System overview

Access PE provides self contained access control for small and medium-sized companies. Its installation is extremely simple and fast. There is no need to install and administer a database system. The system is easy to use and enables a person with minimal training to create badges and administer access rights in a very short time. Specific event logging and reporting allows you to trace who was when and where on your company’s grounds.

You can choose your readers and cards from the same bundle of devices, which are supported by Bosch’s medium to large scale BIS/ACE Access Engine systems, thereby safeguarding your investment for future extensions. Card personalization is included in Access PE, providing you with the means to design your badges, to perform image acquisition with USB-cameras and to use most commercially available Card Printers.

In addition to given standardized door models it is possible to use extended I/O functionality to exert influence on diverse conditions while monitoring inputs or setting outputs.

- Software for access control and security management utilizing the innovative Access Modular Controller family
- Cardholder administration of up to 10,000 records in the database
- Graphical location map with device control via both maps and device tree
- Alarm management with details via alarm list and animated GIFs on interactive location maps
- Video verification, video alarm verification, and video monitoring of live and recorded events

The Access PE offers a map viewer, which provides a graphical representation of the premises with device control directly from the map. (e.g., doors opened or cameras activated) Alarm events are queued in a list and are easily located with the support of navigation maps and animated icons.

The Access PE can be extended with two modules. A Video System on the one side and an Offline Locking System [selected markets, only] on the other side. The Offline Locking System (OLS) is integrated into the Access PE – so a person can use the same card for both systems.

Through integrated video functionality and using the wide range of Bosch IP devices an operator for example can do a video verification by comparing live streams with the database image of the person requesting for access.

Access PE runs on a standard PC with a Windows operating system:
- Windows 2008 Server
- Windows 7
- Windows 10 x64 Pro

This can be a single workstation computer or a client-server system with a central server and remote workstations.
Parts included
- Access PE ISO image
- Access Professional Edition Software
- Card Personalization Software
- Documentation


Functions

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Server with Access PE Software</td>
</tr>
<tr>
<td>2</td>
<td>Workstations</td>
</tr>
<tr>
<td>3</td>
<td>Printer</td>
</tr>
<tr>
<td>4</td>
<td>AMC2 – access controller</td>
</tr>
<tr>
<td>5</td>
<td>Reader</td>
</tr>
<tr>
<td>6</td>
<td>Door strikes</td>
</tr>
</tbody>
</table>

Access Control
The Access PE system, along with AMC access controllers, offers the following features:
- A wide range of pre-defined and self-explaining door models allow fast and easy hardware configuration through one-click selection of the door type, such as standard door, turnstile, elevator, with entrance / exit reader, and so on.
- Real-time activation of reader and cardholder configurations in the access controllers.
- Time zone support for AMC - allows installations across different time zones.
- Time schedules for time-based access permission defined per weekday including the definition of extra days, holidays, etc..
- Time schedules for automatic activation/deactivation of cardholder settings, such as access rules, pin codes and so on.
- Time schedules for automatic activation/deactivation of system settings, such as setting door status to permanent open from 9 a.m. to 5 p.m.
- Online swipe – verification via database image automatically provided through access request.
- Three PIN code types can be used for persons:
  - Verification PIN with alarm code feature
  - Identification PIN – substitutes a card
  - IDS-PIN to arm special areas
- Choose between the following access modes
  - Card only
  - Card with PIN (Verification PIN)
  - PIN or Card (Identification PIN)
- Temporary activation/blocking of cardholders, either manually or time controlled.
- Definable input fields for cardholder information.
- Anti-Passback
- Card personalization for importing cardholder images and creating your individual corporate badge designs printable on standard card printers.
- Up to three cards can be assigned to a person.
- Creation of an acknowledgment of receipt together with the print of the picture and the badge design.
- Creation of logical areas, which could be single rooms, groups of rooms, whole floors or parking lots, where access control points could be assigned to.
- Full archival and restoral of system data.
- Using the Bosch controller family AMC digital and monitored I/Os for additional control and monitoring functions or easy intrusion features.
- Supported languages:
  - English
  - French
  - German
  - Dutch
  - Japanese
  - Polish
  - Simplified Chinese
  - Russian
  - Spanish
  - Portuguese (Brazil)
- Detailed event log for recording access events.
- Integrated filter- and reporting features.
- Export into standard CSV-format for further processing.
- Comprehensive online help
Alarm management
The Access PE alarm list shows all incoming alarms to the operator. Alarms can be accepted by the operator. In case of an alarm, the location map will be displayed. The icon of the device that triggered the alarm is highlighted by animation.

Optional features
The optional features listed below can be added to meet specific customer requirements. They are usable with the Access PE base system, but require additional licenses.

Video

Entrances from special interest can be equipped with additional video devices providing different options. The integrated video functionality in Access PE allows to assign up to five cameras to a door, each to be used as an ID or surveillance camera. With video verification the security level is raised by comparing the person’s database image with a live stream while the environment can be observed for tail-gating or possible threats.

Any violation, such as door open time exceeds, will provide alarm images for further investigation. Storage of those alarm images and retrieval of alarm archives using Bosch video storage systems are supported as well.

In the case of alarm events, video cameras provide live images to the operator, ensuring a proper response. Image streams can be recorded for later analysis or used as evidence. The recorded streams are linked in the logbook for fast and accurate retrieval. Additional functionalities are:

- Alarm verification – providing live images caused through typical alarms around a door.
- Video playback from archives reporting on access requests or alarm situation with minimum search time.
- Live video can be selected from single camera or 2x2 matrix (quad mode).

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Cameras</td>
</tr>
<tr>
<td>8</td>
<td>DVR or encoder</td>
</tr>
</tbody>
</table>
Offline Locking System (OLS) (selected markets only)

The OLS uses some components of the Online System. In the picture above the part with the grey background shows the devices which are used for both systems. On the left hand side there are devices of the Online-System and on the right devices of the OLS.

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Workstation</td>
</tr>
<tr>
<td>2</td>
<td>Server with configuration applications and the database</td>
</tr>
<tr>
<td>3</td>
<td>Access control reader with write module</td>
</tr>
<tr>
<td>4</td>
<td>Card – can be used for both systems</td>
</tr>
<tr>
<td>5</td>
<td>AMC2 4R4 – access controller</td>
</tr>
<tr>
<td>6</td>
<td>Access control reader</td>
</tr>
<tr>
<td>7</td>
<td>Dialog reader to read and write cards</td>
</tr>
<tr>
<td>8</td>
<td>OLS terminal</td>
</tr>
</tbody>
</table>

With the OLS it is possible to integrate a large quantity of rooms which are far away or not so security relevant in the access control system. All data are stored in the same database and the persons need only one card for both – the Online- and the Offline-System. Special reader with write-module (3), which are usually used for access control in the Online System, renew data and validity dates on the cards.

Notice

Writing OLS data onto cards can only be used with an AMC2 4R4. Systems with Wiegand-interface-controller (AMC 4W) have to be expanded with at least one AMC2 4R4 and the corresponded reader.

Milestone XProtect integration

The Access PE can be interfaced with the video management system XProtect 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 XProtect dialogs incl. cardholder details
- Mapviewer 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 XProtect system. In integrated set-up the mapviewer, video features and alarm list will be disabled in the Access PE.

The Milestone XProtect Plugin download is available in the Bosch Security Systems online product catalog.

SDK for operational functions

The Access Professional Edition SDK for operational functions is a reusable kit that can be used by developers to integrate access control functionalities into their applications. The SDK is based on the Access Professional Edition version 3.5 or later. SDK integration of access control on 3rd party applications enables the following functionalities:

1. Read all person and card data
2. Create, update and delete a person
3. Assign and delete card for the specified person
4. Read all configured entrances
5. Assign authorization of an entrance to a person/groups
6. Read any entry and existing transaction of a person
7. Event trigger for entries and transactions
8. Read all entries and existing transactions filtered by time frame
9. Direct control of the access to doors
10. Read door and operation state of configured entries
11. Event trigger for door or operation state changes of entrances

### Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. number of active cardholders</td>
<td>10,000</td>
</tr>
<tr>
<td>Max. cards per person</td>
<td>3</td>
</tr>
<tr>
<td>PIN codes</td>
<td>4 to 8 digits</td>
</tr>
<tr>
<td>PIN code types</td>
<td>Verification PIN, Identification PIN, Arming PIN, Door PIN</td>
</tr>
<tr>
<td>Access modes</td>
<td>Card only, Card with PIN (Verification PIN), PIN or Card (Identification PIN)</td>
</tr>
<tr>
<td>Card enrollment</td>
<td>USB enrollment devices, AMC connected readers</td>
</tr>
<tr>
<td>Max. number of time profiles</td>
<td>255</td>
</tr>
<tr>
<td>Max. number of access authorizations</td>
<td>255</td>
</tr>
<tr>
<td>Max. number of area/time authorizations</td>
<td>255</td>
</tr>
<tr>
<td>Max. number of access authorizations groups</td>
<td>255</td>
</tr>
<tr>
<td>Max. number of readers</td>
<td>512</td>
</tr>
<tr>
<td>Max. number of remote workstations</td>
<td>16</td>
</tr>
<tr>
<td>Max. number of I/O extension boards per AMC</td>
<td>3</td>
</tr>
</tbody>
</table>

### Mapviewer

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. number of maps</td>
<td>128</td>
</tr>
<tr>
<td>Max. number of device per maps</td>
<td>64</td>
</tr>
<tr>
<td>Max. map links per map</td>
<td>64</td>
</tr>
<tr>
<td>Max. map size</td>
<td>2 MB</td>
</tr>
<tr>
<td>Map viewer formats</td>
<td>JPEG, BMP, PNG</td>
</tr>
</tbody>
</table>

### Video

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. number of cameras</td>
<td>128</td>
</tr>
<tr>
<td>Identification cameras per entrance</td>
<td>1</td>
</tr>
</tbody>
</table>

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### Ordering information

**License for basic package**

- 1 Client, 16 Readers, 2,000 Cards
- Order number **ASL-APE3P-BASE**

**License for extended basic package**

- 2 Clients, 64 Readers, 10,000 Cards
- Order number **ASL-APE3P-BEXT**

**License for Reader Expansion**

- 16 additional readers.
- Order number **ASL-APE3P-RDR**

**License for user/client expansion**

- One additional client
- Order number **ASL-APE3P-CLI**

**License for video basic package**

- Enables video with 16 channels
- Order number **ASL-APE3P-VIDB**

**License for video expansion**

- 16 additional channels.
- Order number **ASL-APE3P-VIDE**

**License Pegasys offline basic package**

- Enables Offline Locking System (OLS) with 16 doors
- Order number **ASL-APE3P-OLSB**

**License Pegasys offline extension**

- One additional door for the Offline Locking System (OLS).
- Order number **ASL-APE3P-OLSE**

**License for reader limit up to 512**

- Extends APE to a maximum number of 512 readers.
- Order number **ASL-APE3P-RDRL**

**License for Milestone XProtect plugin**

- Video management and security management handled through the Milestone XProtect system, with Entrance monitoring, Video verification, Mapviewer, and Alarm management.
- Order number **ASL-APE3P-XPRO**

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**Surveillance cameras per entrance**

- Max. number of entrances: 256
- Time models: 15
- Periods/time model: 4
- Special days: 10
License for software development kit
Software Development Kit (SDK) to connect APE, for example, to a Time & Attendance system: to import cardholder master records, and to export access control events. The SDK, with its command set, has its own documentation.
Order number ASL-APE3P-API