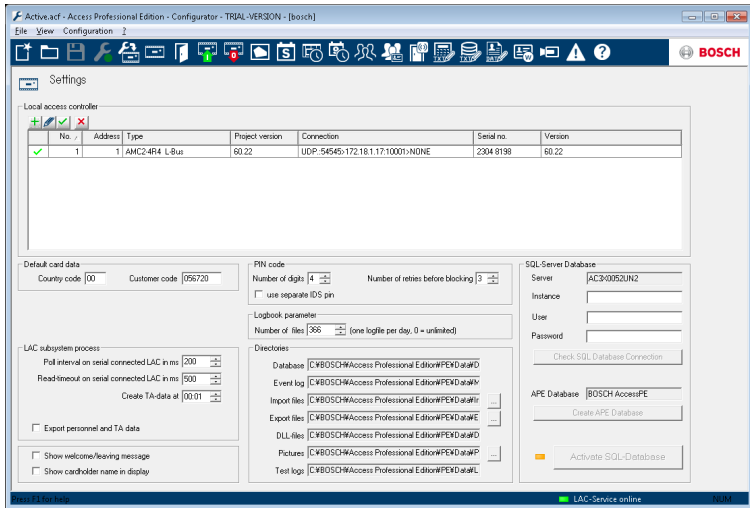
Consequences



Notice!

When using the Configurator to configure the SQL database, the configurator must be started on the APE server PC.

The Configurator must not be started on a client in this case.



- Enter the instance ID of the database in the entry field **Instance**.
- If credentials are required, enter **User** and **Password**.
- Click the button Check **SQL Database Connection**.
- If no APE database server exists so far, move to the Configurator and click **Create APE Database**.

Check SQL Database Connection

SQL-Server Database

Server AC3X0013BT1

Instance SQLExpress

User

Password

Check SQL Database Connection

APE Database BOSCH AccessPE

Create APE Database

Activate SQL-Database

LAC-Service online NUM RF

Edit the name of a new valid instance ID. This causes that a new APE database is created in the specified instance.

If an APE Database exists already or after you have created one, click **Activate SQL Database**.

The system does not import existing logbook data if upgraded to an APE release with SQL database support.

If the limit of 100,000 messages is reached, the system will stop buffering events. Once the SQL service is accessible again the buffered messages are added to the SQL database. The message buffer is not included in the APE system backup.

**Notice!**

The user is responsible to maintain the database such as to erase old entries, keep the SQL installation updated etc.
Consequences

**Notice!**

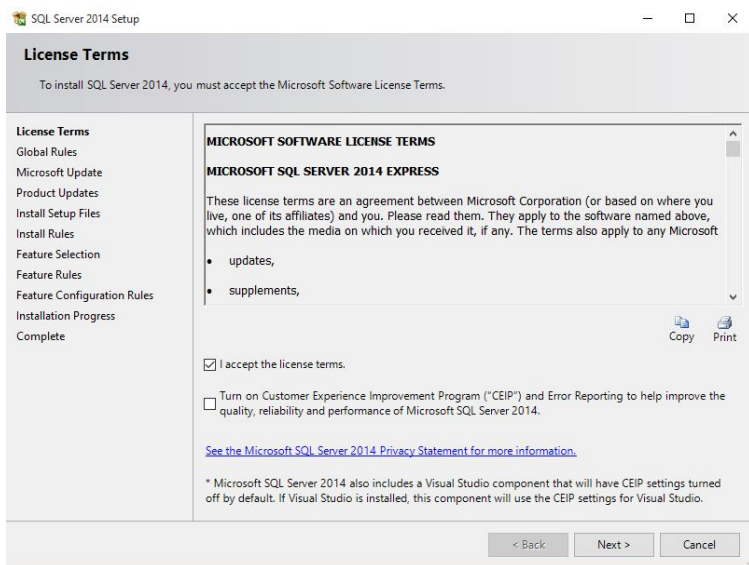
It is possible to enable or disable the SQL database service.
If the service is disabled, a Windows message box will warn the user.

2.4.2 Installation of SQL Database

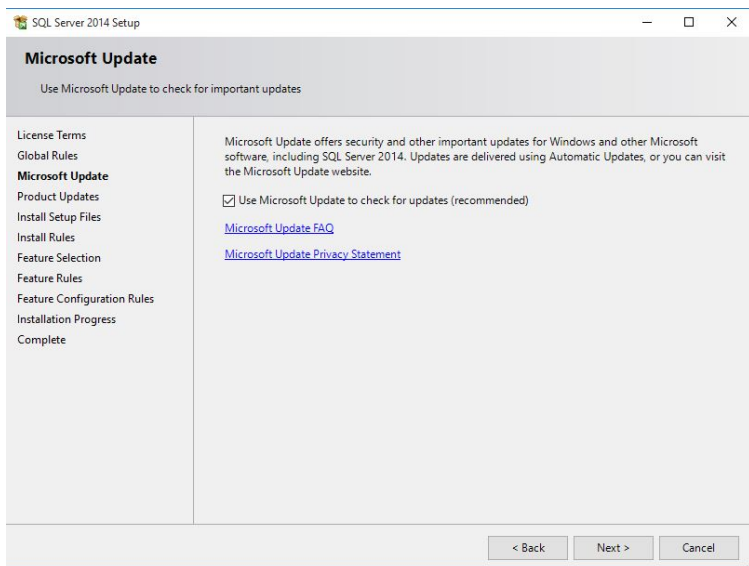
Download the **Microsoft® SQL Server® 2014 Express Edition SP1** from the Microsoft homepage. After the start of the application the **SQL Server Installation Center** is displayed. Select **Installation**.



- Select **New SQL Server**.
- Select **License Terms**.

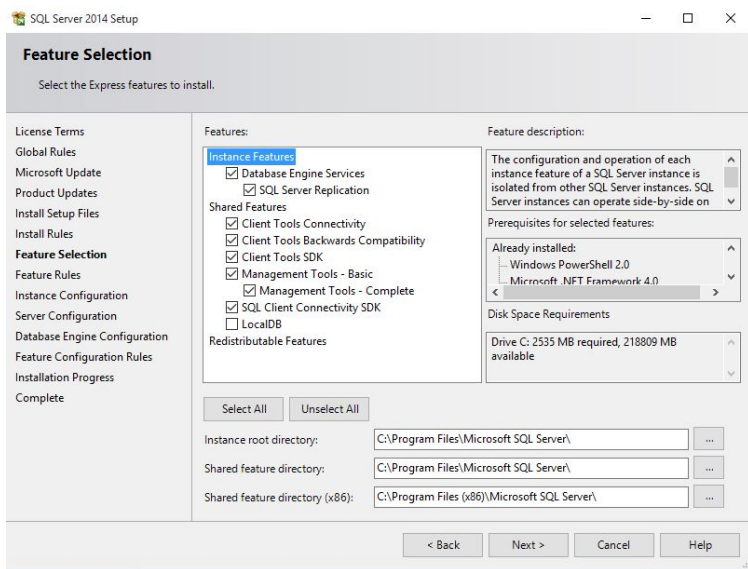


- Accept the license terms and click **Next >** to proceed.
Select **Microsoft Update**.



- Select **Use Microsoft Update to check for updates** and click **Next >** to proceed.

Select **Feature Selection**.



- Select the required **Features** from the list and click **Next >** to proceed.

Select **Instance Configuration**.

SQL Server 2014 Setup

Instance Configuration

Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the installation path.

License Terms

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Feature Selection

Feature Rules

Instance Configuration

Server Configuration

Database Engine Configuration

Feature Configuration Rules

Installation Progress

Complete

☐ Default instance

☒ Named instance:

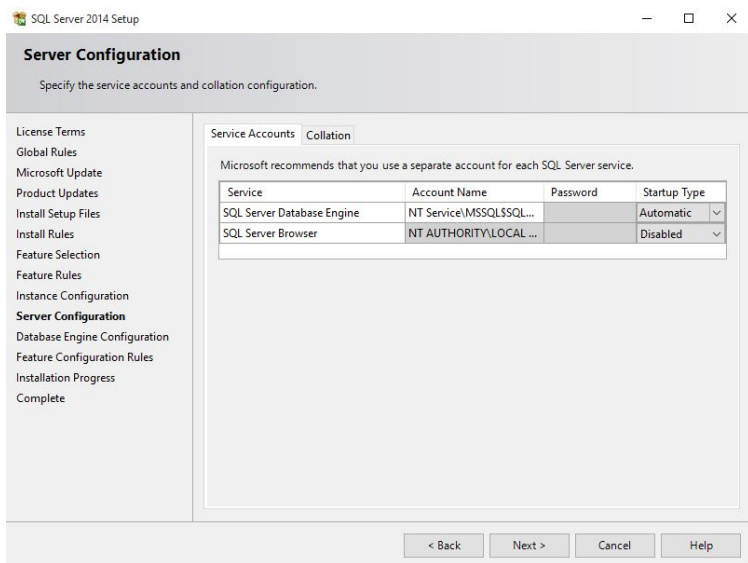
Instance ID:

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL12.SQLEXPRESS

Installed instances:

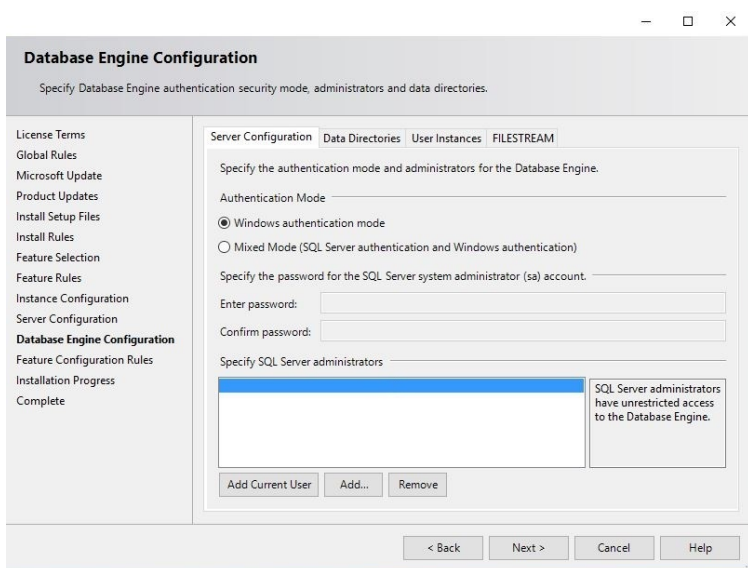
Instance Name	Instance ID	Features	Edition	Version

- Select one of the radio buttons **Default instance** or **Named instance**.
 - Click **Next >** to proceed.
- Select **Server Configuration**.



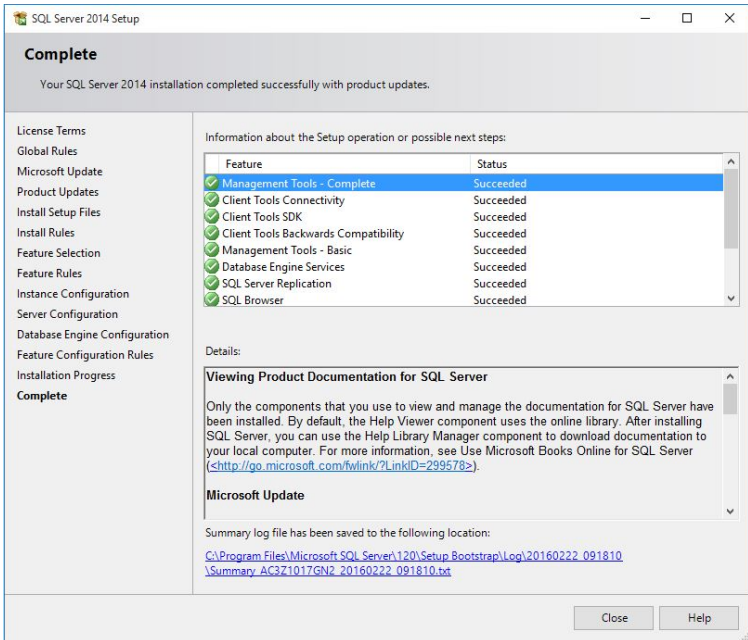
- Select the required **Service Accounts** and click **Next >** to proceed.

Select **Database Engine Configuration**.



- Select the tab **Server Configuration** and activate the radio button **Windows authentication mode**.
- Click **Next >** to proceed.

Select **Complete** and check the **Status** column for successful installation of all applicable features. This may take a few minutes.



- The installation is now complete. Click **Close** to finish the installation.



Notice!

If the installation fails, please contact the Microsoft customer support.

It is under the responsibility of the end-user of the SQL database:

- To create credentials for the authorization to give access to the SQL database
- To create a backup of the SQL server, as the SQL database backup is not supported by the APE system.
- To manage the SQL security.

3 Installation

In addition to the access control applications **Personnel Management**, **Configurator** and **Logviewer**, Access Professional Edition Installation also includes a facility for **Alarm Management** and **Video Verification**, and for setting up the **LacSp** (LAC Subprocess) service and the **Card Personalization** automatic background process (if CP is to be installed).

The following applications are also installed and can all be accessed via **Start > Programs > Access Professional Edition**.

The following additional applications are available:

- AMC IP Configuration
- Badge Designer
- Card Personalization Configuration (German and English)
- Card Personalization Interface
- Database Management

3.1 Requirements

For a new installation of the Access PE download the ISO-image file from the Bosch website. Extract the ISO-image or create a DVD to proceed for installation.

If you wish to use a video functionality together with the access Professional Edition, you need to install **Bosch Video SDK** (3rdParty\BOSCH VideoSDK\MPEG_ActiveX_5.90.0081.x86.exe) Additional supported versions of the Video SDK are listed in the file readme.html on the installation CD. The **Video SDK** requires the .NET 3.5 framework. This is included in Windows 7 and 10. In Windows 10 this is not enabled by default.

To enable this feature:

- Open **Control Panel**.
- Select **Programs and Features** and from there Turn **Windows features on or off**.
- Select **.NET Framework 3.5**. The Sub-Features are not required.

This step requires administrative privileges and a running internet connection. If this does not work for you (i.e. you are not connected to the internet) use the following workaround:

- Mount a windows 10 installation kit (e.g. to F:).
- Use **dism /online /enable-feature /featurename:NetFx3 /all /source:F:\sources\sxs /limitaccess**.

3.2 Beginning the Installation

Before starting the installation please close all other programs. Log in as **Administrator** or use an account which has administrator privileges. Place the installation CD in the CD Drive and begin the installation by double-clicking the file **Access Professional Edition Setup.exe** in the main directory.

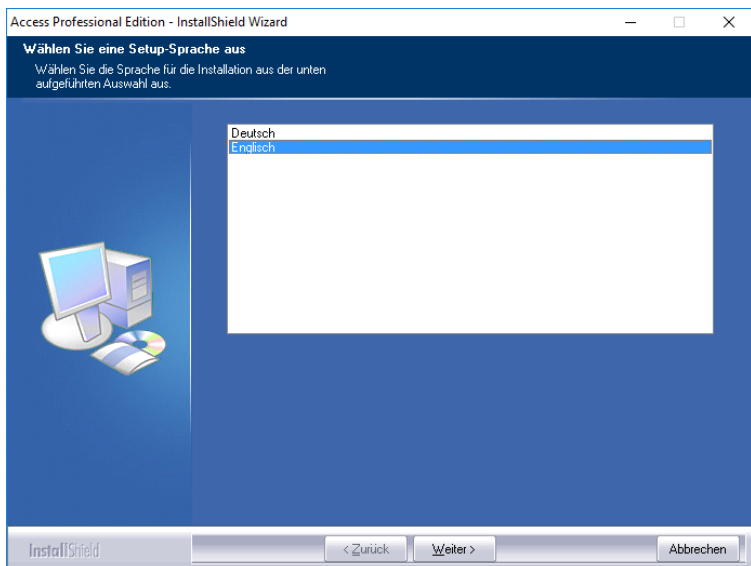
Notice!



The installation and the way it is carried out does not depend on the components ordered for your access control system. All components are installed, and these are either released or blocked by the licensing procedure performed later, see chapter **Licensing**.

3.3 Language Selection and Preparing

Choose the desired language (English or German) for you installation from the list. Confirm your choice by clicking **OK**.



This selection only relates to the language used in the installation wizard dialogs during installation. It does not affect the languages of applications used later.

After setup the Install Shield wizard will start up in the chosen language. Press **Next**

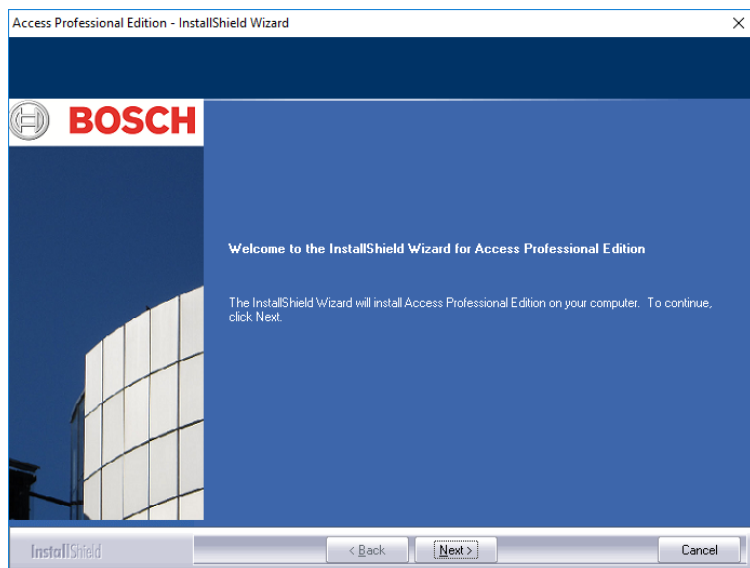


Figure 3.1:

Notice!



If you have chosen for the installation a language other than that of the operating system, it is nevertheless possible that some system elements (particularly button labels) appear in the language of the operating system.

3.4 License Agreement

In order to continue the installation it is necessary to accept the terms of the license agreement. Please read these carefully and indicate your acceptance by clicking **I accept the terms of the license agreement**.



Only then will the button **Next** be activated so that the installation can proceed to the next stage.

3.5 Customer Information

Enter the user and company information in the fields provided. The default values shown are those which were entered during the installation of the operating system.

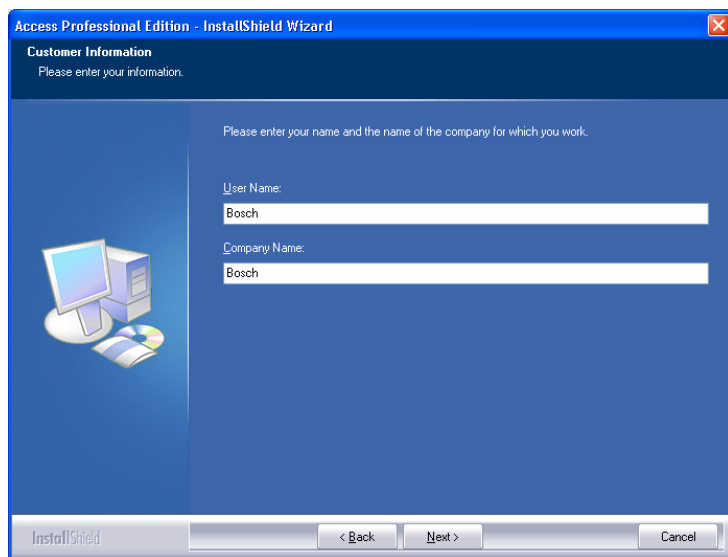
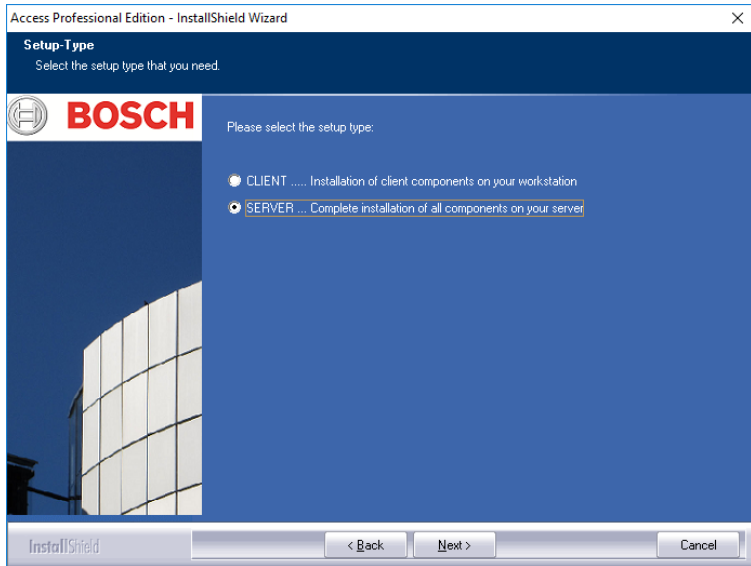


Figure 3.2: Installation – Customer Information

Confirm your entries by clicking **Next**.

3.6 Choosing the type of Installation.

You can choose between **Server** and **Client** type installations.



Confirm your choice by clicking **Next**.



Notice!

Install Access PE on the server first. When installing the clients you need to enter the computer name of the server where the Server component of Access PE has been installed.

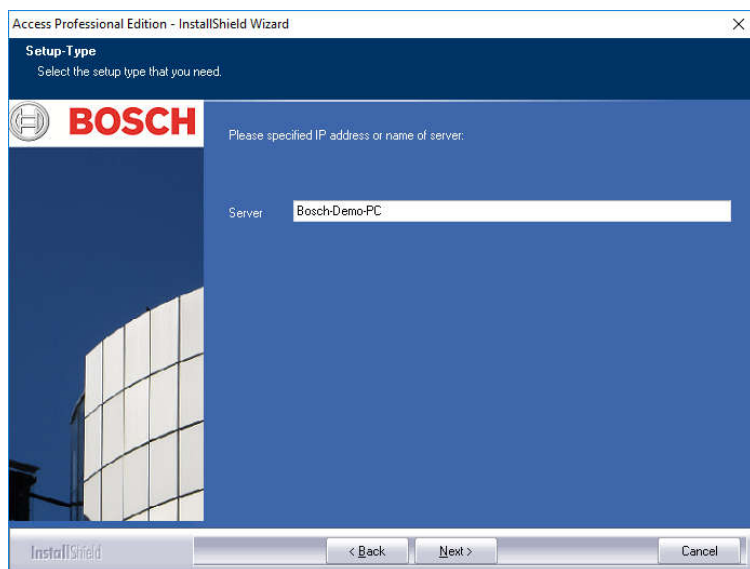


Notice!

Additional information is necessary for Client installations. Any such divergences from the steps of the Server installation will be described at the appropriate points in this guide.

3.6.1 Entering the Server for Client installations

If you have chosen **Client** installation, you will first need to enter the computer name of the Server to which the Client will connect, and on which Access PE has already been installed.



Confirm your input by clicking **Next**.

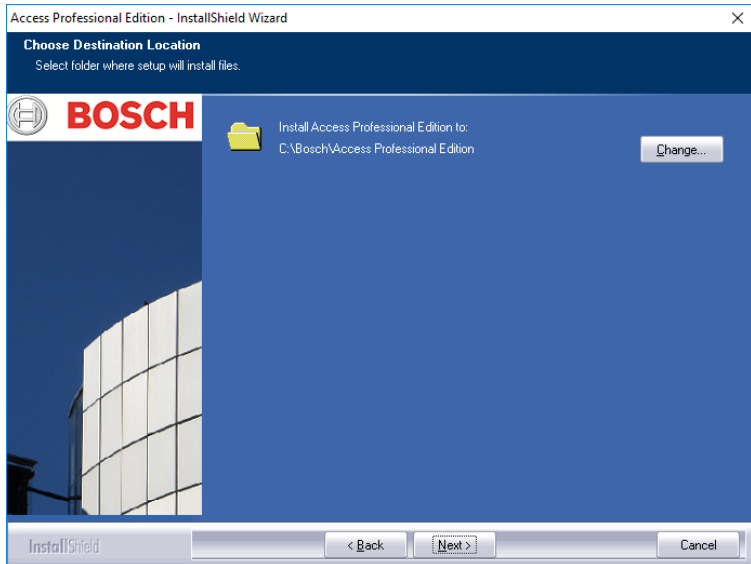
3.7 Choosing the installation path

Choose the directory where the Access PE files are to be installed.

The default path is on the C-partition of your computer. The various components are located in the following directory structure:

C:\BOSCH\Access Professional Edition

The subdirectories **CP** and **PE** contain the files for Card Personalization, and access control respectively.



Confirm your choice by clicking **Next**.

3.8 Choosing Components

According to the default settings all components are installed on the server. By clearing the relevant check-box you can exclude individual components from the installation.

The following components are available:

Configurator

Installs the Configurator program, for setting up devices and systems, with a link on the desktop and in the Personnel Management dialog. These components should be installed at least on the server. They can however be executed from any client.

Personnel Management

Installs the dialogs for Personnel Administration.

Alarm Management

Installs the components required for the handling of alarms.

Video Verification

Installs the components required for using video verification.

Log Viewer

Installs the application for log book evaluation including a link on the desktop and in the Personnel Management dialog.

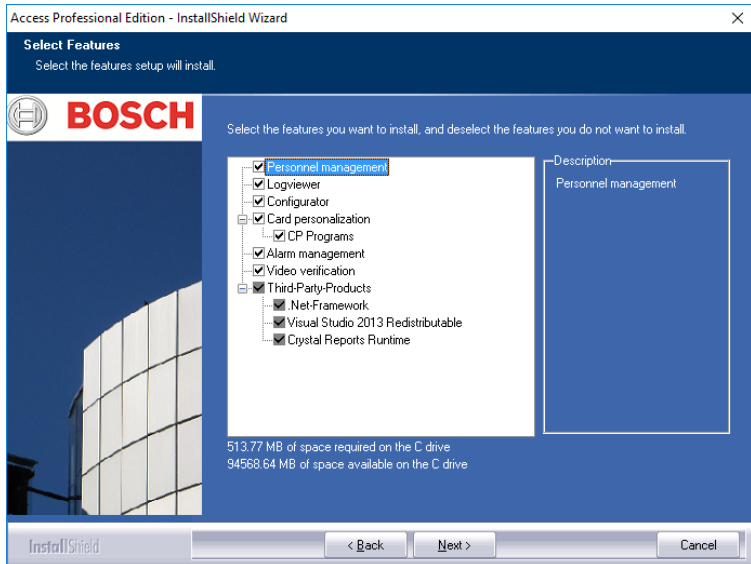
Card Personalization

Installs the Card Personalization application in the CP folder. Functions for card processing (e.g. importing pictures, printing receipts) can only be executed if the badge designer program is installed and running.

Notice!



It is recommended that you install all components on the server, so that in the case of network problems between Server and Clients there is always one computer from which these tasks can be performed.



Confirm your choice by clicking **Next**.

3.8.1 Client Installation

The component **Configurator** is deselected by default in the components for Client installation.



Figure 3.3:

The **Configurator** can however be installed on any client so that configuration changes do not have to be carried out on the Server.

Confirm your choice by clicking **Next**.

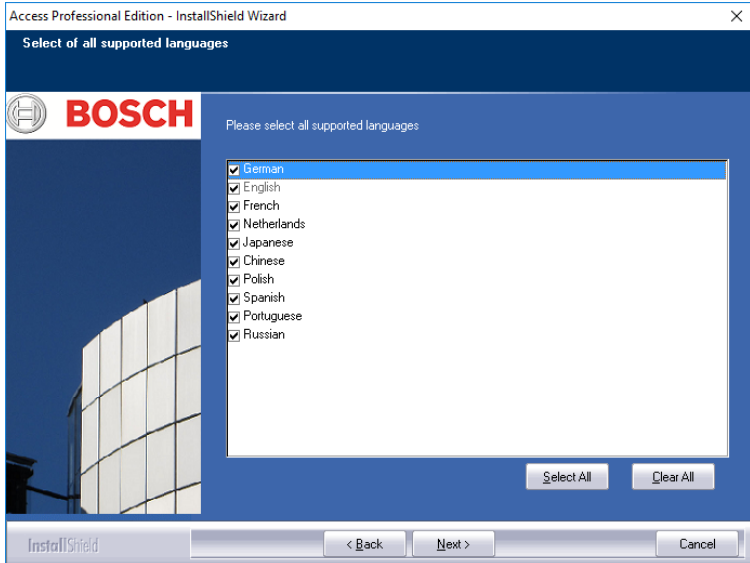


Notice!

If not yet existing, 3rd party products will be installed.

3.9 Selecting supported languages

Select from the list of available languages those which the user-interface should offer.



By default all available languages are selected, however individual languages can be excluded from your installation by clearing the appropriate check-box.



Notice!

English is always installed and the selection can not be cleared. This is to provide technical support access in cases where, for example, only East Asian languages have been installed.

Languages thus installed can be selected in the login dialogs of the applications in order to display the user-interface in the desired language.

To retrospectively change the language selection you make here, you must uninstall the Access PE software and then reinstall it. Click **Next** when you have made your choice of languages.

3.10 Default configuration language (server only)

Predefined configuration data (including public holidays) are available, in principle, in all of the languages listed here. Select the language in which these configuration data are to be loaded and maintained.

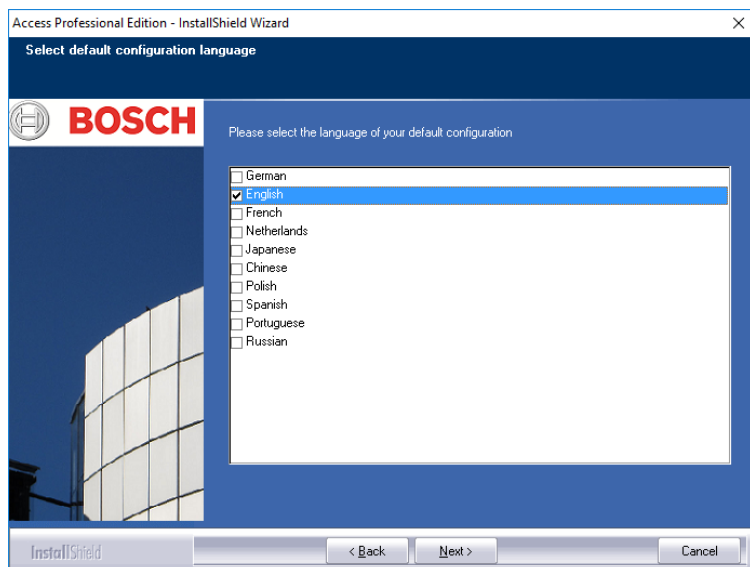


Figure 3.4:

The default configuration language is, like the installation language, the language of the operating system. Nevertheless any listed language can be selected. As only one default configuration language is possible the check-box for the default language will be cleared whenever a different language is selected.

3.11 Confirming Choices

The information entered up to now can be re-examined here and changed or confirmed as required.

Changes can be made via the **Back** button, which can recall the last and all previous dialog screens.

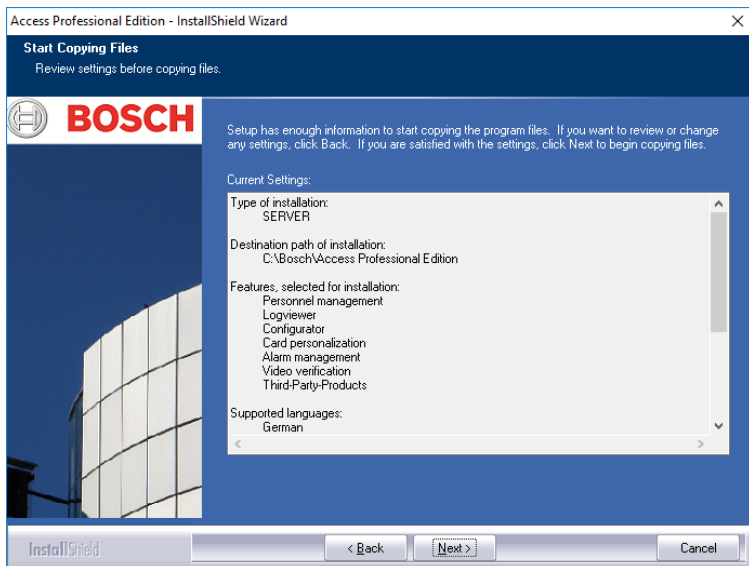
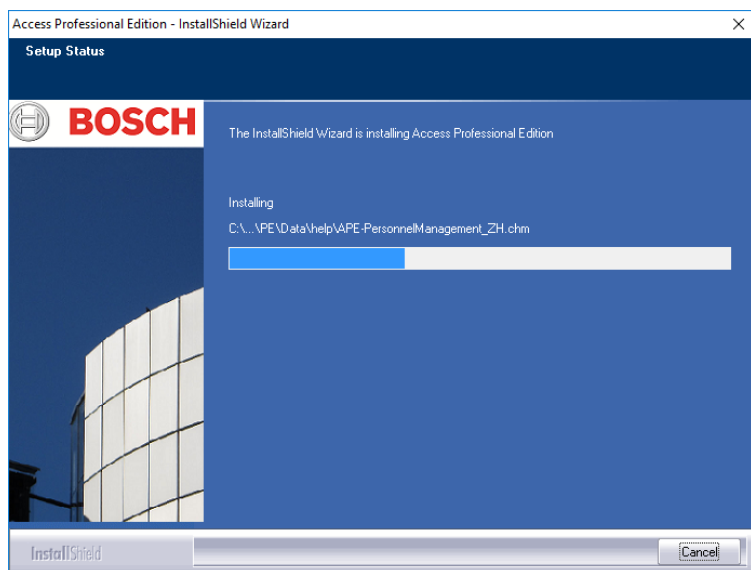


Figure 3.5:

In order to check all settings it may be necessary to scroll down the list. The illustration below shows a full list of choices. Confirm your choice by clicking **Next** if all settings are satisfactory.

3.12 Setup Status

The actual installation process begins now. Its status can be tracked via the progress bar displayed.



3.13 Installation completed

The installation is complete and the Install Shield Wizard can be closed. To do this click **Finish**.



Notice!

Check if the hard disk ...\\BOSCH\\Access Professional Edition \\PE\\Data is released under the shared name **APEData\$**. If necessary, have this set manually by your system Administrator.

4 Product usage

At the time of installation, default and sample data was also created for Access PE; this can help when you are setting up the system. This preinstalled data makes it possible for a user to log on and make changes.

Nevertheless, it is necessary to configure a few settings before you can use the system in the way and to the extent you require. The following sections describe the details regarding the definitive implementation.

4.1 Licensing

Once you have installed the Access PE software, you will only have limited access to the applications until you activate your licenses. Installation enables Access PE components to be used in demo mode. In addition to the standard components:

- Configurator
- Personnel Management
- Alarm Management
- Video Verification
- Log Viewer

this includes the release of the following facilities:

- 1 workstation
- 400 cards
- 2 AMCs
- 8 readers
- 2 cameras

In order to operate and use the software according to the scope of your order, you must activate the licenses you have purchased.

4.1.1 License packages and their content

License name		SAP no.	CTN
	Functionality provided		
Access PE – Basic License		F.01U.298.461	ASL-APE3P-BASE
	Enabling the standard Access PE components: Personnel Management, Configurator, Logviewer, Card personalization 1 workstation = one user logged on 16 readers 2000 cards		
Access PE – Extended License		F.01U.298.462	ASL-APE3P-BEXT
	Enabling the standard Access PE components: Personnel Management, Configurator, Logviewer, Card personalization 2 workstations = two users logged on at the same time 64 readers 10,000 cards		
You must order one of these two licenses; otherwise, you will not be able to use the following extension options.			
Access PE – Reader Expansion License		F.01U.298.463	ASL-APE3P-RDR

License name	SAP no.	CTN
	Functionality provided	
	16 additional readers You can also purchase several of these licenses up to the maximum of 128 readers.	
Access PE – Client Expansion License	F.01U.298.464	ASL-APE3P-CLI
	1 further workstation = one user logged on You can also purchase several of these licenses up to the maximum of 16 workstations.	
Access PE – Video Activation License	F.01U.298.465	ASL-APE3P-VIDB
	Enabling the video components. 16 channels	
Access PE – Video Expansion License	F.01U.298.466	ASL-APE3P-VIDE
	16 further channels You can also purchase several of these licenses up to the maximum of 128 cameras.	
Access PE – OLS Activation License	F.01U.298.467	ASL-APE3P-OLSB
	Enabling the offline locking system. 16 doors	
Access PE – OLS Expansion License	F.01U.298.468	ASL-APE3P-OLSE

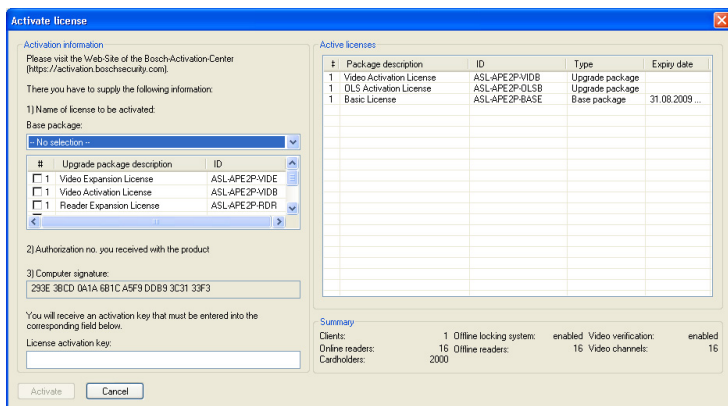
License name		SAP no.	CTN
	Functionality provided		
	1 further door You can also purchase several of these licenses.		
Access PE – Reader Limit up to 512 readers		F.01U.298.469	ASL-APE3P-RDRL
	Extends APE to a maximum number of 512 readers.		

4.1.2 Activating licenses

There are two steps to activating a license:

1. Activating the base package.
2. Activating all purchased extensions.

The base packages are ASL-APE2P-BASE and ASL-APE2P-BEXT - all other software components are extensions.



To activate the software licenses, proceed as follows:

- Start the Access PE Configurator.
- - Select **Configuration > License activation...** from the menu to open the activation dialog.
- In the activation dialog...
- - ... select the appropriate **base package** from the selection list under no. 1 the **first** time you activate the license and skip point **b.** in this list.
 - (the **second** time you activate the license, do not select a base package) ... select the extension and additional packages you have purchased by clicking the checkbox for the corresponding list entry from the list field (more than one selection is possible).

If you have bought several packages of the same type, click again in the corresponding field in the # column to activate write mode and adjust the number to the actual number of purchased licenses.

- Have the authorization no. (2 – Authorization no.) you have received.
- Copy or manually input the computer signature—shown in field 3 of the dialog—to a text file.
- If necessary, switch to a computer with Internet access and start the browser.
- Enter the following URL in the address bar:

<https://activation.boschsecurity.com>

If you do not have an access account for the Bosch License Activation Center, you have two options: Create a new account (recommended) or click the link to activate the new license without registering.

If you do so, the support personnel cannot recover your activations if they get lost.

If you create an account and register before activation, the License Manager records your activations. You can display this log at any time.

- Follow the instructions for retrieving the license activation key.
- Switch to the Access PE activation dialog and enter the activation key you retrieved from the License Manager in the bottom field.
- Complete your inputs by clicking **Activate**.

The activated software package appears in the right-hand list box (**Active licences**) and the activated components appear in the **Summary** area below the list box.

Notice!



If during use of the access control system the limits set by the licences are exceeded, then a license-violation message will appear every time the configurator is opened, and every time configuration data are saved.

4.2 Setting Server access rights

The Administrator manages the access rights in the domain. He has to assign the access rights for the folder **C:\BOSCH\Access Professional Edition\PE\Data** to the individual client users.



Notice!

The Administrator is responsible for the assignment of the access rights.

The standard protection settings under **Windows 10 x64 Professional, Windows 2008 R2, Windows 2008 Server, and Windows 7** have changed vis-à-vis previous versions such that Client applications can not access the folder **C:\BOSCH\Access Professional Edition\PE\Data** (= default installation path) even when that folder is shared. This issue exists for changed installation paths, too. Windows users who are logged into the workstations must have at least **write-access** to this folder. This access right for users and groups can be instated via the folder's **Properties** menu, **Security** tab.

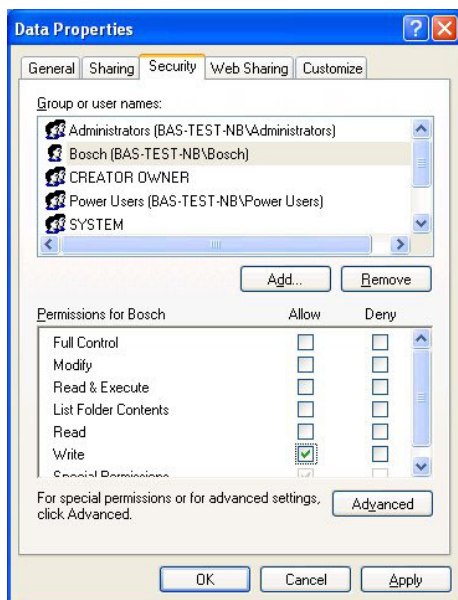


Figure 4.1: Write-access for workstation users

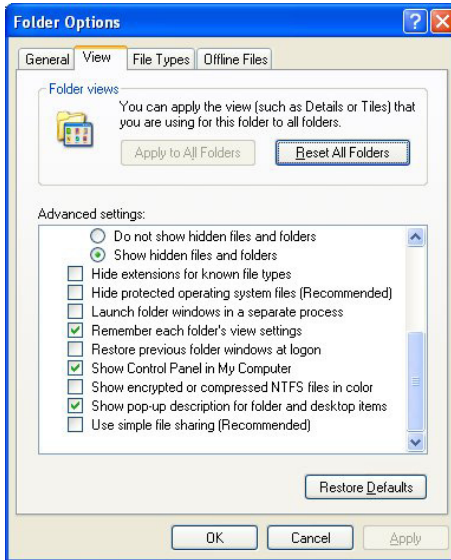
The System administrator can choose whether to assign these rights to each individual user or to all users within the domain.

Showing the Security tab

If your system is using standard settings it can happen that the Security tab is not displayed.

To change the standard settings invoke Folder Options as follows:

Start > Settings > Control Panel > Folder Options



On the View tab clear the check-box **Use simple file sharing (Recommended)** and confirm the changes with **Apply** and **OK**.

4.3 Changing the backdrop

The backdrop for the **Personnel Management** and **Video Verification** dialogs is set by the installation procedure to the BOSCH world map.

This backdrop can be replaced by any jpg file, for instance one showing a floor-plan.

To do this first open the file **Client.ini** in the directory **C:\BOSCH\Access Professional Edition\PE\Data\Cfg** with the text editor of your choice.

Change the entry **MapImage=BOSCH_WorldMap** (line 28) so that the path to the desired jpg file appears after the equals sign - e.g. **C:\BOSCH\MyImage.jpg**.



Notice!

These jpg backdrops are simple images and do not support control elements for user interaction.

4.4 Language settings

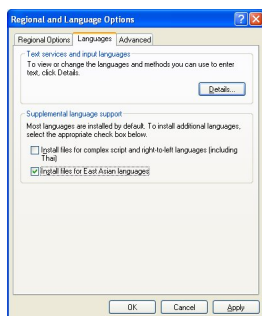
Ideally only those languages are used in Access PE which are compatible with the language of the operating system, e.g. under a German operating system only Western European languages.

If it should prove necessary to install languages in Access PE which do not correspond to the operating system, e.g. Chinese under a German operating system, then the following settings need to be made. We demonstrate the individual steps here using the example of Chinese.

Invoke the **Regional and Language Options** dialog under:
Start > Settings > Control Panel

Install additional languages

Open the **Languages** tab, and select in the **Supplemental language support** field the language group to which the desired language belongs.



In the case of Chinese the appropriate option is **Install files for East Asian languages**.

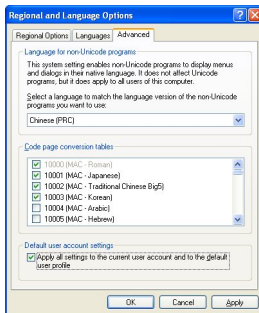


Notice!

During the installation you will be required to insert the installation CD for the operating system. Continue with this installation only if the operating system CD is available to you.

Click the **Advanced** tab and select from the upper combo-box **(Select a language to match the language version of the non-Unicode programs you want to use)** the appropriate entry. In our example this is Chinese (PRC).

In addition, check the box marked **Apply all settings to the current user account and the default user profile** at the lower edge of the dialog.



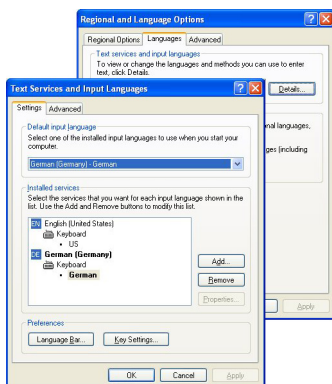
When these settings have been applied you will need to read and confirm various message boxes before being invited to restart the computer. Restart the computer.

After restarting log into an Access PE application and select, for example, Chinese as your language. All dialogs and menus should now contain the appropriate characters.

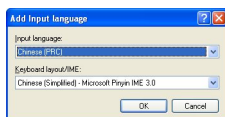
Keyboard settings

If the additional language is to be entered as well as read, then further steps are necessary in addition to the settings described above.

On the **Languages** tab in the field **Text services and input languages** click the button **Details...** This will open a further dialog containing keyboard settings.



In the list field **Installed Services** click **Add...** to install further keyboard layouts.



Choose from the combo-box **Input language** the desired language and, if available, the desired **keyboard layout** and click **OK**.






The list of keyboard layouts will be visible in the task bar alongside the icons representing running programs.



Change the keyboard layout by selecting the desired list entry.

4.5 Configuring the system to your needs

Before your system can enter production usage, it needs to be configured with personnel and location-specific data. The following applications are available for this purpose, and may be invoked via Start > Programs > Access Professional Edition. For further details, please refer to the online help within the individual applications

Icon	Application	Description
	Personnel Management	For creating and administering personnel data.
	Badge Designer	For designing and creating badge layouts.
	Configurator	For configuring system data.
	AMC IP Configuration	
	Card Personalization Configuration	

4.6 X-Protect Integration

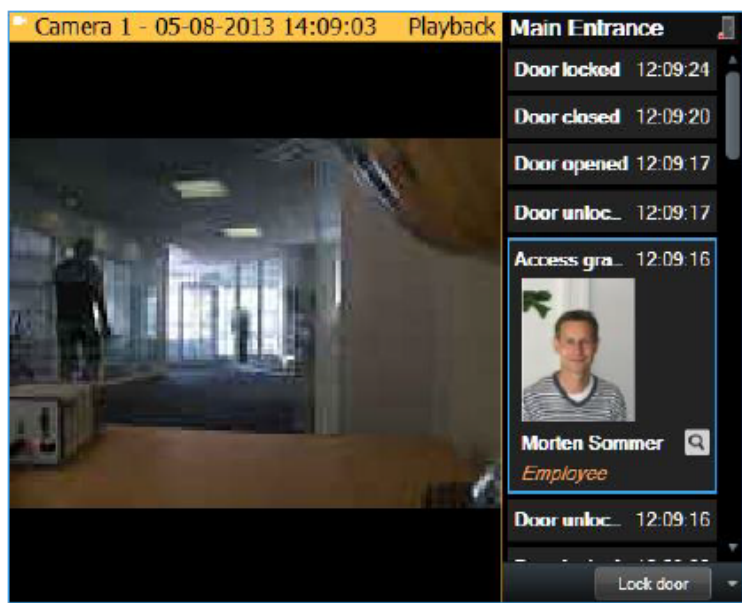
The Access PE can be interfaced with the video management system X-Protect from the company Milestone. Access control and video related features will be subject in the integration between products.

Following integration features can be set up between both products:

- Entrance monitoring with simultaneous live view and instant playback
- Video verification via the X-Protect dialogs incl. cardholder details
- Map Viewer with entrance control and device status
- Alarm management with integrated access alarm, maps and video verification
- History event log with correlated video footage and card holder details

Access control management will remain to be operated through Access PE in integrated set-up.

Video management and security management will handled through via the X-Protect system. In the integrated set-up the Map Viewer, video features and alarm list will be disabled in the Access PE.



5 Deinstallation - Reinstallation

If a reinstallation becomes necessary (e.g. due to a product update) the existing version should first be deinstalled. During the deinstallation process you will be invited to perform a database export. This export is to ensure that your entire data is saved. Your data is saved to your installation folder in the subfolder **\Savedata**. During the following reinstallation you will be invited before completion to perform a database import. This re-import restores all the data from your previous installation. If required by new product functionality, the Export/Import option also supports the simultaneous conversion of your data to a new format.

5.1 Backup and Restore

Backup

For an entire system Backup of all configuration and user data the directory **...\BOSCH\Access Professional Edition\PE\Data** must be save manually or by using a respective backup tool.

Restore

For a Restore the directory **...\BOSCH\Access Professional Edition\PE\Data** must be replaced by the previously saved directory with the same name.

5.2 Deinstallation



Notice!

Before beginning the deinstallation you should close all **Access PE applications**.

This includes the card personalization program and the Windows Service LAC-Service.

5.2.1 Windows Software

To deinstall Access PE open the Windows dialog box via **Start > Settings > Control Panel > Add or Remove programs.**

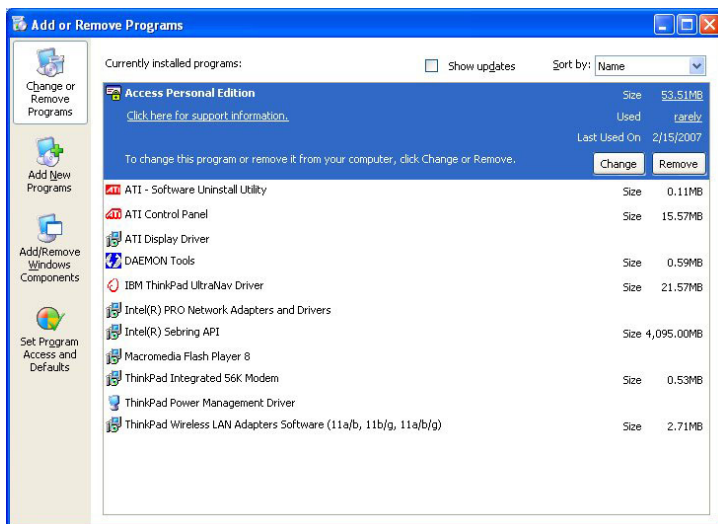


Figure 5.1: Deinstallation - Windows Software dialog

Select the list entry **Access Personal Edition** or **Access Professional Edition** and then click **Change or Remove**.

Whereas the **Remove** function after initializing (see *Initialization*, page 73) invites you to confirm your intention, the **Change** function first presents a dialog box with various options.

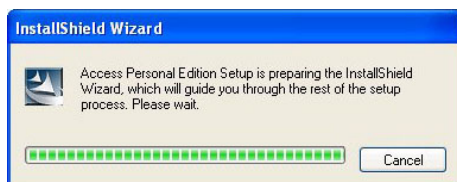
- Modify** You can add program components or remove existing ones.
- Repair** All program components will be re-installed.
- Remove** All program components will be removed.

**Notice!**

You can also execute an earlier or new **Setup.exe**. The application recognizes an existing installation and offers, like the **Change** option, the alternatives listed above.

5.2.2 Initialization

As with Installation the Deinstallation first initializes.



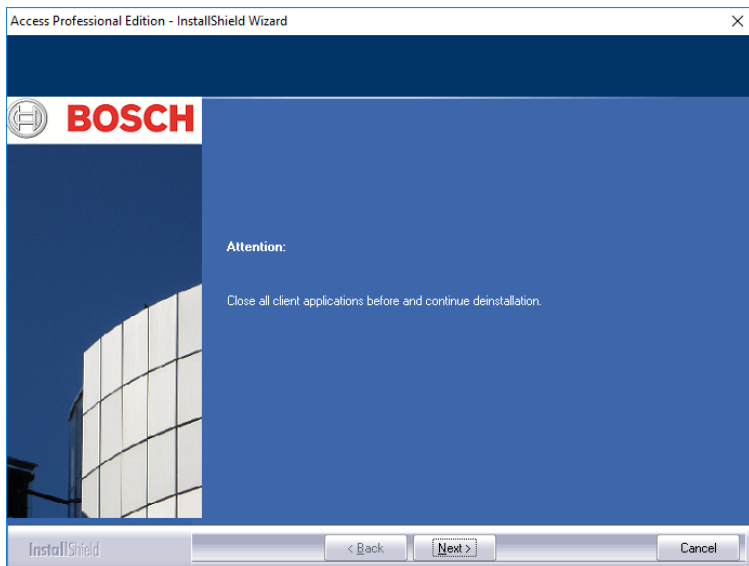
5.2.3 Confirming the Deinstallation

When the safety check appears answer **Yes** to the question for the deinstallation to proceed:

Do you want to completely remove the selected application and all of its features?

5.2.4 Close all programs

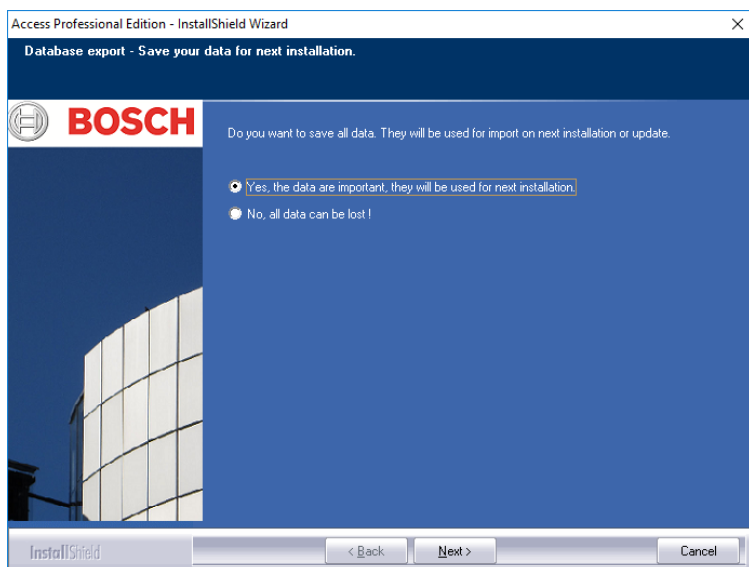
Before performing a data export in the next step please close all Access PE applications. Do not click **Next** until you have done this.



5.2.5 Performing an Export

Export saves your configuration and data to the folder **SaveData** and creates the following subdirectories in the process:

cfg_Save	Backup of the configuration data, containing devices and all system settings.
DB_Save	Backup of the database tables.
MsgLog_Save	Backup of the logs.
Pictures_Save	Backup of the pictures.

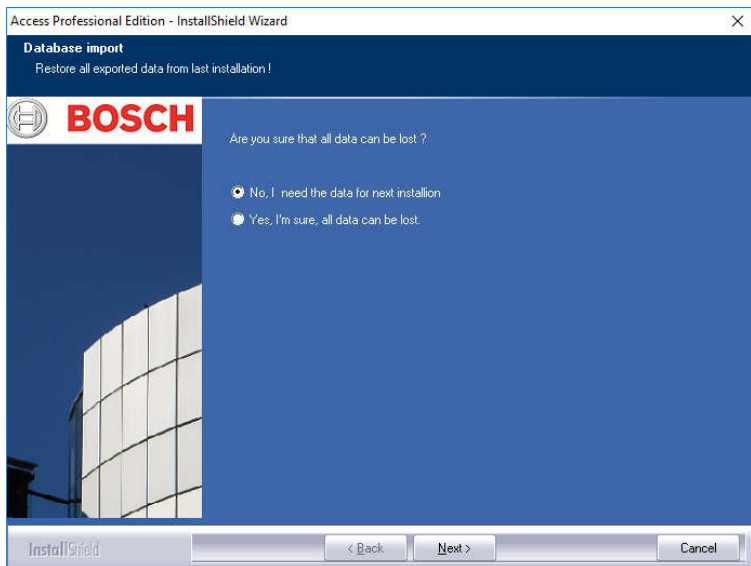


To perform the export, confirm the default action by clicking **Next**.

5.2.6 Declining the Export

You can forego the export by selecting the option **No, all data can be lost!**

In this case you will have to reconfirm the setting by selecting the option **Yes, I 'm sure, all data can be lost.** in the following dialog box. Alternatively, if you confirm the default setting, the data export will be started.



5.2.7 DbiTool

The Export function executes a separate application, also located in the bin directory of Access PE, and exports the selected tables. The default directory for containing exports is called **SaveData** and is created parallel to the software directories under C:\Program Files\BOSCH\Access Professional Edition\

Depending on the amount of data this process can take several minutes.

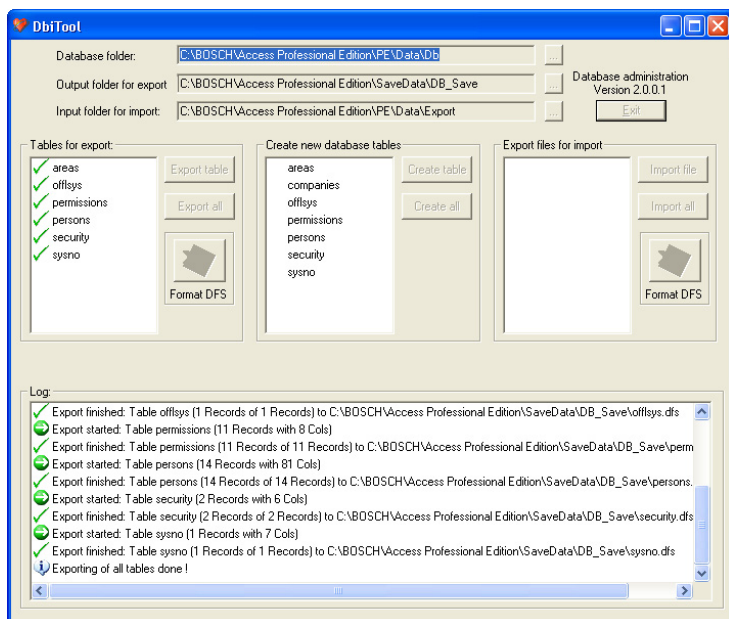


Figure 5.2: Deinstallation - Database-Export

The application is automatically closed upon completion of the export.

The tables contain the following:

- **areas** – Areas and the number of persons in these areas
- **permissions** – access permissions
- **persons** – personnel data with card and permissions information.
- **security** – user permissions
- **sysno** – internal administration table for system counter-data.

Open Applications:

If you have **Personnel Management**, **Configurator** or **Logviewer** open at this time, then a pop-up window will prompt you to close them.

Close the window and wait for a moment before clicking **OK**, to make sure that the application has been completely closed.

If this **OK** button is clicked while an application is running, then an error message is displayed and the deinstallation is aborted.

Notice!



This application can be started manually at any time via **Start >**

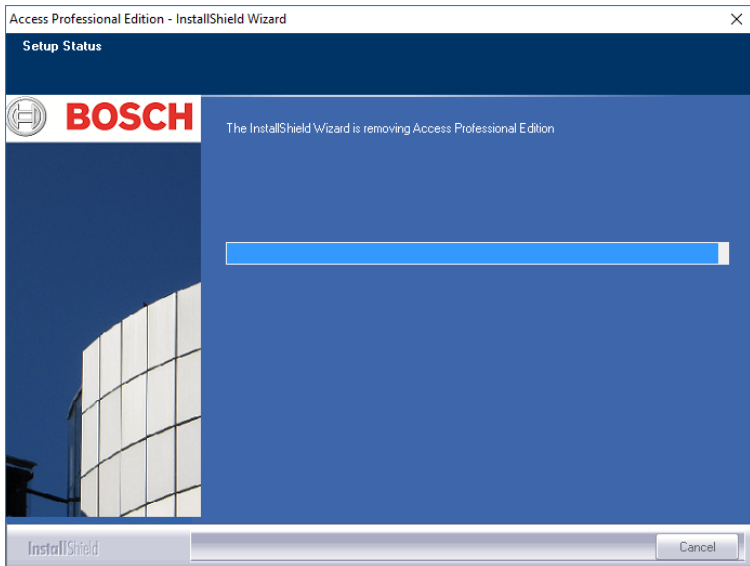
Programs > Access Professional Edition > Database

Management in order to perform a database export.

The default export format can be changed between DFS (default) and CSV using the toggle button. CSV is editable in e.g Excel.

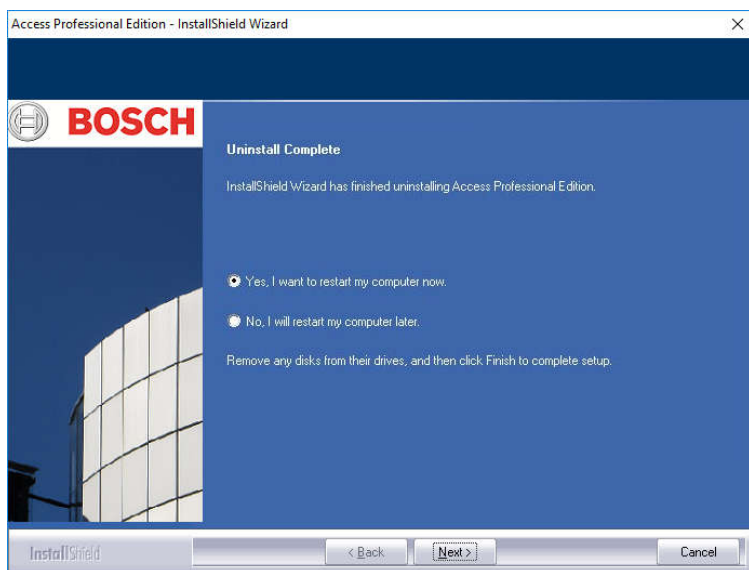
5.2.8 Setup Status

The window below shows the progress of the deinstallation.



5.2.9 Completion and Reboot

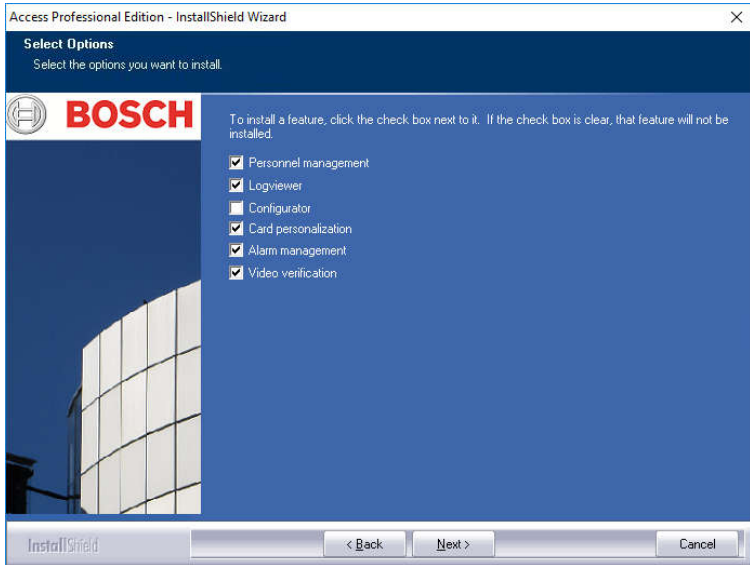
After the deinstallation has completed the Install Shield Wizard can be closed by clicking **Finish**.



A reboot is only necessary if you did not close all programs and services before the deinstallation.

5.3 Modify the software

If the original installation left out one or more applications, or if it is decided that certain applications on certain computers are no longer needed, then use the **Modify** option for subsequent installations and or deinstallations. A dialog appears listing those applications currently installed (box checked) or not installed.



Check the boxes of those applications which you wish to add to the installation.

**Notice!**

Please do **not** clear the check-boxes of any applications you wish to retain. This would lead to their being deinstalled.

5.4 Reinstallation/Update

Reinstallation can begin immediately after completion of the deinstallation process. This process is identical to a first installation –compare Section 3 Installation- and hence we will only briefly list the steps and their responses here:

- Execute the file **Access Professional Edition Setup.exe**
- Language Selection - **OK**
- Initialization of the Install Shield Wizard - **Next**

- License Agreement – Select the Option **I accept the terms of the license agreement.** - **Next**
- Customer Information - **Next**
- Choose the Installation Type - **Next**
- Choose the Installation Path - **Next**
- Choose the Components - **Next**
- Confirm the current settings - **Next**
- Progress bar
- Database Import – compare *Import*, page 82 and *DbiTool*, page 84
- Completing the Installation – **Finish.**

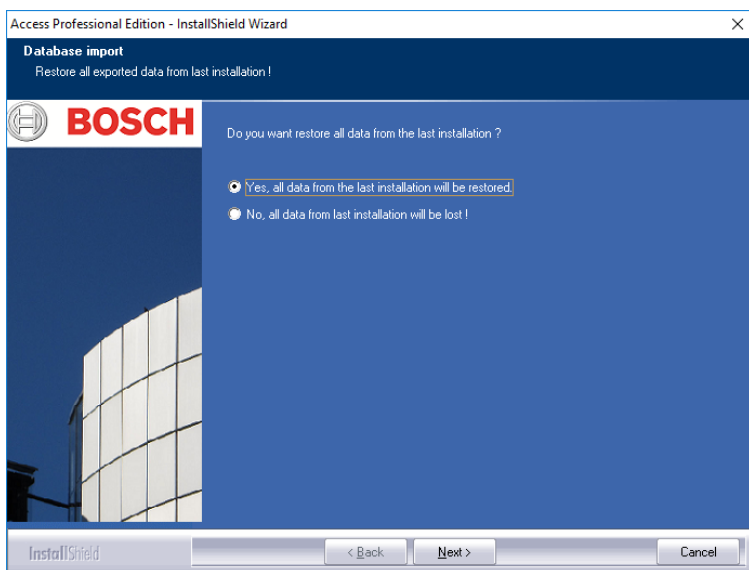
Notice!



It is possible to choose a different installation path for the reinstallation as was used in the previous installation. The backup files will still be found by the Import Tool enabling a data import to be performed.

5.4.1 Import

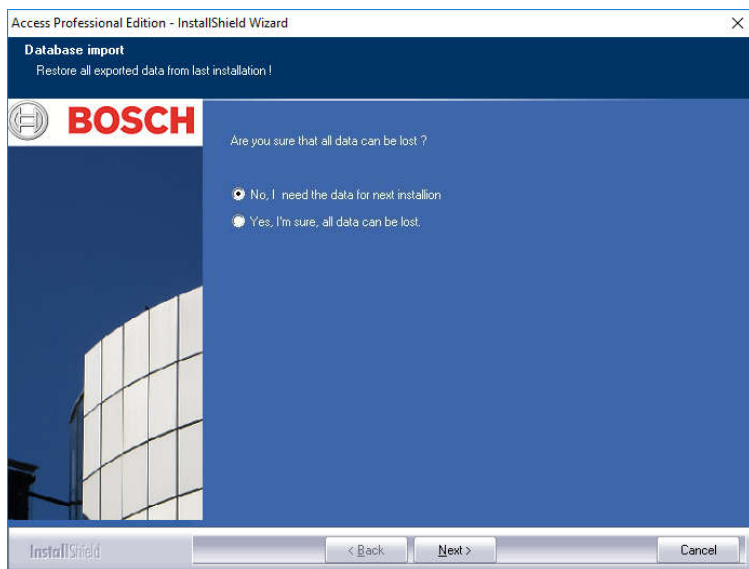
Before the Installation completion message appears you will be asked whether you wish to import saved data.



Declining the Import

If you do not wish to import the saved data, then select the option **No, all data from last installation will be lost!**

Once again a safety check follows which defaults to a data import. Only selecting the option **Yes, I 'm really sure. All data will be lost.** will prevent a data import.



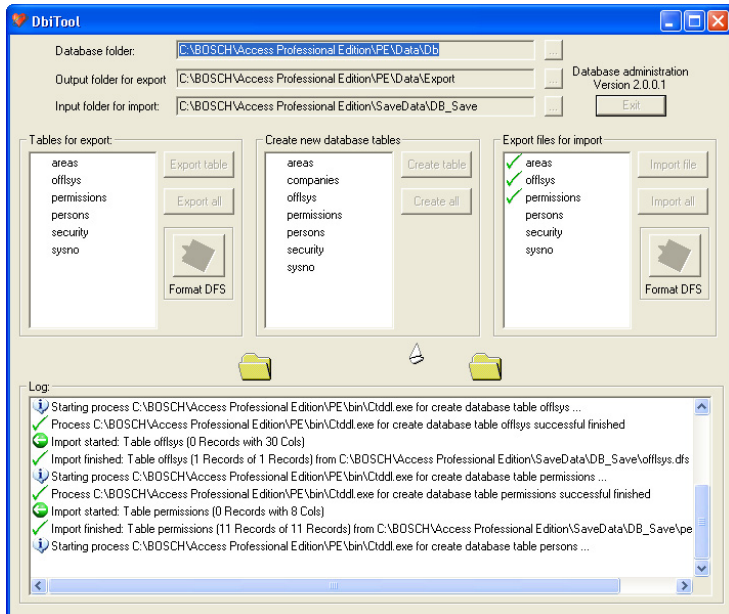
Notice!



The only way to redo a previously declined data import is manually via Start > Programs > Access Professional Edition > Database Management. Please note however that any data stored in the meantime will be overwritten by the import.

5.4.2 DbtTool

The import function calls a separate application, which also resides in Access PE's bin directory and imports selected tables. Depending on the amount of data this process can take some minutes.



5.4.3 Check the Configuration

After importing the data a message appears informing you that the Access PE Configurator is about to be started.

Now the configurator will be started. Please check your configuration and save it!

Click **OK** to start the Configurator and check the configuration data which have been loaded.



Caution!

If after an update a new AMC version is available all AMCs will be updated automatically.

During this update process no access is possible at any entrance.

5.4.4 Installation completed

After checking the configuration close the Configurator. At this point the installation can be completed by clicking **Finish** in the final installation screen.

6 User rights

The rights for users of Access PE applications (as well as users of the Configurator and the Logviewer) are assigned in Personnel Management on a special personnel data tab (= User Rights).

Please refer to the manual “Personnel Management” for detailed description.

7 UL 294 Requirements

Features not evaluated by UL:

- The Video Verification System
- Map Viewer and Alarm Management with Map and Video Verification
- X-Protect Integration
- Video Player
- Badge Designer
- The Delta 1200 Series
- Rosslare ARD-1200EM Series
- LAC Controllers
- LACi Controllers
- APC-AMC2-4R4CF Controllers
 - BG 900 reader interface protocol
 - L-BUS reader interface protocol
- Security System IDS - Arming/Disarming
- Elevator Use
- Texts
- Burglar Alarm Use

Features evaluated by UL:

- 26-bit Wiegand format readers
- AMC2 Controllers:
 - APC-AMC2-4WCF
 - API-AMC2-4WE
 - API-AMC2-8IOE
 - API-AMC2-16IOE
- APE-SW as supplementary monitoring equipment

The following Bosch model card readers were evaluated by UL for compatibility with the Bosch's APE-SW software system:

- LECTUS secure 1000 WI
- LECTUS secure 4000 WI
- LECTUS secure 5000 WI

Bosch Access Systems GmbH

Charlottenburger Allee 50

52068 Aachen

Germany

www.boschsecurity.com

© Bosch Access Systems GmbH, 2017