AEOS and wireless offline locks via OSS-SO

Integration Insights

The Open Security Standard – Standard Offline (OSS-SO) enables offline locks to be integrated into access control platforms all using the same standard. This offers independence when choosing a lock supplier, as different brands can be used together with AEOS.

Integrations

OSS-SO integrates offline locks via network on card functionality, the offline locks connect with AEOS via access cards. OSS-SO describes how AEOS should write authorisations on the cards, and how the offline locks should read this information. Authorisations are assigned in the AEOS application and written on the access cards when they're presented to a Nedap card reader, which functions as an updater. Events from offline locks are written on the cards and read when the access card is presented at the updater again, then they're transferred to AEOS.

Offline locks compatible with AEOS
- Assa Abloy | Offline cylinders C900 EURO
- Uhlmann & Zacher | Clex public
- Deister Electronic | doorLoxx
- DOM group | DOM connect

To see which companies work with the OSS Association, please visit: **www.oss-association.com**

Functionality

Integrating wireless offline locks with AEOS enables the following functionalities:
- Give authorisations and update them through the AEOS updater.
- Track events at offline locks (they're sent through the AEOS updater).
- Set the validity time for authorisations.
- Use blacklist

Functionality overview

	Included in OSS-SO	Included in AEOS
Limit validity of offline authorisations	✔	✔
Toggle mode: first card presentation opens door, second closes door	✔	✔
Extend unlock for specific people	✔	✔

Events shown in AEOS application

	Included in OSS-SO	Included in AEOS
Update card succeeded	✔	✔
Update card failed	✔	✔
Card initialisation succeeded	✔	✔
Card initialisation failed	✔	✔
Authorised access card	✔	✔
Unauthorised access card	✔	✔
Low battery status	✔	✔
Battery replaced	✔	✔
Jammed mechanics in the lock	✔	✔
System events, e.g. lock restarted	✔	✔
Failure to unlock the lock	✔	✔
Detected tamper on lock	✔	✔
Blacklist events	✔	✔

Considerations & limitations

AEOS controllers can handle a maximum of:	8 updaters
	32 access points (including updaters)
AEOS can handle a maximum of:	Unlimited daytime schedules
	4 daytime periods per schedule
	4 intervals per day schedule
	Access cards can handle a maximum of 15 daytime schedules.
OSS-SO can handle a maximum of:	65.535 sites or areas
	65.535 unique door IDs
	65.535 entrance group IDs
	255 events stored on card
	There are no limits to the number of doors you can add to an entrance group.
Storage on cards	The number of time schedules, authorisations and events that can be saved on the card depends on the memory it has available. For more details about memory specifications, please contact the Nedap support desk.
	For each updater, you can configure the type of events that will be read on the access card.
	An AEOS updater can write authorisations on cards for one site only.
Authorisation management	Authorisations can only be managed from the AEOS application.
Supported card types	Mifare DESFire: since AEOS 3.1.2; cards must be initialised by the card supplier.
	Mifare Classic: since AEOS 3.1.2; AEOS supports the initialisation process.
	Legic Advant : since AEOS 3.1.5; cards must be initialised by the card supplier.