Document Details

V1.0 (20211008)
(V1.0 first published 20230523)

Firmware

Firmware version can be verified on Verkada Command command.verkada.com.
Introduction

Assa Abloy Aperio Integration into Verkada System.
For all Assa Abloy documentation including lock installation and datasheets, sign into Assa’s content portal.

Background

Assa Abloy’s Aperio technology is a cross brand wireless communication protocol centered around their AH series hub. Please contact your Assa Abloy representative to find out which wireless lock under the Aperio umbrella works for your use case.

Verkada specifically integrates with the AH30 hub which communicates with the AC41/AC42 via the RS-485 module in the AUX cassette/terminal block. In order for an AC41/AC42 to be utilized for the Assa Integration, it must be set to Assa mode. This is done during the commissioning process. While in Assa Abloy mode, the AC41/AC42 cannot control traditional wired doors. The AC41/AC42 can control up to 16 wireless locks.

Integration Process

The integration process should be split into two phases.
1. Assa Installation and Configuration.
   a. Installation of locks.
   b. Wiring AH30 into Verkada AUX for power.
   c. Linking of hubs and locks.
2. Verkada Command Setup
   a. Claim controller and set as Assa mode
   b. Add doors with lock’s EAC address

Phase one of the integration is totally independent to Verkada, besides using the controllers RS-485 to power the AH30.
Introduction

Common use cases

Many schools, universities, medical facilities and multi-tenant units use wireless locks to secure doors that are operated with low frequency

Schools/Campuses
Classroom doors, Offices, Break rooms

Universities/Medical Facilities
Dorm Rooms, Lecture Halls, Offices, Laboratories

In multi-tenant
Officeses, Supply closets

These verticals use wireless locks because they do not require expensive wiring to be run through walls and allow much more flexibility. They are also much more cost effective than wired doors. This integration allows us to work with existing customers with Aperio enabled wireless locks.

Important notes

Tips to help you do your best:

- Read all of the Assa Abloy documentation for the lock series being installed.
- **Verkada support will NOT troubleshoot Assa Abloy hardware!**
- Wireless locks are wireless products so wireless range is always a concern, please ensure that the AH30 is placed within range of all the connected locks.
Installation

Installation Order of Operation

1. Install and configure the AH30
2. Install and configure the wireless lock
3. Configure the AC41/AC42

Wiring AH30 to the AC41/AC42

<table>
<thead>
<tr>
<th>AUX RS-485</th>
<th>AH30</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>↔</td>
</tr>
<tr>
<td>-</td>
<td>↔</td>
</tr>
<tr>
<td>A</td>
<td>↔</td>
</tr>
<tr>
<td>B</td>
<td>↔</td>
</tr>
</tbody>
</table>

This step is done first simply to provide power to the AH30. No Command configuration is required until after the locks and hub are successfully connected.

Post Aperio Lock setup

Once you have successfully linked your locks to your hub, you will need to write down all the EAC addresses. These will be used when adding the locks as doors in Command.
Installation

Command Configuration

1. Add the AC41/42 to Command and select Assa Abloy

2. Once the AC41/AC42 is added and in Assa Abloy mode, navigate to the controller and click add door. The window to the right will pop up. Select the type of lock and the EAC address (which you will get from the Aperio setup)
Installation

**Command Configuration Cont.**

A successful connection will result in an "online" status for the lock.

The settings page of the AC41/AC42 will also signal the health of the connection.

---

**Assa Abloy Devices**

**Door 1**
- Connected
- Device Type: Sargent IN100
- EAC Address: 1
- MAC Address: 00:17:7a:01:02:15:b9:4a
- Platform Version: 3
- Battery: **NORMAL**

**Aperio Hub**
- Connected
- Device Type: Aperio Hub
- EAC Address: 1
- RS485 Slot: 4
- MAC Address: 00:12:4b:00:2a:05:98:bd
- Protocol Version: 2.7
Troubleshooting Guidelines

1. Verify that your ACU is in Assa Abloy mode - if you forgot to set it to Assa Abloy mode, you will need to decommission it and re-add it.
2. Verify that the Assa Abloy Locks and AH30s have been successfully paired.
3. Ensure that the addresses for each Assa Abloy lock were successfully configured. Additionally, ensure that the addresses provided when setting up the door in command are correct.

<table>
<thead>
<tr>
<th>AUX RS-485</th>
<th>AH30</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>8-24VDC</td>
</tr>
<tr>
<td>-</td>
<td>GND</td>
</tr>
<tr>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>
Appendix

Support

Thank you for purchasing this Verkada product. If for any reason things don’t work right, or you need assistance, please contact us immediately.

verkada.com/support
Sincerely, The Verkada Team