ASSA ABLOY Aperio[™] Configuration Guide for Brivo Access

The integration of Aperio Wireless Technology by Assa Abloy into Brivo Access introduces a simple and secure solution for access control. Integrating with Aperio has allowed Brivo to introduce a wide variety of quality locks by various respected Assa Abloy Brands.



orivo.

Introduction

This installation guide is written for certified Brivo and Assa Abloy Installers. There is fundamental system information that you as an installer or system programmer will need to know prior to configuring this installation. This guide will take you through the necessary steps to connect and configure the Aperio Hubs and locks with Brivo Access, through either the ACS300-E or ACS6000-E Control Panels.

This guide assumes the proper installation and linking of Aperio Locks to Aperio Hubs. Although pointing to some best practices, this guide should not be referred to as a replacement for any Assa Abloy guides. This guide will touch on some configuration of the Aperio Hubs and Aperio Locks as it relates to the integration to Brivo Access. For other Hub and Lock configuration needs, please refer to the Assa Abloy guide associated with the particular Hub and/or Lock that you are installing or configuring.

Supported Locks

Corbin Russwin and Sargent IN100

Constructed with ANSI/BHMA Grade 1 hardware, the IN100 lock offers high-level security with flexible access control, all at an affordable price. The IN100 lock with is available in cylindrical, mortise, and exit device configurations.

Adams Rite G100

The Adams Rite G100 wireless digital lock makes extending access control to all-glass doors easy and affordable while maintaining aesthetics. This surface-mounted digital glass door locking solution provides greater flexibility and control for interior office space areas without the need to make costly modifications.

HES K100 / KS100 Cabinet Locks

The flexible integrated solution for extending access control to secure locker drawers and doors. The HES K100 cabinet lock comes standard with locked state & tamper monitoring, optional mechanical key override and over 150 lbs of holding force.

Designed to install easily on most swing handle server cabinet doors, the HES KS100 comes standard with locked state monitoring and utilizes an SFIC (Small Format Interchangeable Core) mechanical key override. An optional extended DPS monitoring sensor can be connected to ensure that the cabinet is closed, locked and secure.



Supported Features

Privacy Mode

Privacy Mode allows the user to place the door in a "Do Not Disturb" state. If the lock supports Privacy Mode, by either pushing a button on the secure side of the door, or on some models by simply engaging the deadbolt, the lock will no longer open for Users that are not in a group with Privacy Override enabled. Privacy Mode will remain active until the door is either opened from the inside, or valid access is gained by someone who has Privacy Override Privileges. Privacy Override can also be canceled by pushing the Privacy Override button again, or by disengaging the deadbolt. The Default setting is No. Some Assa Abloy Locks do not have Privacy Mode capabilities. Privacy Mode also will not affect the key override functionality of a lock.

Credential Caching

Assa Abloy Aperio locks have the ability to cache up to 1024 credentials (some capabilities and limits do vary). The cache expiration time limit and caching size are configurable through Brivo Access. Caching is when the lock will remember each credential (up to the limit) that had gained valid access to the lock for the predetermined period of time. Each time that a valid user gains access to the lock, the expiration timer for that credential will reset. When a User's access is removed from the lock, Brivo Access will send a command to remove the cached credential from the lock. **Note**: The Hub and Lock must be online for the cache removal to take place. In the event that the Lock or Hub are not online at the time access is removed, the lock will require the credential to either be presented while the lock is online, or the cache expiration for that particular credential will have to occur.

Characteristics									Monitoring				
Make	Model	Lock Type	Purpose	Hub	# Doors (Per Panel)	Cards Support	Keypad	Remote Entry	Dead- bolt Monitor	Locked State Monitor	DPS	Privacy Mode	Low Battery
Adams Rite	G100	2*	B*	AH40	30	iClass SE	No	Yes	No	No	Yes	No	Yes
Corbin Russwin	IN100	3*	C*	AH40	30	Multi ClassSE	No	Yes	No	No	Yes	Yes	Yes
HES	K100	4*	D*	AH40	30	Multi ClassSE	No	Yes	No	No	Yes	No	Yes
HES	KS100	5*	E*	AH40	30	Multi ClassSE	No	Yes	No	Yes	Yes	No	Yes
Sargent	IN100	6*	F*	AH40	30	Multi ClassSE	No	Yes	No	No	Yes	Yes	Yes

- 1 Deadlatch, Deadlock
- 2 Deadlock/Boltlock
- 3 Cylindrical, Mortise, and Exit
- 4 Cabinet Latch
- 5 Cam Latch
- 6 Cylindrical, Mortise, and Exit

- A Storefront, Narrow Stile, Deadlatch, or Deadlock
- B Single Frameless Glass Door, Deadlock
- C Std Commercial Entry and Std Stile or Flat Panel Rim Exit
- D Cabinet, Locker, and Drawer
- E Server Rack (Review Compatibility Chart)
- F Std Commercial Entry and Std Stile or Flat Panel Rim Exit



System Requirements

Aperio Hub Specifications (AH-40)				
Wireless Range Up to 50' between Hub and Lock using internal antenna perpendicular to mounting surface.				
	Up to 25' omni-directional between Hub and Lock when using the optional external antenna, AA-EXT-ANT			
Voltage	8-24VDC or PoE IEEE 802.3af			
Max Standby Current	80mA @ 12VDC and 250mA @ 24VDC			
Operating Temperature	41 to 95 degrees Fahrenheit (5 to 35 degrees Celsius)			

System Specifications	
Controller Interface	IP, Connects via ACS6000/ACS300 Admin Port
Power	Brivo ACS300 12VDC @ 1.5A or PoE+ IEEE 802.3at - Brivo ACS6000 12VDC @1.5A - AH-40 Aperio Hub 8-24VDC or PoE IEEE 802.3af
PC Requirements	For APA Software and Radio Dongle: 32-bit or 64-bit versions of Windows 7, Windows 8, Windows 8.1, or Windows 10 USB 2.0 interface required
Application Requirements	All Brivo Access accounts have ASSA ABLOY Aperio enabled. No extra licenses required.

Required Components

Assa Abloy Manuals

Aperio Programming Application Manual

Aperio Hub AH40 Installation Instructions

Aperio Online Mechanical Installation Manual

Aperio Online Quick Installation Guide

Lock Manuals

G100	K100
IN100	KS100

Aperio - Troubleshooting Radio Related Problems

Brivo Documentation

ACS300/ACS6000 Installation Guide

Brivo Access Online Help

Brivo ACS6000-E or ACS300-E Control Panel with firmware 6.1.1 or higher

AH40 Hub

The AH40 Hub is for a connection to the Aperio supported locks via IP to the panel. Multiple AH40 hubs may be connected to a Panel

Aperio Lock(s)

G100	K100
IN100	KS100

PoE+ or 12VDC Power

Configuration

Preparation for Installation

Certified Installers Only

Only Brivo and Assa Abloy Aperio Certified Installers are permitted to install Aperio Wireless Products within Brivo Access. If you have not been certified by both Brivo and Assa Abloy on the respective products, please contact your Brivo Regional Sales Manager for information on how to become certified.

Placement of Locks and Hubs

The AH40 Hub has an overall range of 50ft.

When using the internal antenna, the range between the Hub and the furthest lock is 50ft perpendicular from the face of the AH40 Hub.

When using the optional ANT10, the range between the Hub and the furthest lock is 25ft, omni-directional.

There are considerations for obstructions such as walls and tall office equipment when determining the correct placement for the

Using the Radio Dongle

The APA-10-USB Aperio Radio Dongle serves multiple purposes. As part of the APA-10-PC Aperio Programming Kit, the Aperio Radio Dongle is necessary for linking locks to their respective hub, configuring both the Hubs and Locks and updating firmware on the Aperio products. Before and during the installation, the Aperio Radio Dongle can be used to test the select location for both the hubs and locks. In the Aperio Programming Application software, you will also be able to receive the connection status and connection quality between each hub and its connected locks.

Panel Placement and Networking Considerations

The first consideration with respect to the panel and hub placement is distance. The network for the Aperio hubs will be an isolated private network and should not reside on a corporate network. Although some customers may have the ability to create an isolated LAN within their multi-layer network schema, it is recommended that the installer create a private network for the hubs and panels.

It is not possible for more than one panel to reside on the same network via the Admin Port, therefore there are no required considerations for the Admin Port addressing. The Admin port address will serve as the ACU address for each hub. Since up to 30 hubs can be connected to a single panel each hub will need to be addressed ensuring that no IP addresses collide on the network. Each hub will need to be addressed between 192.168.207.2 and 192.168.207.254

The Brivo panel will recognize each hub by the MAC address of the hub. The IP addressing is for the purpose of the hub to be able to reach out to the panel for communication as the host for the hub.



IP Addressing

Each Brivo panel will either use the default address or will be programmed as described above. The instructions for modifying the IP address on the Brivo panel are outlined later in this manual.

Addressing the hub will be handled during the configuration of the hub. The instructions will also be covered later in this manual.

Use the blank table below to plan and record the IP addressing for your Brivo Panels and Aperio Hubs

Panel CP	Panel IP	Aperio MAC	Aperio IP

Table A - IP Addressing

orivo.

Aperio Installation

The installation of all Assa Abloy Hardware should be completed in accordance with Assa Abloy manuals, guidelines and restrictions. Brivo imposes no special instructions to installers on Aperio equipment. This guide will outline the specific settings required for optimal operation with Brivo Access.

Note: During the installation of Aperio locks and hubs, ensure that the Aperio firmware is at the latest supported version. The proper instructions for upgrading Aperio firmware is outlined in the Aperio APA Guide.

Order of Installation

For the best outcome, the locks should be installed in the following order:

- 1. Install Locks on doors
- 2. Determine optimal location for Hubs and install Hubs
- 3. Pair locks and Hubs
- 4. Configure Locks and Hubs
- 5. Connect Hubs to Panels
- 6. Program (Add) Hubs in Brivo Access
- 7. Program (Add) Locks in Brivo Access

Installation of Locks

The locking hardware should be installed in accordance with Assa Abloy requirements and instructions. Please refer to the specific documentation pertaining to the locks being used.

Installation of Hubs

Each AH40 Hub should be installed in accordance to Assa Abloy requirements and instructions.

Refer to:

https://www.assaabloy.es/Local/UK/Products/aperio/AA_Aperio_AH40_Mounting%20instruction_English.pdf

Using the External Antenna

When using the ANT-10, you will need to understand the differences in distance.

Pairing of Locks and Hubs

Pairing the Locks

Refer to the Aperio installation guides for proper pairing procedures.

Once the locks are paired with the hub and once the hub is connected to the Brivo Control Panel in Brivo Access, you will be able to select the lock from a list of MAC addresses.

Configuration of Locks and Hubs

Once the lock and hub pairing is complete, it will be time to configure the hub and lock settings. For certain settings that are not covered in this document, refer to each ASSA ABLOY configuration manual associated with the lock and hub that you are installing.

Saving Configurations

For each lock body type or hub, you can save the configuration file in order to apply the configuration for each additional lock or hub. This will save time and ensure that the same configuration is being applied across all locks and hubs. Please refer to the APA Software manual for instructions on saving, exporting and importing configuration files.

Configuration Matrix

For Simplicity, the required configuration settings are highlighted in the tables below. Although each lock could have some differences in the configuration screens, the basic settings are identical among all Aperio locks.

HUB and Lock Settings		
Hub Settings		
Setting Label	Value	Notes
Electronic Access Control Settings		
EAC Addressing Mode	Normal Offset	
Lock Access Decision Timeout (seconds)	2	
Remote Unlock Time to Live (minutes)	1	
Status Report Interval		
Status Reporting Interval (minutes)	5	Must Match Lock
Network Settings		
IP Address	192.168.207.xxx	Adjust in Config Menu
Network Mask	255.255.255.0	
TLS Encryption	Enabled	
ACU Address	192.168.207.1	
ACU Port	9999	
		-
Radio		
Radio Channels	11, 16, 25	Default for US

Table B - Hub and Lock Settings (continued below)



Configuring the Hub

Г

There are a few default settings that will need to be modified on the AH40 Hub for proper performance. Refer to Table B on the previous pages for the proper settings.

Setting Label	Value	Notes
Locking Parameters		
Try to unlock timeout (seconds)	2	
Lock open time (seconds)	5	
Lock jammed alarm timeout (seconds)	30	
Locking Parameters (cont.)		
Lock jammed retry period (seconds)	60	
Lock jammed indication mode	LED and Buzzer	
Battery		
Battery Check Interval (minutes)	10	
Reporting		
Status Report Interval (minutes)	5	Must Match Hu
Polling Interval (seconds)	5	
Sensor Events	Always Enabled	
Smart Credential Cache		
Dynamic cache	Enabled	Setting in Acce
Valid for (Days)	1-7	Setting in Acce
Number of credentials	100	Setting in Acce
Static cache	Enabled	
Cache state	Running	
Privacy Mode		
Privacy Mode	Variable - Enabled / Disabled	Must be Set in and in Access
Radio		
Radio Channels	11, 16, 25	US Standard

Table B - Hub and Lock Settings Continued

Note: In order to speed up the configuring of multiple hubs, make sure to select include for every option in the configuration screen. The option will not only be sent to the hub, but will be available to save and download the configuration. Once saved, the configuration will be available to apply to the other hubs in the system. Optionally, you may export the configuration to use for future installations.



Setting the IP Address:

In the APA Software navigate to the Hub that you wish to configure. Right-Click on the hub and select 'Change IP Address'

ONLINE			OFFLINE		USB C	ABLE	
	@ :	2	A	A	6	1	
Quick scan	Scan	Refresh	Connect	Disconnect	Det	lect	
Lock/Sensor	Commu	nication Hub	EAC A	Address	UHF Lin	k	
112627	0C3644		D	Jnknown]			The
		Lo	ock/Sensor [11	[2627]	+		The c
		Co	ommunicatio	n Hub [0C364	4] 🕨	Configure	
		Üş	ograde Firmw	are		Pair with lock or	sensor
						Retrieve System I Retrieve Event Lo Retrieve All Logs	nformation g
						Change Radio Ch	nannels
					\square	Change IP Addre	ss
						Change Physical	Location Name
						Switch to Custon	ner Mode
						Restart	
							TLS Encryption

Next, enter the Static Address you wish to set the hub to. Each hub will require a unique IP address per panel network. The Panel IP is 192.168.207.1, therefore the IP range for each hub is 192.168.207.2 through 192.168.207.254. You can use the table found earlier in this guide to plan and keep track of the IP settings for each hub.





Modifying the Configuration:

From the Hub Details Screen, right-click on the hub you wish to configure. Navigate to **Communications Hub [EXAMPLE]**. Select **Configure** from the dropdown menu that appears.

ONLINE			OFFLINE		USB C	ABLE			
Quick scan	Scan	Refresh	Connect	Disconnect					
Lock/Sensor	Commun	ication Hub	EAC	Address	UHF Lin	k			
112627	0C3644	Lo	[ck/Sensor [1]	Unknown] 12627]	+		6	The The c	communication h
		C	ommunicatio	n Hub [0C364	14]	Conf	figure		Hub [0C3644
		U	pgrade Firmw	are		Pair	with lock or s	sensor	
						Retri	eve System I	nformation	
						Retri	eve Event Lo eve All Logs	g	n
						Char	nge Radio Ch	annels	
						Char	nge IP Addres	ss Location Name	
						Swite	ch to Custom	ner Mode	
						Resta	art		
l								TLS Encryption	

Hub Action Menu - Select Configure

Using **Table B - Required Settings** from earlier in this guide, work through the configuration and make changes where the settings do not match. You will use **'Change'** to change a setting or group of settings. **'Include'** will automatically be selected for each setting you modify. Select **'Next'** to advance to the next screen. The series of reference images below demonstrate the sequence of changing the settings.

Configure Communication Hub [0C3644]	
Status Report Interval Setting The setting is read from the device. Change the setting if required.	
Status Report Interval 1 minute Revert Changes Change	
	Sample Configuration Setting
Back Next Cancel	

Sample Hub Configuration Screen

obrivo.

Configure Communication Hub [0C1BD4]	×	
Electronic Access Controller Settings Change settings if needed.		
EAC Addressing Mode	Include Revert Changes Change	
Lock Access Decision Timeout 2 seconds	Indude Revert Changes Change	Remote Unlock Configuration
Remote Unlock Remote Unlock Time to Live: 1 minute	Indude Revert Changes Change	Time to Live 0 hours and 1 minutes
UID Reverse Byte Order Disabled for all RFID technologies	Include Revert Changes Change	Sample Configuration Setting
	Back Next Cancel	

Sample Hub Configuration Screen

Saving and Sending the Configuration

Once you have cycled through all of the configuration screens, you will end up on the Device Update screen. You will see a list of settings that will be sent to the hub.

Verify the listed settings against the **Required Settings** table.

Configure Communication Hub (0C3644) Device Update The configuration is ready to be transmitted. You might need to show a card to the lock or engage the sensor. Click "Next" to transmit the configuration.	Save Configuration
The following configuration will be transmitted:	Save configuration to local storage
Status Report Interval	Select the configurations in the table below that you want to
1 minute	save. Then choose a name for the setting and click OK to
EAC Addressing Mode	save.
- Normal address offset	Configuration name AH40 Brivo
Lock Access Decision Timeout	Include Configurations
- 2 seconds	Include Configurations
Remote Unlock Time to Live	Include Configurations
- 1 minute	Include Configurations
Metwork Nettings	Include Configurations
- Network Mask: 255.255.255.0	Include Configurations
Default Gateway: 0.0.0.0	Include Configurations
ACU Address: 192.168.207.1	Setup Settings
- ACU Port: 9999	ACU Settings
- TLS Encryption: Enabled	Status Report Interval
Save Configuration	Radio Channels



Name and Save Configuration

Select **'Apply'** to send the configuration to the hub. You also have the option at this point to save the configuration file. Saving the configuration file will allow you to push the same configuration to other hubs you are installing, or to download for future installations. To save the configuration, select Save Configuration. At this point you will be given the option to name the configuration file. Give the configuration a name that you will easily recognize. You will also want to review the configurations that will be added to the saved configuration. Select **'OK'** to commit the save. The configuration will be saved and can be retrieved through the hub's action menu.



Configuring the Lock

Although each lock may have slight differences in the configuration, the required settings are the same throughout the Aperio integrated product line. From the Hub Details Screen, right-click on the Lock you wish to configure.

ile Installation	Help				
ONLINE			OFFLINE	USB CABLE	
	0:		A		
Quick scan	Scan	Refresh	Connect Disco	nect Detect	
Lock/Sensor	Commun	nication Hub	EAC Address	UHF Link	
112627	0C364	Lock/Sen	sor [112627]	Apply Configuration	unication h
		Commun	ication Hub [0C364	Configure	acion nub is noc
		Upgrade I	Firmware	Retrieve System Information	C3644]
		1.5		Retrieve Event Log	00:17
				Retrieve Audit Trail	IP, M
				Retrieve Debug Log	1.9.3
				Retrieve All Logs	1.9.3
				Change Radio Channels	11, 1
				Change Physical Location Name	25 (2
				Switch to Customer Mode	192.1
				Unpair Lock/Sensor from Communication H	Hub 192.1
				ACU Port	9999
				TLS Encryption	Enab
				Remote Unlock	Enat
				Remote Unlock Tin	ne to Live 1 mi

Lock/Sensor Action Menu

Navigate to Lock/Sensor [EXAMPLE]

Select **Configure** from the dropdown menu that appears.

Using **Table B - Required Settings** from earlier in this guide, work through the configuration and make changes where the settings do not match. You will use **'Change'** to change a setting or group of settings. **'Include'** will automatically be selected for each setting you modify. Select **'Next'** to advance to the next screen. The series of reference images below demonstrate the sequence of changing the settings.

RFID Search Order			
ISO/IEC 14443B	Include	Revert Changes	Change
Credential Data Conversion			
No conversion	Include	Revert Changes	Change
Smart Credential Cache			
Dynamic cache: Enabled			
Valid for: 1 day			
Number of credentials: 100	Include	Revert Changes	Change
Card Read Detection Configuration			
Support for Emulated MIFARE Classic cards disabled	Include	Revert Changes	Change
			gen

Smart Credential	Cache
Configure smart c	redential cache for V3 locks.
The second	
Number of credentials	100

obrivo.

Configure Lock/Sensor [112627]	TORIGINAL	
Escape and Return and Privacy Mode Configuratic Set escape and return and privacy mode configurati	n ion if required.	
Escape and Return and Privacy Mode Configuration	on	Escape and Return and Privacy Mode Config
Privacy Mode: Enabled Escape and Return: Disabled	Indude Revert Changes Change.	Escape and Return and Privacy Mode Escape and return and privacy mode can not both be enabled at the same time. Escape and return is only supported by Aperia V2 SE and
		V3 locks. Privacy mode is only supported by Aperice V3 locks
Green flash and three buzzes	Include Revert Changes Change.	Privacy Mode V Enable privacy mode
scape and Return Cancellation Indication		Escape and Return
Three red flashes with buzz	Indude Revert Changes Change.	Enable escape and return
		Enable automatic re-lock Default unlock time (seconds) 740
		OK Cance
	A Back Next C	ancel
onfigure Lock/Sensor [112627]	TTILLLLLL	
Device Settings These settings are read from the device. Change th	e settings if required.	
Status Report Interval		
1 minute	✓ Indude Revert Changes Change.	-
attery Check Interval		😞 Configure Polling Interval
60 minutes	✓ Indude Revert Changes Change	Polling Interval
olling Interval		Configure the polling interval (in seconds) for V3 locks.
5 seconds	☑ Indude Revert Changes Change.	· Disable polling
		Polling Interval (seconds) 5
		OK Cance
	4 Back Nevt C	ancel

Note: The Status Reporting Interval must match on the hub and the lock.

Note: Both Credential Caching and Privacy Mode need to be enabled on the Lock Configuration and in Brivo Access for proper operation. If Privacy Mode is enabled on the Lock Configuration and not in Brivo Access, the lock will behave as if it is entering Privacy Mode, but users will still gain normal access.



Saving and Sending the Configuration

Once you have cycled through all of the configuration screens, you will end up on the Device Update screen. You will see a list of settings that will be sent to the lock.

Verify the listed settings against the **Required Settings** table. Select **'Apply'** to send the configuration to the lock. You also have the option at this point to save the configuration file. Saving the configuration file will allow you to push the same configuration to other locks of the same model you are installing, or to download for future installations. To save the configuration, select **'Save Configuration'**. At this point you will be given the option to name the configuration file. Give the configuration a name that you will easily recognize. You will also want to review the configurations that will be added to the saved configuration. Select **'OK'** to commit the save. The configuration will be saved and can be retrieved through the hub's action menu.

Connecting Hubs to the ACS300/ACS6000 Control Panels

Networking the Hub(s)

Each Hub connected to the Brivo panel will need to be connected via a simple isolated network. The Recommended configuration includes a PoE switch to also power the hub(s). The ACS300-E/ACS6000-E will connect to the same switch via the Admin Port on the panel. The Admin Port and the LAN Port cannot exist on the same network. In addition, two panels cannot exist on the same physical hub network. Other networking considerations may require the consultation of Brivo Technical Support or a Brivo Regional Technical Manager.



Typical Hub to Panel Network Diagram

Associating Aperio Locks with Brivo Access

Programming (Adding) Hubs in Brivo Access

Adding a Hub in Brivo Access

Using Remote Access via Partner Portal, click on the **Account Config** button to log into Brivo Access.

Once in Brivo Access, from the **Setup** tab, select **Sites/Doors** and then **Control Panels**.

Select the control panel you wish to view. The View Control Panel page will display.

Under the **More Operations** drop down, select **Add Wireless Gateway/Router**.

VIEW CONTROL PAN	IEW CONTROL PANEL					
Control Panel List	Edit Control Panel	New Control Panel	More Operations -			
Control Panel Name Control Panel ID MAC address Model Firmware Note	 STB-4V-YYAO STB-4V-YYAO 001d00002572 ACS6000 6.1.2.1 Inside Telepho 	6 - DC 6 2 ne Closet	Add Board Add Wireless Gateway/Router Add Elevator Configure Antipassback View Relationships			

The Add Wireless Gateway/Router page displays.

Select Assa Abloy Aperio Hub from the Wireless Board Types. Enter the Location.

For the **MAC address** field, Brivo Access will automatically identify any Hubs that are connected to the panel. If the Hub is connected to the panel and is online, you will be able to select the MAC address associated with the Hub from the dropdown list. If the Hub is not connected or online or in the case of pre-programming the account, you may enter the MAC address into the MAC Address field. Be sure to enter the address with colon ":" separating each octet.

When finished, click Save Wireless Gateway/Router.

Aperio 👻	
loset	
B1:A6:B7:34 Find existing MAC Address	
	B1:A6:B7:34 Find existing MAC Address

obrivo.

Programming (Adding) Locks in Brivo Access

Adding a Lock in Brivo Access

Using Remote Access via Partner Portal, click on the **Account Config** button to log into the Brivo Access account.

Once in Brivo Access Account Config, from the **Setup** tab, select **Sites/Doors** and then **Sites**. The Site List page displays.

Click on the Site to which you wish to add the lock. The View Site page displays.

Under the More Operations dropdown, select Add Door.

Enter a unique **Door** name and then select the appropriate control panel from the dropdown list.

Click **Next** and then select the Hub from the **Board** dropdown list. Next, select the **Lock #** from the dropdown list. The lock number is a number you will select and assign between 1 and 16. The lock number itself does not correlate to any value in Aperio.

STORAGE - DC/ DEFINE D	OOR	
Door Name Control Panel	Assa Abloy STB-4V-YYAO6 - DC	
Board	Assa Abloy Aperio 👻	
Lock #	1 -	
MAC address	31:E3:94:45:B1:A6:B7:34	Find existing MAC Address
Enable Privacy Mode	Yes 🔍 No	
Enable Credential Caching	Yes • No	
Door Ajar Enabled	• Yes • No	
Door Ajar Threshold	120	seconds (30-600)
Pass-through Period	5	seconds (1-600)
Door Unlock Schedule	None -	
Enable Mobile Pass Biometrics	🔍 Yes 🔍 No	
Control from Browser	• Yes • No	
Cancel Save Door		

For the **MAC address** field, Brivo Access will automatically identify any Locks that are paired with the selected Hub. If the Lock is connected to the Hub and the Hub is also online during this step, you will be able to select the MAC address associated with the Lock from the dropdown list. If the Hub is not online or in the case of pre-programming the account, you may enter the MAC address into the MAC address field. Be sure to enter the address with a colon ":" separating each octet.

Setting **Enable Privacy Mode** button to Yes allows the user to place the door in a "Do Not Disturb" state. If the lock supports Privacy Mode, by either pushing a button on the secure side of the door, or on some models by simply engaging the deadbolt, the lock will no longer open for Users that are not in a group with Privacy Override enabled. Privacy Mode will remain active until the door is either opened from the inside, or valid access is gained by someone



who has Privacy Override Privileges. Privacy Override can also be canceled by pushing the Privacy Override button again, or by disengaging the deadbolt.

The Default setting is No. Some Assa Abloy Locks do not have Privacy Mode capabilities. Select the radio button for Yes or No to enable or disable Privacy Mode.

You may also set Offline Cache. Select Yes for Enable Credential Caching to enable the Cache. Additional option will appear. Set the number of days you wish the lock to cache credentials and also set the number of credentials you wish the lock to cache.

obrivo.

Appendix 1

Configuring the Brivo Unified Credential Overview

Brivo Unified Credential (BUC) is designed to give seamless compatibility between Brivo and Assa Abloy. The Brivo Unified Credential can be securely used to access spaces secured with Brivo Smart Readers and select Assa Abloy Aperio[™] locksets.

Brivo Unified Credentials require that the partnered lock contain the necessary configuration to effectively read the credentials. The lockset will be configured using the Assa Abloy APA toolkit needed for lock commissioning and a configuration file which is accessible through the Brivo Partner Portal. If you do not have access to the Brivo Partner Portal, Authorized Brivo Resellers may obtain the file by contacting Brivo Technical Support. Professional Services are also available to assist in the programming of these locks. The files that support the configuration are password protected. Please contact Brivo Technical Support for the password.

Compatible Locks

• IN100

NOTE: Aperio locks are compatible with BUC using only the Wavelynx 56-1 format. All BUC credentials are formatted with 56-1 by default, however, custom formats are available. Verify that the credentials you are using are 56-1 formatted credentials.

Before You Begin

- You will need the Assa Abloy Aperio APA Software and the Aperio Radio Dongle (needed for lock commissioning) in order to set the configuration.
- You will need to download the proper configuration file from the Brivo Partner Portal or receive the file from Brivo Technical Support.
- You will need the password for the file you are using.

Preparing for the Configuration

You will want to commission and configure the lockset to work with Brivo Access prior to applying the configuration.

Copy the configuration file (BUC_IN100_Only.xml) into any workable folder on your Windows machine.

Applying the Configuration

Add the file to the APA Software

1. In the APA Software, select **Manage Configurations...** from the Installation dropdown menu.



2. Within the Configurations screen, Select **Import**.

le Manage Configurations	×
Available configurations	Configuration content
Import Export	
2	Close



- 3. From the File Selector, Browse to the proper Folder and select the xml file needed for the lockset. In this example we are configuring the IN100 with BUC.
 - Import Configuration X 🏚 📂 🛄 • Look in: 🚽 Downloads \sim BUC_IN100_Only Recent Items Desktop 5 Documents This PC File name: Open Network Files of type: Aperio® Configuration file (*.xml) Cancel ~
- a. Select the BUC_IN100_Only.xml file and Select **Open**.

4. Insert the password and select **OK**.

🗢 Enter	Password ×
Enter P Enter th	assword e password for the configuration.
Password	
2	OK Cancel



5. You should now see the configuration under Available Configurations. Select **Close**.

Apply the Configuration

1. Back in the Devices Screen, Scan for your available devices if they are not already present on the screen.

	rogramming h Help	Application -	- [Brivo Of	fice]				-	
ONLINE Quick scan	Scan	Refresh	OFFLINE Connect	Disconnect	USB CABLE				aperio
Lock/Sensor 0EB915 177FF4 0BB931	Commun 0C36C2 0C4517 0C4517	ication Hub	EA	C Address [Unknown] [Unknown] [Unknown]	UHF Link		The communication hub	on hub is not in customer m is not in customer mode, the radio com	10de munication is r
0E6A14	00.4517			[Unknown]		Comm MAC Ac Firmwar Bootloa Radio C Active C Security IP addr ACU Ac ACU Po TLS Enc Remote Remote Number Lock/S MAC Ac Pan id	unication Hub [0C36C2] ddress re Flavor re Version der Version dannels Channels Channel y Mode ess ddress rt cryption e Unlock Unlock Time to Live r of Paired Locks and Sensors Sensor [0EB915] ddress ddress	00:17:7A:01:02:0C:36:C2 IP, Multiple Lock [Aperio protocol] 1.9.3404 1.9.3023 11, 16, 25 25 (2.475 GHz) Manufacturer Mode 192.168.207.10 192.168.207.1 9999 Enabled Enabled 0 seconds 1 00:17:7A:01:02:0E:B9:15 36C2 1013	
💙 USB radio d	ongle conne	cted (COM 3)				•			>

2. Right-click the lock to apply the configuration to and select **Lock/Sensor**, followed by **Apply Configuration**, followed by **BUC_IN100_Only**.

ONLINE		OFFLINE		USB CABLE	=		
Quick scan	Scan Refresh	Connect	Disco	onnect Detect			
.ock/Sensor	Communication Hub	EAC	Address	UHF Link		_	
EB915	002602		n Isknow	n] 💦	e 🔒	🗌 🔼 The	e communication
.77FF4	Lock/Sensor [0EB	915]	>	Apply Configura	tion)	BUC_IN100_Only
Communication Hub [0C36C2]		1 3	Configure			on Hub [0C36C2]	
	Upgrade Firmware			Set Time and Date			
			_	Retrieve System	Information		
				Retrieve Event Lo	og		
				Retrieve Audit Tr	ail		tion 4
				Retrieve Debug L	.og		
				Retrieve All Logs	1		
				Channe Bartin Cl			
				Change Radio Ci	nanneis		
				Change Physical	Location Name		
				Switch to Custor	ner Mode		

orivo.

3. You will now see the confirmation screen. Verify the configuration and select **Confirm**.

The following configuration is ready to be transmitted. You might need to show a card to the lock or engage the sensor. Click "Confirm" to transmit the configuration.		
Time and Date - Current system time MIFARE DESFire Configuration - RFID Card Type: DESFire - Application Id: 16063710 - File Identity: 2 - File Start Position: 26 - Length to read in File: 7 - File Data Protection Level: Full encryption - Key Type: AES 128 - Key - Number: 8 - Key - Diversification Algorithm: None		
2 Confirm Cancel		

4. You may need to present a card or actuate the inside lever of the lock to push the configuration. Once it is complete, you will receive a confirmation of a successful configuration. Select OK



5. Verify that Brivo Unified Credentials can be read using the assigned Card ID and Facility Code.

NOTE: This does not apply to any of the Brivo Custom Encryption Credentials. For Custom Encryption, special configuration will be required and is handled solely through Brivo Professional Services.

For more assistance and configuration support, please contact Brivo Technical Support.



Obrivo.

Revision List

Date	Version	Description
November 25, 2019	1.0	Initial version
May 5, 2020	1.1	Updated Lock Configuration instructions
April 1, 2022	1.2	Added Appendix with Brivo Unified Credential information
August 12, 2022	1.3	Removed references to Onair