

BioStar 2

ADMINISTRATOR GUIDE

Version 2.9.12

English
EN 102.00.BS2

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1 BioStar 2 Overview

BioStar 2 is a web-based access control management system which is OS-independent and can be used anywhere.

BioStar 2 expands its versatility even further with its support for access control and time & attendance module, API, Mobile App, and Device SDK solutions.

License

Versions

Access Control

Items		Details
Device	Max. Device	1,000
	Max. Slave per Master (RS-485)	31 (Up to 8 Fingerprint Devices)
	RS-485 Protocol	OSDP Supported
	Multi-Door Control	Supported
	Device Admin Level	All / User / Config
	Auto Reconnection to Server	Direct & Server mode
	USB Enrollment Device	BioMini, BioMini Plus 2, DUALi DE-620, BioMini Slim 2
	Daylight Saving Time	Supported
User	Max. Card per User	8
	Max. Fingerprint per User	10
	Auto User Sync to Device	Supported
	Access-on-Card	Supported
	Secure Credential	Supported
	iCLASS Seos Card	Supported
	Long-term Idle Users Management	Supported
	Custom Fields	Supported
Access Control	Max. Access Level	2,048 (Depends on the device)
	Max. Access Group	2,048 (Depends on the device)
	Max. Access Group per User	16
	Max. Access Level per Access Group	128
	Max. Door per Access Level	128
	Auto Access Group Sync to Device	Supported
	Access Group Report by Door/User/Elevator	Supported

1 BioStar 2 Overview

Items		Details
Elevator (Floor Management)	Max. Floor per Elevator	192
	Max. Floor Level	2,048
	Dual Auth	Supported
	Anti-passback Zone	Supported
	Fire Alarm Zone	Supported
Zone	Max. Zones	1,000
	Max. Device per Zone	1,000 Global, 32 Local
	Anti-passback	Door APB, Global, Local
	Fire Alarm	Global, Local
	Scheduled Unlock/Lock	Supported (Local)
	Intrusion Alarm	Supported (Local)
	Interlock	Supported (Local)
	Muster	Supported (Global)
	Occupancy Limit	Supported (Global)
Advanced	Dashboard	Supported
	Server Matching	Supported
	Audit Trail	Supported
	Local API Server	Supported
	BioStar 2 Mobile App	Supported (User, Door, Monitoring, Alarm)
	Mobile Access	Supported

Time Attendance

Items	Details
Number of Shifts	Unlimited
Number of Schedules	Unlimited
Number of User per Schedule	Unlimited
Shift Type	Fixed, Flexible, Floating
Time Card	Supported
Number of Leave per User	Unlimited
Calendar View	Supported

Note

- Check the [License](#) for features that your license supports.

License

You can use more features by registering the activation key after purchasing the BioStar 2 license.

1 BioStar 2 Overview

For more information on license activation, refer to [License](#).

License for Access Control

Items		Starter (Free)	Basic	Standard	Advanced	Professional	Enterprise
Access Control	Max. User	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
	Max. Device	1,000	1,000	1,000	1,000	1,000	1,000
	Max. Door	5	20	50	100	300	1,000
	Zone	-	-	Supported	Supported	Supported	Supported
	Elevator	-	-	-	Supported	Supported	Supported
	Graphic Map	-	-	-	Supported	Supported	Supported
	Server Matching	-	-	-	Supported	Supported	Supported
	Active Directory	-	-	-	Supported	Supported	Supported

Note

- If there is an AC Standard license already in use, it is replaced by an Advance license.

License for Time Attendance

Items	Starter (Free)	Standard	Advanced	Professional
Number of Users	100	500	1,000	Unlimited

Note

- If there is an Time Attendance license already in use, it is replaced by an Professional license.

License for Visitor

1 BioStar 2 Overview

Items	Starter (Free)	Visitor License
Visitor Management	-	Supported

License for Remote Access

Items	Starter (Free)	Remote Access License
Remote Access	-	Supported

Versions

BioStar 2.9.12

New and improved features

Category	Functionality
Device	▪ Supports BioStation 3 Max. ▪ Supports XPass Q2.
Settings	▪ Supports Remote Access.

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.2 or later
- BioStation A2: 1.9.3 or later
- BioStation L2: 1.6.2 or later
- BioEntry W2: 1.8.2 or later
- FaceStation 2: 1.5.4 or later
- CoreStation: 1.7.1 or later
- BioEntry P2: 1.5.2 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.7.0 or later
- XPass D2: 1.3.2 or later
- XPass D2 (Rev 2): 1.8.2 or later
- FaceLite: 1.3.5 or later
- XPass 2: 1.5.0 or later
- FaceStation F2: 2.2.1 or later

1 BioStar 2 Overview

- X-Station 2: 1.4.0 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.4.1 or later
 - BioStation 2a: 1.2.0 or later
 - BioEntry W3: 1.0.1 or later
 - CoreStation 20: 1.0.3 or later
 - Door Interface: 1.0.2 or later
 - BioStation 3 Max: 1.0.0 or later
 - XPass Q2: 1.0.0 or later
-

BioStar 2.9.11

New and improved features

Category	Functionality
Device	▪ Supports Master Admin feature.
Settings	▪ Supports SL1, SL3, and SL1/SL3 Mix Mode of MIFARE Plus EV1 cards.

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.2 or later
- BioStation A2: 1.9.3 or later
- BioStation L2: 1.6.2 or later
- BioEntry W2: 1.8.2 or later
- FaceStation 2: 1.5.4 or later
- CoreStation: 1.7.1 or later
- BioEntry P2: 1.5.2 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.6.2 or later
- XPass D2: 1.3.2 or later
- XPass D2 (Rev 2): 1.8.1 or later
- FaceLite: 1.3.5 or later
- XPass 2: 1.4.3 or later

1 BioStar 2 Overview

- FaceStation F2: 2.2.1 or later
 - X-Station 2: 1.3.1 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.3.1 or later
 - BioStation 2a: 1.1.1 or later
 - BioEntry W3: 1.0.1 or later
 - CoreStation 20: 1.0.2 or later
 - Door Interface: 1.0.1 or later
-

BioStar 2.9.10

New and improved features

Category	Functionality
General	▪ Supports MS SQL Server 2022 and OLE DB Driver. ▪ Upgraded MariaDB version (11.4.4). ▪ Added support for logging in to BioStar 2 using Microsoft Entra ID (Azure Active Directory) integration.
Device	▪ Supports CoreStation 20. ▪ Supports Door Interface. ▪ Supports XPass 2 (XP2-MAPB-H).

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.2 or later
- BioStation A2: 1.9.3 or later
- BioStation L2: 1.6.2 or later
- BioEntry W2: 1.8.2 or later
- FaceStation 2: 1.5.4 or later
- CoreStation: 1.7.1 or later
- BioEntry P2: 1.5.2 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.6.2 or later
- XPass D2: 1.3.2 or later

1 BioStar 2 Overview

- XPass D2 (Rev 2): 1.8.1 or later
 - FaceLite: 1.3.5 or later
 - XPass 2: 1.4.3 or later
 - FaceStation F2: 2.2.1 or later
 - X-Station 2: 1.3.1 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.3.1 or later
 - BioStation 2a: 1.1.1 or later
 - BioEntry W3: 1.0.1 or later
 - CoreStation 20: 1.0.0 or later
 - Door Interface: 1.0.0 or later
-

BioStar 2.9.8

New and improved features

Category	Functionality
General	▪ Improved REPORT & DASHBOARD performance
User	▪ Supports setting Server Private Message ▪ Supports file upload to user information
Device	▪ Added Firmware Version to device list ▪ Supports an option to deny authentication when the mask is worn.
Door	▪ Supports granular door Open Time settings. ▪ Updated Timed Anti PassBack feature.
Video	▪ Discontinuation of support for the BioStar 2 VIDEO.
Monitoring	▪ Added Elevator and Zone columns to the Column List of the Event Log.
Settings	▪ Added Deleted CSN Mobile Card list. ▪ Added new predefined Wiegand card formats.

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later

1 BioStar 2 Overview

- BioStation 2: 1.10.2 or later
 - BioStation A2: 1.9.3 or later
 - BioStation L2: 1.6.2 or later
 - BioEntry W2: 1.8.2 or later
 - FaceStation 2: 1.5.4 or later
 - CoreStation: 1.7.1 or later
 - BioEntry P2: 1.5.2 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.6.2 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.8.0 or later
 - FaceLite: 1.3.5 or later
 - XPass 2: 1.4.2 or later
 - FaceStation F2: 2.2.0 or later
 - X-Station 2: 1.3.0 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.3.1 or later
 - BioStation 2a: 1.1.1 or later
 - BioEntry W3: 1.0.1 or later
-

BioStar 2.9.7

New and improved features

Category	Functionality
General	▪ Supports Multi-Factor Auth for Login feature
User	▪ Supports Store Visual Face Image feature ▪ Improved visual face synchronization protocol
Device	▪ Supports New Device BioEntry W3

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.2 or later

1 BioStar 2 Overview

- BioStation A2: 1.9.3 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.8.0 or later
 - FaceStation 2: 1.5.4 or later
 - CoreStation: 1.7.1 or later
 - BioEntry P2: 1.5.2 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.6.1 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.2 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.4.1 or later
 - FaceStation F2: 2.2.0 or later
 - X-Station 2: 1.3.0 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.3.0 or later
 - BioStation 2a: 1.1.1 or later
 - BioEntry W3: 1.0.0 or later
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BioStar 2.9.6

New and improved features

Category	Functionality
General	▪ Updated Spanish resource file ▪ Improved BioStar 2 Setting(.exe) UI
Device	▪ Supports XPass 2(XP2-MAPB) ▪ Supports Display Result from Controller feature ▪ Supports Ignore Repeated Signals Duration feature ▪ Supports editing Auth Mode in Batch Edit ▪ Supports User ID/Name Display feature

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later

1 BioStar 2 Overview

- BioStation 2: 1.10.1 or later
 - BioStation A2: 1.9.3 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.8.0 or later
 - FaceStation 2: 1.5.4 or later
 - CoreStation: 1.7.1 or later
 - BioEntry P2: 1.5.1 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.6.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.2 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.4.1 or later
 - FaceStation F2: 2.1.4 or later
 - X-Station 2: 1.3.0 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.2.1 or later
 - BioStation 2a: 1.1.1 or later
-

BioStar 2.9.5

New and improved features

Category	Functionality
General	▪ Added New Dashboard
User	▪ Improved USER menu ▪ Added Advanced Search ▪ Supports user profile photo and visual face enrollment using the webcam
Door	▪ Added Timed Anti PassBack
Setting	▪ Improved TRIGGER & ACTION menu ▪ Added Quick Action feature in the TRIGGER & ACTION menu

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later

1 BioStar 2 Overview

- XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.10.1 or later
 - BioStation A2: 1.9.1 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.8.0 or later
 - FaceStation 2: 1.5.4 or later
 - CoreStation: 1.6.1 or later
 - BioEntry P2: 1.5.1 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.6.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.2 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.3.2 or later
 - FaceStation F2: 2.1.4 or later
 - X-Station 2: 1.2.3 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.2.1 or later
 - BioStation 2a: 1.1.0 or later
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BioStar 2.9.4

New and improved features

Category	Functionality
General	▪ Improved Administrator menu UI on the DEVICE detail page
User	▪ Added Template on Mobile feature ▪ Supports Custom Smart Card Layout
Device	▪ Supports BioStaion 2a ▪ Supports Wireless Door Lock connection to CoreStation

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later

1 BioStar 2 Overview

- XPass S2: 2.4.4 or later
 - BioStation 2: 1.10.1 or later
 - BioStation A2: 1.9.1 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.7.1 or later
 - FaceStation 2: 1.5.3 or later
 - CoreStation: 1.6.1 or later
 - BioEntry P2: 1.4.4 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.6.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.1 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.3.2 or later
 - FaceStation F2: 2.1.4 or later
 - X-Station 2: 1.2.2 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.1.1 or later
 - BioStation 2a: 1.0.0 or later
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BioStar 2.9.3

New and improved features

Category	Functionality
General	▪ Added REPORT feature related to access control events ▪ Updated German, French, Romanian, Russian, Polish, Czech, Greek, and Italian resource files
Device	▪ Supports keypad Backlight of XPass D2 ▪ Supports QR code authentication in BioStation 3
Setting	▪ Added CARD PRINTER feature ▪ Added SYSTEM BACKUP and RESTORE feature ▪ Stabilization of 'Specific Devices' Automatic User Synchronization option

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later

1 BioStar 2 Overview

- XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.10.1 or later
 - BioStation A2: 1.9.1 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.7.1 or later
 - FaceStation 2: 1.5.3 or later
 - CoreStation: 1.6.1 or later
 - BioEntry P2: 1.4.4 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.5.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.1 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.3.2 or later
 - FaceStation F2: 2.1.3 or later
 - X-Station 2: 1.2.2 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.1.0 or later
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BioStar 2.9.2

New and improved features

Category	Functionality
Setting	▪ Improved security of login password vulnerabilities for brute-force attack

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.1 or later
- BioStation A2: 1.9.1 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.7.1 or later
- FaceStation 2: 1.5.3 or later

1 BioStar 2 Overview

- CoreStation: 1.5.3 or later
 - BioEntry P2: 1.4.4 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.5.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.0 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.3.2 or later
 - FaceStation F2: 2.1.2 or later
 - X-Station 2: 1.2.0 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.0.2 or later
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BioStar 2.9.1

New and improved features

Category	Functionality
General	▪ Improved main screen ▪ Added features to activate licenses to use specific features of the device
User	▪ Improved security and usability when downloading CSV files
Device	▪ Support 3rd party OSDP devices as a reader for CoreStation

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.1 or later
- BioStation A2: 1.9.1 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.7.1 or later
- FaceStation 2: 1.5.3 or later
- CoreStation: 1.5.3 or later
- BioEntry P2: 1.4.4 or later
- BioEntry R2: 1.4.1 or later

1 BioStar 2 Overview

- BioLite N2: 1.5.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.7.0 or later
 - FaceLite: 1.3.4 or later
 - XPass 2: 1.3.2 or later
 - FaceStation F2: 2.1.2 or later
 - X-Station 2: 1.2.0 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
 - BioStation 3: 1.0.2 or later
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BioStar 2.9.0

New and improved features

Category	Functionality
General	▪ Adopted Improved Visual Face Algorithm
User	▪ Added Visual Face Import ▪ Added Visual Face Migration ▪ Added User Configuration Partial Update
Device	▪ Supports BioStation 3 (BS3-DB, BS3-APWB) ▪ When a sync error occurs because of exceeding the maximum number of users or credentials in the device, the error message explains the reason for the sync error.

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.1 or later
- BioStation A2: 1.9.1 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.7.0 or later
- FaceStation 2: 1.5.2 or later
- CoreStation: 1.5.2 or later
- BioEntry P2: 1.4.3 or later
- BioEntry R2: 1.4.1 or later

1 BioStar 2 Overview

- BioLite N2: 1.5.0 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.6.0 or later
 - FaceLite: 1.3.2 or later
 - XPass 2: 1.3.1 or later
 - FaceStation F2: 2.0.3 or later
 - X-Station 2: 1.1.3 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
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BioStar 2.8.17

New and improved features

Category	Functionality
Time & Attendance	▪ Supports setting the storage period of punch logs ▪ Improved security vulnerabilities

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.1 or later
- BioStation A2: 1.9.1 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.6.3 or later
- FaceStation 2: 1.5.1 or later
- CoreStation: 1.5.2 or later
- BioEntry P2: 1.4.3 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.4.1 or later
- XPass D2: 1.3.2 or later
- XPass D2 (Rev 2): 1.6.0 or later
- FaceLite: 1.3.2 or later
- XPass 2: 1.2.4 or later
- FaceStation F2: 2.0.3 or later
- X-Station 2: 1.1.3 or later

1 BioStar 2 Overview

- OM-120: 1.2.1 or later
- Secure I/O 2: 1.3.1 or later
- DM-20: 1.2.2 or later
- IM-120: 1.0.0 or later

BioStar 2.8.16

New and improved features

Category	Functionality
General	▪ Added visual face to the dashboard ▪ Added setting.config file initialization logic ▪ Added procedure to accept to collection and use of the privacy when using cloud ▪ Updated German and French resource files
User	▪ Improved the visual face mobile enrollment usability - Improved the user interface of Visual Face Mobile Enrollment page - Added footer to email sending the visual face mobile enrollment link ▪ Added Error_Description column to user list file that failed CSV import ▪ Added Hide Face Credential Preview Image option ▪ Added the Use QR as card option
Device	▪ Improved USB Device Agent security vulnerabilities ▪ Supports setting the byte order for smart cards ▪ Allows connecting X-Station 2 as a slave device of CoreStation
Door	▪ Added relay deactivation option for exit button input ▪ Added 'All Devices' option to dual authentication setting to door
Zone	▪ Improved occupancy limit zone monitoring page
Monitoring	▪ Separated the log related to door unlock - Door Unlocked (Exit Button) - Door Unlocked (By Operator)
Video	▪ Improved security vulnerabilities
Setting	▪ Added option to delete unassigned card ▪ Support to log in to BioStar 2 with Active Directory account

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later

1 BioStar 2 Overview

- BioStation 2: 1.10.1 or later
 - BioStation A2: 1.9.1 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.6.3 or later
 - FaceStation 2: 1.5.1 or later
 - CoreStation: 1.5.2 or later
 - BioEntry P2: 1.4.3 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.4.1 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.6.0 or later
 - FaceLite: 1.3.2 or later
 - XPass 2: 1.2.4 or later
 - FaceStation F2: 1.1.4 or later
 - X-Station 2: 1.1.3 or later
 - OM-120: 1.2.1 or later
 - Secure I/O 2: 1.3.1 or later
 - DM-20: 1.2.2 or later
 - IM-120: 1.0.0 or later
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BioStar 2.8.15

New and improved features

Category	Functionality
General	▪ Applied Log4j 2 v2.17.1
Setting	▪ Stabilization of features for automatic user synchronization

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.0 or later
- BioStation A2: 1.9.0 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.6.3 or later
- FaceStation 2: 1.5.1 or later
- CoreStation: 1.5.2 or later

1 BioStar 2 Overview

- BioEntry P2: 1.4.3 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.4.1 or later
- XPass D2: 1.3.2 or later
- XPass D2 (Rev 2): 1.5.0 or later
- FaceLite: 1.3.1 or later
- XPass 2: 1.2.4 or later
- FaceStation F2: 1.1.2 or later
- X-Station 2: 1.1.2 or later
- OM-120: 1.2.1 or later
- Secure I/O 2: 1.3.1 or later
- DM-20: 1.2.2 or later
- IM-120: 1.0.0 or later

BioStar 2.8.14

New and improved features

Category	Functionality
General	▪ Supports OpenJDK ▪ Applied Log4j 2 v2.16.0 ▪ Improved security vulnerabilities ▪ Updated APIs in Swagger ▪ Improved the server performance ▪ Improved the performance of processing data on the database ▪ 26 bit Wiegand card option support for BioStar 1.x to BioStar 2.x Migration Tool
User	▪ Supports PIN enrollment via CSV Import
Device	▪ Supports Input Module (IM-120) ▪ Supports 1:N security level setting for CoreStation ▪ Improved the speed of connecting devices
Door	▪ Changed the default value of held open setting
Access Control	▪ Improved the speed of linking access groups
Monitoring	▪ Improved event log processing performance ▪ Improved the speed of accessing the monitoring menu
Setting	▪ Stabilization of features for automatic user synchronization

Compatible firmware

- BioLite Net: 2.3.5 or later

1 BioStar 2 Overview

- BioEntry Plus: 2.3.4 or later
 - BioEntry W: 2.3.4 or later
 - XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.10.0 or later
 - BioStation A2: 1.9.0 or later
 - BioStation L2: 1.6.1 or later
 - BioEntry W2: 1.6.3 or later
 - FaceStation 2: 1.5.0 or later
 - CoreStation: 1.5.2 or later
 - BioEntry P2: 1.4.2 or later
 - BioEntry R2: 1.4.1 or later
 - BioLite N2: 1.4.1 or later
 - XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.5.0 or later
 - FaceLite: 1.3.0 or later
 - XPass 2: 1.2.4 or later
 - FaceStation F2: 1.1.2 or later
 - X-Station 2: 1.1.0 or later
 - OM-120: 1.2.0 or later
 - Secure I/O 2: 1.3.0 or later
 - DM-20: 1.2.1 or later
 - IM-120: 1.0.0 or later
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BioStar 2.8.13

New and improved features

Category	Functionality
Time & Attendance	▪ Created the T&A report inquiry API ▪ Supports private SSL certificates with a passphrase ▪ Changed the TLS default version to 1.2 ▪ Updated T&A APIs in Swagger ▪ Improved of the T&A report inquiry performance

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later

1 BioStar 2 Overview

- BioStation 2: 1.10.0 or later
- BioStation A2: 1.9.0 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.6.3 or later
- FaceStation 2: 1.5.0 or later
- CoreStation: 1.5.1 or later
- BioEntry P2: 1.4.1 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.4.0 or later
- XPass D2: 1.3.2 or later
- XPass D2 (Rev 2): 1.5.0 or later
- FaceLite: 1.3.0 or later
- XPass 2: 1.2.3 or later
- FaceStation F2: 1.1.1 or later
- X-Station 2: 1.1.0 or later
- OM-120: 1.2.0 or later
- Secure I/O 2: 1.3.0 or later
- DM-20: 1.2.1 or later

BioStar 2.8.12

New and improved features

Category	Functionality
Device	▪ Supports X-Station 2 Fingerprint model (XS2-ODPB, XS2-OAPB)

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.10.0 or later
- BioStation A2: 1.9.0 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.6.3 or later
- FaceStation 2: 1.5.0 or later
- CoreStation: 1.5.1 or later
- BioEntry P2: 1.4.1 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.4.0 or later

1 BioStar 2 Overview

- XPass D2: 1.3.2 or later
 - XPass D2 (Rev 2): 1.5.0 or later
 - FaceLite: 1.3.0 or later
 - XPass 2: 1.2.3 or later
 - FaceStation F2: 1.1.1 or later
 - X-Station 2: 1.0.3 or later
 - OM-120: 1.2.0 or later
 - Secure I/O 2: 1.3.0 or later
 - DM-20: 1.2.1 or later
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BioStar 2.8.11

New and improved features

Category	Functionality
General	▪ Updated APIs in Swagger ▪ Updated a Japanese resource file
User	▪ Supports a new credential - QR/Barcode
Device	▪ Supports X-Station 2 (XS2-QDPB, XS2-QAPB, XS2-DPB, XS2-APB)
Zone	▪ Supports Occupancy Limit Zone
Setting	▪ Separated email settings of both Visual Face Mobile Enrollment and QR

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.9.0 or later
- BioStation A2: 1.8.0 or later
- BioStation L2: 1.6.1 or later
- BioEntry W2: 1.6.3 or later
- FaceStation 2: 1.4.2 or later
- CoreStation: 1.5.1 or later
- BioEntry P2: 1.4.1 or later
- BioEntry R2: 1.4.1 or later
- BioLite N2: 1.3.2 or later
- XPass D2: 1.3.2 or later

1 BioStar 2 Overview

- XPass D2 (Rev 2): 1.5.0 or later
 - FaceLite: 1.2.0 or later
 - XPass 2: 1.2.3 or later
 - FaceStation F2: 1.0.5 or later
 - X-Station 2: 1.0.1 or later
 - OM-120: 1.2.0 or later
 - Secure I/O 2: 1.3.0 or later
 - DM-20: 1.2.1 or later
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BioStar 2.8.10

New and improved features

Category	Functionality
General	▪ Supplementation of New Local API ▪ Updated a German resource file
User	▪ Supports a drag & drop method when registering Visual Face with 'Upload Image' ▪ Provides guidance on success or failure of Visual Face Mobile Enrollment ▪ Supports new Date File Export/Import
Device	▪ Added minimum threshold temperature setting function on the thermal camera ▪ Supports Intelligent Slave ▪ Screen saver option support for FaceStation 2, FaceStation F2
Setting	▪ Improved Email Settings

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.9.0 or later
- BioStation A2: 1.8.0 or later
- BioStation L2: 1.6.0 or later
- BioEntry W2: 1.6.2 or later
- FaceStation 2: 1.4.0 or later
- CoreStation: 1.4.1 or later
- BioEntry P2: 1.4.0 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.3.2 or later

1 BioStar 2 Overview

- XPass D2: 1.3.1 or later
 - XPass D2 (Rev 2): 1.4.2 or later
 - FaceLite: 1.2.0 or later
 - XPass 2: 1.2.2 or later
 - FaceStation F2: 1.0.2 or later
 - OM-120: 1.2.0 or later
 - Secure I/O 2: 1.3.0 or later
 - DM-20: 1.2.0 or later
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BioStar 2.8.9

New and improved features

Category	Functionality
General	▪ Updated some language resource files
User	▪ Displays user information on the Mobile Access Cards ▪ Provides a guide on the screen when registering Visual Face on the mobile device
Time & Attendance	▪ Improves server synchronization structure
Setting	▪ Stabilization of features for Mobile Access - Supports Dynamic site - Improves a user interface

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.9.0 or later
- BioStation A2: 1.8.0 or later
- BioStation L2: 1.6.0 or later
- BioEntry W2: 1.6.1 or later
- FaceStation 2: 1.4.0 or later
- CoreStation: 1.4.1 or later
- BioEntry P2: 1.4.0 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.3.2 or later
- XPass D2: 1.3.1 or later
- XPass D2 (Rev 2): 1.4.2 or later

1 BioStar 2 Overview

- FaceLite: 1.2.0 or later
- XPass 2: 1.2.2 or later
- FaceStation F2: 1.0.1 or later
- OM-120: 1.2.0 or later
- Secure I/O 2: 1.3.0 or later
- DM-20: 1.2.0 or later

BioStar 2.8.8

New and improved features

Category	Functionality
General	▪ BioStar 2 performance improvements ▪ Supplementation of New Local API
User	▪ Supports batch registration of Visual Face using CSV import
Device	▪ Stabilization of features for thermal camera
Monitoring	▪ Supports thermal report
Time & Attendance	▪ Fixed bugs of some features in the TIME ATTENDANCE menu
Setting	▪ Email contents improvements ▪ Stabilization of 'Specific Devices' Automatic User Synchronization option

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.9.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.6.0 or later
- BioEntry W2: 1.6.0 or later
- FaceStation 2: 1.4.0 or later
- CoreStation: 1.4.1 or later
- BioEntry P2: 1.4.0 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.3.2 or later
- XPass D2: 1.3.1 or later
- XPass D2 (Rev 2): 1.4.2 or later
- FaceLite: 1.1.0 or later

1 BioStar 2 Overview

- XPass 2: 1.2.2 or later
 - FaceStation F2: 1.0.0 or later
 - OM-120: 1.2.0 or later
 - Secure I/O 2: 1.3.0 or later
 - DM-20: 1.2.0 or later
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BioStar 2.8.6

New and improved features

Category	Functionality
Device	▪ Supports server matching on FaceStation 2 ▪ Supports thermal camera on face authentication devices ▪ Support FaceStation F2 ▪ Support BioEntry W2 (Rev 2)

Compatible firmware

- BioLite Net: 2.3.5 or later
 - BioEntry Plus: 2.3.4 or later
 - BioEntry W: 2.3.4 or later
 - XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.8.0 or later
 - BioStation A2: 1.7.1 or later
 - BioStation L2: 1.6.0 or later
 - BioEntry W2: 1.5.0 or later
 - FaceStation 2: 1.3.1 or later
 - CoreStation: 1.4.0 or later
 - BioEntry P2: 1.4.0 or later
 - BioEntry R2: 1.4.0 or later
 - BioLite N2: 1.3.1 or later
 - XPass D2: 1.3.1 or later
 - XPass D2 (Rev 2): 1.4.1 or later
 - FaceLite: 1.1.0 or later
 - XPass 2: 1.2.1 or later
 - OM-120: 1.2.0 or later
 - Secure I/O 2: 1.3.0 or later
 - DM-20: 1.2.0 or later
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1 BioStar 2 Overview

BioStar 2.8.5

New and improved features

Category	Functionality
Time & Attendance	▪ Supports Wiegand devices ▪ Improved the Individual Report usability ▪ Supports users to update TA reports

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.6.0 or later
- BioEntry W2: 1.5.0 or later
- FaceStation 2: 1.3.1 or later
- CoreStation: 1.4.0 or later
- BioEntry P2: 1.4.0 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.3.1 or later
- XPass D2: 1.3.1 or later
- XPass D2 (Rev 2): 1.4.1 or later
- FaceLite: 1.1.0 or later
- XPass 2: 1.2.1 or later
- OM-120: 1.2.0 or later
- Secure I/O 2: 1.3.0 or later
- DM-20: 1.2.0 or later

BioStar 2.8.4

New and improved features

Category	Functionality
General	▪ Supplementation of New Local API ▪ Improvement of backup and recovery logic for Web -App, CGI server system.conf ▪ Exclusion of TLS V1.1 for improved security ▪ Improved Thrift communication logic log

1 BioStar 2 Overview

Category	Functionality
	▪ Improved security vulnerabilities on Redis
User	▪ Improved the logic for issuing mobile access cards ▪ Improved the logic for issuing mobile access cards using the CSV
Setting	▪ Stabilization of features for mobile access cards

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.5.1 or later
- BioEntry W2: 1.5.0 or later
- FaceStation 2: 1.3.1 or later
- CoreStation: 1.4.0 or later
- BioEntry P2: 1.4.0 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.3.1 or later
- XPass D2: 1.3.1 or later
- XPass D2 (Rev 2): 1.4.1 or later
- FaceLite: 1.1.0 or later
- XPass 2: 1.2.1 or later
- OM-120: 1.2.0 or later
- Secure I/O 2: 1.3.0 or later
- DM-20: 1.2.0 or later

BioStar 2.8.3

New and improved features

Category	Functionality
General	▪ Updated language resource files
Device	▪ Supports FaceStation 2 and FaceLite as a slave of CoreStation ▪ Supports Mobile Access on BioLite N2
Elevator	▪ Improved the scheduled unlock zone function to support elevator
Setting	▪ Supports Zone in the Admin Item Settings of the custom level

1 BioStar 2 Overview

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.5.1 or later
- BioEntry W2: 1.4.1 or later
- FaceStation 2: 1.3.1 or later
- CoreStation: 1.4.0 or later
- BioEntry P2: 1.4.0 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.3.0 or later
- XPass D2: 1.3.0 or later
- XPass D2 (Rev 2): 1.4.0 or later
- FaceLite: 1.1.0 or later
- XPass 2: 1.2.1 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.3.0 or later
- DM-20: 1.2.0 or later

BioStar 2.8.2

New and improved features

Category	Functionality
General	▪ Fixed local file inclusion (LFI) vulnerability

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.5.1 or later
- BioEntry W2: 1.4.1 or later

1 BioStar 2 Overview

- FaceStation 2: 1.3.1 or later
 - CoreStation: 1.3.1 or later
 - BioEntry P2: 1.3.1 or later
 - BioEntry R2: 1.4.0 or later
 - BioLite N2: 1.2.0 or later
 - XPass D2: 1.3.0 or later
 - XPass D2 (Rev 2): 1.4.0 or later
 - FaceLite: 1.1.0 or later
 - XPass 2: 1.2.0 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.5 or later
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BioStar 2.8.1

New and improved features

Category	Functionality
General	▪ Supports MS SQL Server 2019
Time & Attendance	▪ Move the 'In/Out Only' and 'All Punches' options in the Individual Report

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.5.1 or later
- BioEntry W2: 1.4.1 or later
- FaceStation 2: 1.3.1 or later
- CoreStation: 1.3.1 or later
- BioEntry P2: 1.3.1 or later
- BioEntry R2: 1.4.0 or later
- BioLite N2: 1.2.0 or later
- XPass D2: 1.3.0 or later
- XPass D2 (Rev 2): 1.4.0 or later
- FaceLite: 1.1.0 or later
- XPass 2: 1.2.0 or later

1 BioStar 2 Overview

- OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.5 or later
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BioStar 2.8.0

New and improved features

Category	Functionality
General	▪ DB encryption to enhance security on personal information

Compatible firmware

- BioLite Net: 2.3.5 or later
 - BioEntry Plus: 2.3.4 or later
 - BioEntry W: 2.3.4 or later
 - XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.8.0 or later
 - BioStation A2: 1.7.1 or later
 - BioStation L2: 1.5.1 or later
 - BioEntry W2: 1.4.1 or later
 - FaceStation 2: 1.3.0 or later
 - CoreStation: 1.3.1 or later
 - BioEntry P2: 1.3.1 or later
 - BioEntry R2: 1.3.1 or later
 - BioLite N2: 1.2.0 or later
 - XPass D2: 1.2.0 or later
 - XPass D2 (Rev 2): 1.4.0 or later
 - FaceLite: 1.1.0 or later
 - XPass 2: 1.1.0 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.5 or later
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BioStar 2.7.14

New and improved features

1 BioStar 2 Overview

Category	Functionality
General	▪ Supports Windows Authentication for MS SQL database server connections ▪ Supports MS SQL Server 2017 ▪ Added the Floor Control API to BioStar 2 API Documents
Device	▪ Support XPass D2(Rev 2)
Setting	▪ Enhancement in Mobile Access usage ▪ Stabilization of 'Specific Devices' Automatic User Synchronization option

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.1 or later
- BioStation L2: 1.5.1 or later
- BioEntry W2: 1.4.1 or later
- FaceStation 2: 1.3.0 or later
- CoreStation: 1.3.1 or later
- BioEntry P2: 1.3.1 or later
- BioEntry R2: 1.3.1 or later
- BioLite N2: 1.2.0 or later
- XPass D2: 1.2.0 or later
- FaceLite: 1.1.0 or later
- XPass 2: 1.1.0 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.2.4 or later
- DM-20: 1.1.5 or later

BioStar 2.7.12

New and improved features

Category	Functionality
Time & Attendance	▪ Support to generate TA reports simultaneously on multiple clients
Setting	▪ Added the new Suprema Mobile Access ▪ Stabilized 'Specific Devices' Automatic User Synchronization option

1 BioStar 2 Overview

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.8.0 or later
- BioStation A2: 1.7.0 or later
- BioStation L2: 1.5.1 or later
- BioEntry W2: 1.4.1 or later
- FaceStation 2: 1.3.0 or later
- CoreStation: 1.3.1 or later
- BioEntry P2: 1.3.1 or later
- BioEntry R2: 1.3.1 or later
- BioLite N2: 1.2.0 or later
- XPass D2: 1.2.0 or later
- FaceLite: 1.1.0 or later
- XPass 2: 1.1.0 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.2.4 or later
- DM-20: 1.1.5 or later

BioStar 2.7.11

New and improved features

Category	Functionality
General	▪ Improved dashboard usability
User	▪ Added User IP item to User Information
Device	▪ Supports the alert sound for 'Input(Event Name Change)' in the <Trigger & Action>
Monitoring	▪ Supports the sorting of lists for the User ID and User Group column of the <Muster Status> page
Setting	▪ Enhances the system security ▪ Added 'Specific Devices(Only devices belonging to the access group)' option to <Automatic User Synchronization>

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later

1 BioStar 2 Overview

- BioEntry W: 2.3.4 or later
 - XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.8.0 or later
 - BioStation A2: 1.7.0 or later
 - BioStation L2: 1.5.1 or later
 - BioEntry W2: 1.4.1 or later
 - FaceStation 2: 1.3.0 or later
 - CoreStation: 1.3.0 or later
 - BioEntry P2: 1.3.1 or later
 - BioEntry R2: 1.3.1 or later
 - BioLite N2: 1.2.0 or later
 - XPass D2: 1.2.0 or later
 - FaceLite: 1.1.0 or later
 - XPass 2: 1.1.0 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.5 or later
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BioStar 2.7.10

New and improved features

Category	Functionality
Device	▪ Support FaceLite ▪ Support XPass 2
Time & Attendance	▪ Improve the Custom Level ▪ Support to use the custom user field in the T&A report ▪ Supports the sorting for entire data in the T&A report ▪ Added option to select 'First in & Last Out' or 'All in/Out Punches' to search conditions of the individual report
Visitor	▪ Support to the USB fingerprint scanner connection (BioMini, BioMini Plus, BioMini Plus 2)
Setting	▪ Update the resource files of Japanese, Arabic, and Spanish ▪ Add Automatic backup function for Setting.conf file

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later

1 BioStar 2 Overview

- XPass S2: 2.4.4 or later
 - BioStation 2: 1.8.0 or later
 - BioStation A2: 1.7.0 or later
 - BioStation L2: 1.5.0 or later
 - BioEntry W2: 1.4.0 or later
 - FaceStation 2: 1.3.0 or later
 - CoreStation: 1.3.0 or later
 - BioEntry P2: 1.3.0 or later
 - BioEntry R2: 1.3.0 or later
 - BioLite N2: 1.2.0 or later
 - XPass D2: 1.2.0 or later
 - FaceLite: 1.1.0 or later
 - XPass 2: 1.0.1 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.5 or later
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BioStar 2.7.8

New and improved features

Category	Functionality
Device	▪ Supports multiple use function of controllers in CoreStation ▪ Supports options for selection by card type ▪ Supports the fingerprint/face duplicate check ▪ Supports Anti-Tailgating ▪ Supports setting options for Wiegand authentication result output
Door	▪ Supports Anti-Tailgating
Visitor	▪ Supports to search option for visitors using fingerprints
Setting	▪ Supports user group synchronization in Active Directory ▪ Supports Anti-Tailgating

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.1 or later
- BioStation A2: 1.6.0 or later

1 BioStar 2 Overview

- BioStation L2: 1.5.0 or later
 - BioEntry W2: 1.4.0 or later
 - FaceStation 2: 1.2.1 or later
 - CoreStation: 1.3.0 or later
 - BioEntry P2: 1.3.0 or later
 - BioEntry R2: 1.3.0 or later
 - BioLite N2: 1.1.0 or later
 - XPass D2: 1.2.0 or later
 - FaceLite: 1.0.0 or later
 - XPass 2: 1.0.0 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.4 or later
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BioStar 2.7.7

New and improved features

Category	Functionality
General	▪ Change the license policy
Visitor	▪ Add the VISITOR menu
Setting	▪ Add the settings for visitor management

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.1 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.1 or later
- CoreStation: 1.2.0 or later
- BioEntry P2: 1.2.0 or later
- BioEntry R2: 1.2.0 or later
- BioLite N2: 1.1.0 or later
- XPass D2: 1.1.0 or later
- OM-120: 1.1.0 or later

1 BioStar 2 Overview

- Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.4 or later
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BioStar 2.7.6

New and improved features

Category	Functionality
General	▪ Add BioStar 1.x to BioStar 2.x Migration Tool
Monitoring	▪ Support to the Clear APB for each user
Setting	▪ Add the event items to IMAGE LOG menu ▪ Add the encryption option to Active Directory menu ▪ Supports that the administrator can change the port 9000 in FastCGI of Port menu

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.1 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.1 or later
- CoreStation: 1.2.0 or later
- BioEntry P2: 1.2.0 or later
- BioEntry R2: 1.2.0 or later
- BioLite N2: 1.1.0 or later
- XPass D2: 1.1.0 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.2.4 or later
- DM-20: 1.1.4 or later

BioStar 2.7.5

New and improved features

Category	Functionality
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1 BioStar 2 Overview

User	▪ Support to the list sorting for group and status column
Device	▪ Support to the list sorting for RS-485 column ▪ Remove the unsupported AoC events ▪ Added an Ambient Brightness option to the FaceStation 2 slave device
Door	▪ Support to the list sorting for group column
Video	▪ Remove the unsupported AoC events
Setting	▪ Add the Active Directory menu ▪ Supports that the administrator can change the port 9000 in setting.conf ▪ Remove the unsupported AoC events

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.1 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.1 or later
- CoreStation: 1.2.0 or later
- BioEntry P2: 1.2.0 or later
- BioEntry R2: 1.2.0 or later
- BioLite N2: 1.1.0 or later
- XPass D2: 1.1.0 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.2.4 or later
- DM-20: 1.1.4 or later

BioStar 2.7.4

New and improved features

Category	Functionality
Device	▪ Support for Quick Enrollment for FaceStation 2 (FaceStation 2 FW V1.2.2 or later)
Setting	▪ Limits the use of passwords that contain the same string, consecutive string, and login ID

1 BioStar 2 Overview

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| | <ul style="list-style-type: none">▪ Limits reuse of the same password▪ Support to Spanish and Arabic▪ Expanding the number of custom levels to unlimited |
|--|--|
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Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.1 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.1 or later
- CoreStation: 1.2.0 or later
- BioEntry P2: 1.2.0 or later
- BioEntry R2: 1.2.0 or later
- BioLite N2: 1.1.0 or later
- XPass D2: 1.1.0 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.2.4 or later
- DM-20: 1.1.4 or later

BioStar 2.7.3

New and improved features

Category	Functionality
Device	▪ Increase the number of administrators that can be added per device ▪ Change the way new settings are applied when adding administrators using batch edit of devices
Setting	▪ Support for reconnection of devices configured as a port forwarding

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later

1 BioStar 2 Overview

- BioStation 2: 1.7.0 or later
 - BioStation A2: 1.6.0 or later
 - BioStation L2: 1.4.0 or later
 - BioEntry W2: 1.3.0 or later
 - FaceStation 2: 1.2.0 or later
 - CoreStation: 1.2.0 or later
 - BioEntry P2: 1.2.0 or later
 - BioEntry R2: 1.2.0 or later
 - BioLite N2: 1.1.0 or later
 - XPass D2: 1.1.0 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.4 or later
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BioStar 2.7.2

New and improved features

Category	Functionality
Monitoring	▪ Support to Live Video View on Graphic Map ▪ Support to viewing Anti-passback Zone and Fire Alarm Zone on Graphic Map
Time & Attendance	▪ Supports <Allowed a day before/after time> setting for working 24 hours or longer
Setting	▪ Add the Security menu ▪ Change Password Level options ▪ Support to the setting for Maximum Password Age and Maximum Password Change Limit ▪ Support to the setting options for password failures at login ▪ Support to the Storage Path Settings for image logs

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.0 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.0 or later

1 BioStar 2 Overview

- CoreStation: 1.2.0 or later
 - BioEntry P2: 1.2.0 or later
 - BioEntry R2: 1.2.0 or later
 - BioLite N2: 1.1.0 or later
 - XPass D2: 1.1.0 or later
 - OM-120: 1.1.0 or later
 - Secure I/O 2: 1.2.4 or later
 - DM-20: 1.1.4 or later
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BioStar 2.7.1

New and improved features

Category	Functionality
Device	▪ Support to Input(Event Name Change) in Trigger & Action ▪ Support to the OM-120 Relay time setting value from 1 second
User	▪ Support for deleting users stored on the device
Monitoring	▪ Provides the log about whether a user has been updated on the device or the server
Setting	▪ Supports synchronization of all devices connected to the server when users update the device ▪ Adds root password verification procedures during installation and upgrade

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.0 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.0 or later
- CoreStation: 1.2.0 or later
- BioEntry P2: 1.2.0 or later
- BioEntry R2: 1.2.0 or later
- BioLite N2: 1.1.0 or later
- XPass D2: 1.1.0 or later
- OM-120: 1.1.0 or later

1 BioStar 2 Overview

- Secure I/O 2: 1.2.4 or later
- DM-20: 1.1.4 or later

BioStar 2.7.0

New and improved features

Category	Functionality
Device	▪ Support to the number of users, fingerprints, faces, and cards in Manage Users in Device
Access Control	▪ Support for a larger number of access groups and access groups
Monitoring	▪ Support to Graphic Map
Time & Attendance	▪ Support to Working alarm time report ▪ Improve the process for generating the time card ▪ Support to the separator option in CSV export ▪ Support to Floating shift ▪ Support to Fixed option in Meal deduction and Break Time ▪ Support to Weekend days setting option in Schedule Template
Setting	▪ Support to Custom Account Level in T&A ▪ Support to AES encryption type for DESFire card ▪ Support to DESFire Advanced option

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.7.0 or later
- BioStation A2: 1.6.0 or later
- BioStation L2: 1.4.0 or later
- BioEntry W2: 1.3.0 or later
- FaceStation 2: 1.2.0 or later
- CoreStation: 1.2.0 or later
- BioEntry P2: 1.2.0 or later
- BioEntry R2: 1.2.0 or later
- BioLite N2: 1.1.0 or later
- XPass D2: 1.1.0 or later
- OM-120: 1.1.0 or later
- Secure I/O 2: 1.2.4 or later

1 BioStar 2 Overview

- DM-20: 1.1.4 or later
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BioStar 2.6.4

New and improved features

Category	Functionality
Setting	▪ Support to set the same action for different triggers

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.4 or later
- BioEntry W: 2.3.4 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.6.2 or later
- BioStation A2: 1.5.1 or later
- BioStation L2: 1.3.2 or later
- BioEntry W2: 1.2.3 or later
- FaceStation 2: 1.1.1 or later
- CoreStation: 1.1.2 or later
- BioEntry P2: 1.1.2 or later
- BioEntry R2: 1.1.1 or later
- BioLite N2: 1.0.2 or later
- XPass D2: 1.0.2 or later
- OM-120: 1.0.0 or later
- Secure I/O 2: 1.2.1 or later
- DM-20: 1.1.2 or later

BioStar 2.6.3

New and improved features

Category	Functionality
Setting	▪ Support Admin Item Settings when configuring Custom Account Level

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.3 or later

1 BioStar 2 Overview

- BioEntry W: 2.3.3 or later
 - XPass: 2.4.4 or later
 - XPass S2: 2.4.4 or later
 - BioStation 2: 1.6.1 or later
 - BioStation A2: 1.5.1 or later
 - BioStation L2: 1.3.1 or later
 - BioEntry W2: 1.2.1 or later
 - FaceStation 2: 1.1.1 or later
 - CoreStation: 1.1.1 or later
 - BioEntry P2: 1.1.1 or later
 - BioEntry R2: 1.1.0 or later
 - BioLite N2: 1.0.2 or later
 - XPass D2: 1.0.1 or later
 - OM-120: 1.0.0 or later
 - Secure I/O 2: 1.2.1 or later
 - DM-20: 1.1.2 or later
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BioStar 2.6.2

New and improved features

Category	Functionality
User	▪ Support the user information export/import by using the external storage (USB)
Video	▪ Support the real-time video monitoring
Monitoring	▪ Support the event log import by using the external storage (USB)

Compatible firmware

- BioLite Net: 2.3.5 or later
- BioEntry Plus: 2.3.3 or later
- BioEntry W: 2.3.3 or later
- XPass: 2.4.4 or later
- XPass S2: 2.4.4 or later
- BioStation 2: 1.6.1 or later
- BioStation A2: 1.5.1 or later
- BioStation L2: 1.3.1 or later
- BioEntry W2: 1.2.1 or later
- FaceStation 2: 1.1.1 or later
- CoreStation: 1.1.1 or later
- BioEntry P2: 1.1.1 or later

1 BioStar 2 Overview

- BioEntry R2: 1.1.0 or later
- BioLite N2: 1.0.2 or later
- XPass D2: 1.0.1 or later
- OM-120: 1.0.0 or later
- Secure I/O 2: 1.2.1 or later
- DM-20: 1.1.2 or later

BioStar 2.6.0

New and improved features

Category	Functionality
General	▪ Support the Daylight Saving Time(DST) ▪ Support the database encryption key management ▪ Support the system ports setting ▪ Support the system logs management ▪ Firmware upgrade notifications supported ▪ Change the license policy
User & Card	▪ Support for the auto-Increase User IDs ▪ Support the iCLASS Seos card setting ▪ Support the hexadecimal values for the primary and secondary site keys on the smart card ▪ Wiegand card search supported from the Unassigned card menu ▪ Support for automatic deletion of user information when issuing an AoC card ▪ Wiegand Legacy Mode Support ▪ Blacklist card deletion support
Device	▪ Support BioLite N2 ▪ Support XPass D2 ▪ Support BioMini Plus 2 ▪ Support the user information and log deletion when a tamper event occurs (secure tamper) ▪ Device reset excluding network settings ▪ Wiegand In/Out Support
Zone	▪ Support the interlock zone ▪ Support the muster zone
Video	▪ Support MS SQL for Video log ▪ Support the video file storage management
Monitoring	▪ Add door column to event log list

Compatible firmware

1 BioStar 2 Overview

- BioLite Net: 2.3.3 or later
 - BioEntry Plus: 2.3.3 or later
 - BioEntry W: 2.3.3 or later
 - XPass: 2.4.3 or later
 - XPass S2: 2.4.3 or later
 - BioStation 2: 1.6.0 or later
 - BioStation A2: 1.5.0 or later
 - BioStation L2: 1.3.0 or later
 - BioEntry W2: 1.2.0 or later
 - FaceStation 2: 1.1.0 or later
 - CoreStation: 1.1.0 or later
 - BioEntry P2: 1.1.0 or later
 - BioEntry R2: 1.1.0 or later
 - BioLite N2: 1.0.0 or later
 - XPass D2: 1.0.0 or later
 - OM-120: 1.0.0 or later
 - Secure I/O 2: 1.2.1 or later
 - DM-20: 1.1.2 or later
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BioStar 2.5.0

New and improved features

Category	Functionality
General	▪ Setting https as the default communication protocol ▪ Oracle Database not supported
Device	▪ Supports CoreStation ▪ Supports BioEntry P2 ▪ Supports BioEntry R2 ▪ Supports the enrollment of a fingerprint from the slave device(BioLite Net does not support this feature)
Zone	▪ Supports Intrusion Alarm zone (Local)
Monitoring	▪ Event Log, Real-time Log: T&A Key column added ▪ Event Log: Supports the period setting ▪ Supports video log
Video	▪ Supports NVRs (ACTi, Dahua, Hikvision) ▪ Supports IP cameras
Setting	▪ Alert: Network disconnection detection alert added ▪ Supports Audit Trail

1 BioStar 2 Overview

Compatible firmware

- BioLite Net: 2.3.3 or later
- BioEntry Plus: 2.3.3 or later
- BioEntry W: 2.3.3 or later
- XPass: 2.4.3 or later
- XPass S2: 2.4.3 or later
- BioStation 2: 1.5.0 or later
- BioStation A2: 1.4.0 or later
- BioStation L2: 1.2.3 or later
- BioEntry W2: 1.1.4 or later
- FaceStation 2: 1.0.3 or later
- CoreStation: 1.0.0 or later
- BioEntry P2: 1.0.0 or later
- BioEntry R2: 1.0.0 or later

BioStar 2.4.1

New and improved features

Category	Functionality
General	▪ Supports Mobile Card (NFC, BLE)
Device	▪ Supports FaceStation 2
Time & Attendance	▪ Enhanced UI/UX ▪ Merge the time card with T&A report ▪ Display of daily T&A records ▪ Time rate setting is excluded from the time code for leave management. ▪ Break time is displayed on the time slot when fixed work is used. ▪ It is possible to set the Min. Duration and Punch in Time Limit when flexible work is used.
Setting	▪ Supports Face Group Matching

Compatible firmware

- BioLite Net: 2.4.0 or later
- BioEntry Plus: 2.4.0 or later
- BioEntry W: 2.4.0 or later
- XPass: 2.4.1 or later
- XPass S2: 2.4.0 or later
- BioStation 2: 1.4.0 or later
- BioStation A2: 1.3.0 or later
- BioStation L2: 1.2.2 or later

BioStar 2 Overview

- BioEntry W2: 1.1.2 or later
 - FaceStation 2: 1.0.0 or later
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BioStar 2.4.0

New and improved features

Category	Functionality
General	▪ Supports elevator management ▪ Supporting Oracle Database 11g, 12c
Device	▪ Supports OM-120 ▪ Supports card USB device (DUALi DE-620) ▪ Supports secure communication between BioStar 2 and a device
Time & Attendance	▪ Supports time & attendance report PDF export
Setting	▪ Change of detailed custom permission setting ▪ Supports user ID type setting (numbers/alphanumeric characters) ▪ Supports dd/mm/yyyy date format

Compatible firmware

- BioLite Net: 2.4.0 or later
 - BioEntry Plus: 2.4.0 or later
 - BioEntry W: 2.4.0 or later
 - XPass: 2.4.0 or later
 - XPass S2: 2.4.0 or later
 - BioStation 2: 1.4.0 or later
 - BioStation A2: 1.3.0 or later
 - BioStation L2: 1.2.2 or later
 - BioEntry W2: 1.1.2 or later
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BioStar 2.3.0

New and improved features

Category	Functionality
General	▪ Supporting a low-resolution monitor ▪ Improvement in list page move
User	▪ Improvement importing/exporting CSV files

1 BioStar 2 Overview

Device	▪ Supporting BioStation A2 video phone (SIP based) ▪ Supporting the batch editing the device manager ▪ Supporting an additional information display of a device firmware
Door	▪ Supporting an automatic door setting
Setting	▪ Supporting Wiegand card's facility code setting ▪ Supporting the batch editing the Wiegand card data format ▪ Supporting BioStar 2 alert sound's upload and setting (.wav, .mp3) ▪ Supporting the custom account level (up to 32)

Compatible firmware

- BioLite Net: 2.3.0 or later
- BioEntry Plus: 2.3.0 or later
- BioEntry W: 2.3.0 or later
- XPass: 2.3.0 or later
- XPass S2: 2.3.0 or later
- BioStation 2: 1.3.0 or later
- BioStation A2: 1.2.0 or later
- BioStation L2: 1.1.0 or later
- BioEntry W2: 1.0.0 or later

BioStar 2.2.2

New and improved features

- BioEntry W2 support

Compatible firmware

- BioLite Net: 2.2.3 or later
- BioEntry Plus: 2.2.3 or later
- BioEntry W: 2.2.3 or later
- XPass: 2.2.3 or later
- XPass S2: 2.2.3 or later
- BioStation 2: 1.3.0 or later
- BioStation A2: 1.1.0 or later
- BioStation L2: 1.0.0 or later
- BioEntry W2: 1.0.0 or later

BioStar 2.2.1

1 BioStar 2 Overview

New and improved features

- BioStation L2 support
- Long-term idle user management
- Access control privilege management per user
- Automatic database backup
- Enrollment device management
- Custom user fields

Compatible firmware

- BioLite Net: 2.2.3 or later
- BioEntry Plus: 2.2.3 or later
- BioEntry W: 2.2.3 or later
- XPass: 2.2.3 or later
- XPass S2: 2.2.3 or later
- BioStation 2: 1.3.0 or later
- BioStation A2: 1.1.0 or later
- BioStation L2: 1.0.0 or later

BioStar 2.2.0

New and improved features

- BioStation A2 support
- Access On Card
- Secure Credential Card
- Global Anti-passback zone
- Image Log

Compatible firmware

- BioLite Net: 2.2.3 or later
- BioEntry Plus: 2.2.3 or later
- BioEntry W: 2.2.3 or later
- XPass: 2.2.3 or later
- XPass S2: 2.2.3 or later
- BioStation 2: 1.2.0 or later
- BioStation A2: 1.0.0 or later

BioStar 2.1.0

New and improved features

1 BioStar 2 Overview

- BioStar API
- DM-20 support
- Global Anti-passback zone / Local Fire Alarm zone / Local Anti-passback zone
- More secure login password
- License management
- BioStar 2 Cloud support
- BioStar 2 Mobile support
- Zone status monitoring

Compatible firmware

- BioLite Net: 2.0.4 or later
- BioEntry Plus: 2.0.4 or later
- BioEntry W: 2.0.4 or later
- XPass: 2.0.4 or later
- XPass S2: 2.0.4 or later
- BioStation 2: 1.0.1 or later

BioStar 2.0.1

New and improved features

- BioStation 2 support
- Wireless LAN configuration
- T&A configuration
- Interphone configuration
- Display and sound configuration
- CSV import and export
- Multi-language resource support
- Memory optimization of BioStar 2 server

Compatible firmware

- BioLite Net: 2.0.0 or later
- BioEntry Plus: 2.0.0 or later
- BioEntry W: 2.0.0 or later
- XPass: 2.0.0 or later
- XPass S2: 2.0.0 or later

Before using BioStar 2 to implement an access control system, the BioStar 2 server must be installed on the administrator PC.

The BioStar 2 server receives event logs, user information, etc. from connected devices and stores them.

2 Installation

BioStar 2 can be installed easily. Before installation, please check the [Minimum System Requirements](#). The BioStar 2 installation file can be found on the Suprema Download Center(<https://www.supremainc.com/download-center>).

Minimum System Requirements

Installing BioStar 2

Minimum System Requirements

Item		Small	Medium	Enterprise
Environment	Total Devices	1 to 50	51 to 100	101 to 1,000
System requirement (Server)	OS	Windows 10, Windows 11, Windows Server 2016, Windows Server 2019, Windows Server 2022 Windows virtual environments on Mac Boot Camp are not supported.		
	Database	MariaDB 11.4.4, MS SQL Server 2012 SP3, MS SQL Server 2014 SP2, MS SQL Server 2016 SP1, MS SQL Server 2017, MS SQL Server 2019, MS SQL Server 2022 - TLS 1.2 is supported for MS SQL secure communication. - For enterprise environment, it is recommended to install an MS SQL database. - MariaDB 11.4.4 is not supported on Windows Server 2012 operating system, so BioStar 2 cannot be upgraded to version 2.9.10 or later.		
	CPU	2 GHz Dual Core	4 GHz Quad Core	4 GHz 16 Core
	RAM	8 GB	16 GB	32 GB
	SSD	512 GB	1 TB	1 TB
System requirement (Client)	CPU	1 GHz	1 GHz	1 GHz
	RAM	4 GB	4 GB	4 GB
	Web Browser	Google Chrome version 100 or later		

Note

- For the best performance, use only the 64-bit operating system.
- BioStar 2 is optimized for Google Chrome.
- BioStar 2 supports Windows 7, but Microsoft's technical support for Windows 7 has ended. Be

2 Installation

aware of the OS selection when installing the system.

- If you are using Windows 8.1 install, please refer to the [KB2919355 update](#) link.
- Starting from BioStar 2 v2.9.10, MS SQL Server 2022 is supported, and you can connect using either the [Microsoft OLE DB Driver for SQL Server](#) or [Native Client](#).
 - If the OLE DB driver is installed, BioStar 2 will use OLE DB as the default connection method. If only the Native Client is installed, the system will connect using Native Client.
 - Since Native Client is no longer included with SQL Server 2022 and has limitations in terms of compatibility and features, it is recommended to use the OLE DB driver for connecting to newer versions of SQL Server.
- If MS SQL Server and BioStar 2 are installed on different PCs, the PC running BioStar 2 must have either the [Microsoft OLE DB Driver for SQL Server](#) or [Native Client](#) installed.
 - When using the TA menu, the [Microsoft ODBC Driver 17 for SQL Server](#) is also required. Please verify your environment and install it accordingly.
- Oracle Database is no longer supported. For details, please contact the Suprema Technical Support.

Installing BioStar 2

BioStar 2 supports a 32-bit operating system and a 64-bit operating system. Check the system type of your PC where BioStar 2 is to be installed and carry out its installation accordingly.

Note

- Installation files for 32-bit operating systems are not provided from BioStar 2.9.2.
- Do not install BioStar 2 on a PC where BioStar 1 is installed. This may cause performance problems.
- If BioStar 2.3.0 is installed on top of a BioStar 2.2.1 or 2.2.2 installation, all information stored in the SQLite database is migrated to a new MariaDB database.
- Upgrading directly from the existing version to the latest version is possible from BioStar 2.6.0 or higher. If the installed version is lower than 2.6.0, installing all versions in a correct sequence until reaching version v2.6.0 is essential.

Current Version	Upgrade Path
2	2.2.1 > 2.3 > 2.4 > 2.4.1 > 2.5.0 > 2.6.4 > Latest Version
2.2 2.2.1 2.2.2	2.3 > 2.4 > 2.4.1 > 2.5.0 > 2.6.4 > Latest Version
2.3	2.4 > 2.4.1 > 2.5.0 > 2.6.4 > Latest Version
2.4	2.4.1 > 2.5.0 > 2.6.4 > Latest Version
2.5 2.6	2.6.4 > Latest Version
2.6.4 or higher	Latest Version

2 Installation

- If you are using Windows 8.1 install, please refer to the [KB2919355 update](#) link.
- If you are using MS SQL 2012 Express, please refer to the [Service Pack 3](#) link.
- If you are using MS SQL 2014 Express, please refer to the [Service Pack 2](#) link.
- Starting from BioStar 2 v2.9.10, MS SQL Server 2022 is supported, and you can connect using either the [Microsoft OLE DB Driver for SQL Server](#) or [Native Client](#).
 - If the OLE DB driver is installed, BioStar 2 will use OLE DB as the default connection method. If only the Native Client is installed, the system will connect using Native Client.
 - Since Native Client is no longer included with SQL Server 2022 and has limitations in terms of compatibility and features, it is recommended to use the OLE DB driver for connecting to newer versions of SQL Server.
- If MS SQL Server and BioStar 2 are installed on different PCs, the PC running BioStar 2 must have either the [Microsoft OLE DB Driver for SQL Server](#) or [Native Client](#) installed.
 - When using the TA menu, the [Microsoft ODBC Driver 17 for SQL Server](#) is also required. Please verify your environment and install it accordingly.
- If you are using MS SQL Server, set the Collation option of the server and each table to CI (Case-insensitive).
- When backing up a database from an older version of BioStar 2, disable all services and procedures. Furthermore, if you do not back up and restore the AC database and the TA database together, you will not be able to use the TA database.
- If you want to back up the database of BioStar 2, be sure to also back up the enckey in the %Program Files% BioStar 2 (x64)%util folder and the system.conf and setting.conf file in the %Program Files% BioStar 2(x64) folder. Otherwise, the database will be unavailable.
- The default values for the ports used by BioStar 2 are as follows. If another program occupies the same port, BioStar 2 may not work properly.

Port			
• HTTP Port	80		Available
• Web-socket Port	9002		Available
• Database Port	3312		Available
• T&A HTTPS Port	3002		Available
• FastCGI Port	9000		Available
• Unified Gateway HTTPS Port	5002		Available
• Report HTTPS port	4214		Available
• HTTPS Port	443		Available
• API Port	9010		Available
• T&A HTTP Port	3000		Available
• T&A Cloud Port	52001		Available
• Unified Gateway HTTP Port	5000		Available
• Report HTTP port	4213		Available

If you use a database configured by the user directly, check the following items before installing BioStar 2.

— MariaDB

- Open the my.cnf file and then change some configurations under

2 Installation

[mysqld] as shown below.

```
character-set-server=utf8
collation-server=utf8_unicode_ci
max_connections = 600
```

- Open the my.cnf file and then add some configurations under [mysqld] as shown below.

```
log_bin_trust_function_creators = 1
group_concat_max_len = 102400
```

- Access MariaDB with the root permission and execute the following command.

```
> GRANT SUPER ON . TO user_id@'localhost' IDENTIFIED BY "passwo
> GRANT SUPER ON . TO user_id@'%' IDENTIFIED BY "password";
```

— MS SQL Server

Note

- All databases and tables should set the Collation as CI (case-insensitive).
- The database name can only enter alphanumeric (case-sensitive) and special characters (-, _).

Setting the port

- a) Run SQL Server Configuration Manager and set TCP/ IP Protocol for Protocols for SQLEXPRESS to the desired port number.
- b) Restart SQL Server Services to apply the settings.

Creating the user and database

- a) Log in to the sa account using SQL Server Authentication in SQL Server Management Studio.
- b) Right-click on Security and click New Login.
- c) Enter the desired name in the Login Name field and select SQL Server Authentication.
- d) Enter the desired password in the Password and Confirm password field, and then uncheck the Enforce password policy.
- e) Click OK to save the settings.
- f) Right-click on Database and click New Database.
- g) Enter the desired name in the Database Name field.
- h) Enter the login name in the Owner field. Use the login name set in step c).

2 Installation

- i) In the Database Files section, we recommend that set the Initial Size (MB) to 3000 and set the Autogrowth/Maxsize to By 10 MB, Unlimited. However, in environments with a high number of transactions, logs should be backed up periodically to prevent the log size from continuously increasing.

Setting the Windows Authentication database

1. Presetting

If you are using Microsoft Windows Active Directory, complete the presets as below before setting up the Windows Authentication database.

- a) Log in to SQL Server Management Studio with an administrator account.
- b) Right-click on Security and click New Login.
- c) Select Windows Authentication and click Search.
- d) In the Select a user or group window, click Location, then select the Active Directory path and click OK.
- e) Enter the user name in the object name field, then click Check Names > OK.
- f) Click Server Roles in the Select a page.
- g) Select sysadmin and click OK.
- h) Click User Mapping in the Select a page.
- i) Select ac, master, ta, ve and set the Default Schema to dbo.
- j) Click OK to save the settings.

2. Settings to use MS SQL Windows Authentication with Active Directory account

- a) Run services.msc and log in as a domain user by selecting Specify account in the MSSQL DB's Properties > Logon.
- b) Add port 1433 as an exception to your Windows firewall.
- c) Create an empty ac, ta, ve database in MS SQL with sysadmin authentication.
- d) Enable Windows Authentication for domain users in MS SQL and assign all permissions except sysadmin to the ac, ta, ve databases.
- e) Connect all services except Local Computer in services.msc.
- f) Set the domain user as an administrator on the local service computer.
- g) ODBC connection to MSSQL.

3. Setting the database

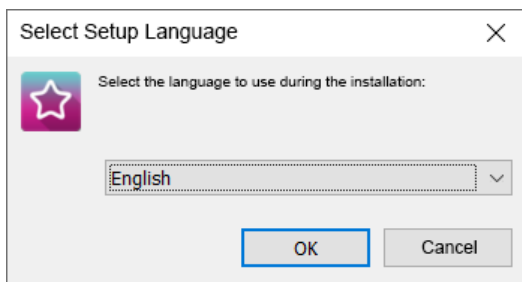
- a) Run SQL Server Configuration Manager and click Client Protocol under SQL Native Client Configuration.
- b) Select TCP/ IP and check the default port.
- c) Click Protocols for SQLEXPRESS under SQL Server Network

2 Installation

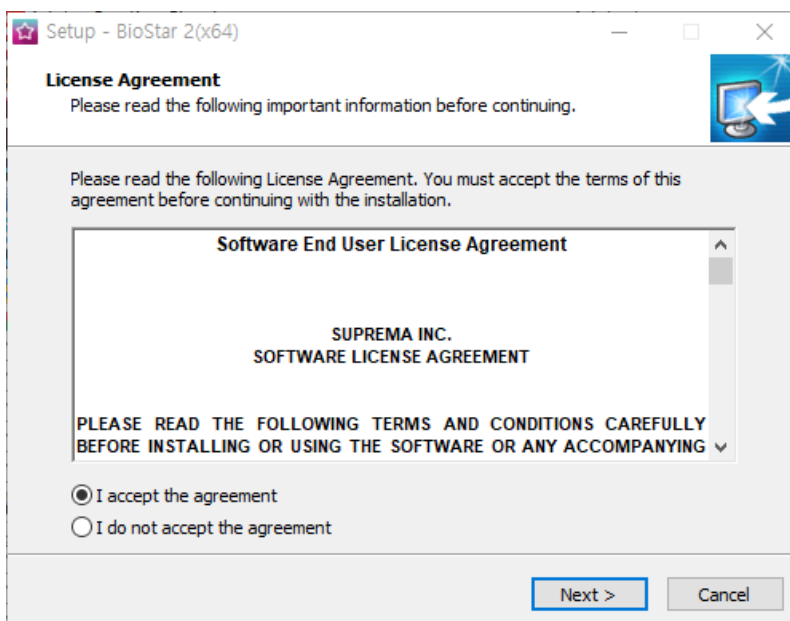
Configuration.

- d) Make sure that the ODBC port is set to the same as the default port in TCP/ IP.
- e) Log in to SQL Server Management Studio by an administrator account.
- f) Click Security> Logins and then double-click NT AUTHORITY\SYSTEM.
- g) Click Server Roles in the Select a page.
- h) Select public, sysadmin, and then click OK.
- i) Click User Mapping in the Select a page.
- j) Select the ac, master, ta, and ve databases and click OK to save.

- 1) Double-click the downloaded setup program. (ex. 'BioStar 2 Setup.x.x.x.xxx.exe')
- 2) Select a language and click OK.

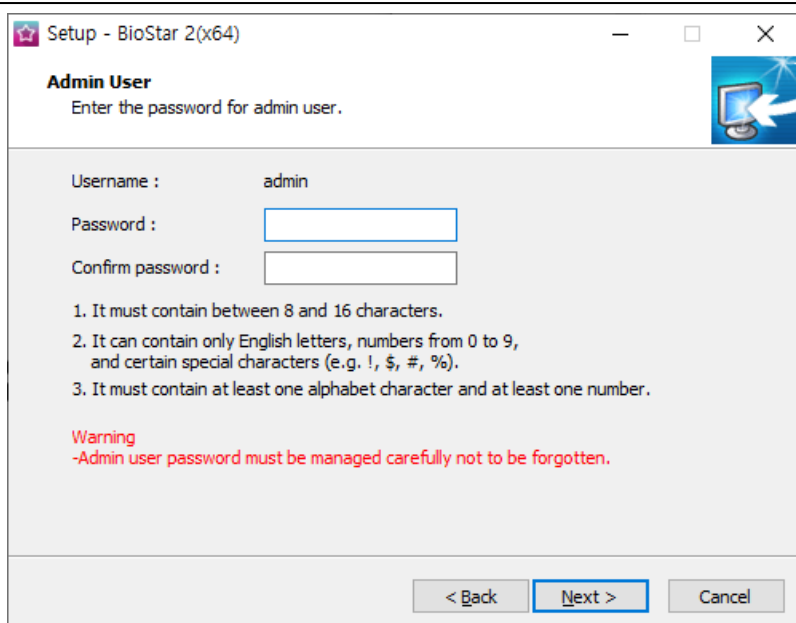


- 3) To continue the installation, select I accept the agreement and click Next.



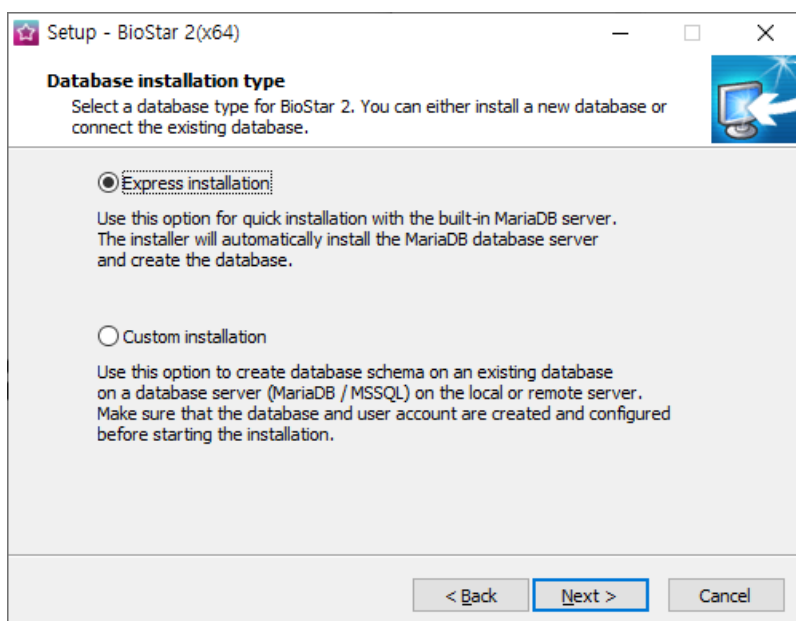
- 4) Enter the password for admin account and click Next. The password set in this step will be used when you log in to BioStar 2.

2 Installation



The screenshot shows the 'Admin User' step of the BioStar 2 setup. The window title is 'Setup - BioStar 2(x64)'. Below the title bar, there's a section titled 'Admin User' with the instruction 'Enter the password for admin user.' To the right of this text is a small icon of a computer monitor with a blue arrow pointing to it. Below the instruction, there are three input fields: 'Username' with the value 'admin', 'Password', and 'Confirm password'. Below these fields are three numbered instructions for password creation: 1. It must contain between 8 and 16 characters. 2. It can contain only English letters, numbers from 0 to 9, and certain special characters (e.g. !, \$, #, %). 3. It must contain at least one alphabet character and at least one number. Below these instructions is a red 'Warning' message: '-Admin user password must be managed carefully not to be forgotten.' At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a blue border.

- 5) Install the database to be used in BioStar 2. You can install a new MariaDB or connect it to the already-installed MariaDB. Installing BioStar 2 for the first time, please select Express Installation and click Next.



The screenshot shows the 'Database installation type' step of the BioStar 2 setup. The window title is 'Setup - BioStar 2(x64)'. Below the title bar, there's a section titled 'Database installation type' with the instruction 'Select a database type for BioStar 2. You can either install a new database or connect the existing database.' To the right of this text is a small icon of a computer monitor with a blue arrow pointing to it. Below the instruction, there are two radio button options: 'Express installation' (which is selected) and 'Custom installation'. Below 'Express installation' is a description: 'Use this option for quick installation with the built-in MariaDB server. The installer will automatically install the MariaDB database server and create the database.' Below 'Custom installation' is a description: 'Use this option to create database schema on an existing database on a database server (MariaDB / MSSQL) on the local or remote server. Make sure that the database and user account are created and configured before starting the installation.' At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a blue border.

- 6) If Express Installation has been selected from Database Installation Type, enter the database manager's account password and click Next. If Custom Installation has been selected from Database Installation Type, enter the detailed information on the already-configured database and click Next.

2 Installation

Setup - BioStar 2(x64)

Express Installation
Enter the password for database root account.

Username : root

Password :

Confirm password :

1. It must contain between 8 and 16 characters.
2. It can contain only English letters, numbers from 0 to 9, and certain special characters (e.g. !, \$, #, %).
3. Enter the existing root account password when upgrading the server.

Warning
-Root account password must be managed carefully not to be forgotten.
-Root account password is also used as the initial AC, TA, Video DB passwords.
-When the password is lost, it will not be able to make a version upgrade and DB backup/recovery.

< Back Next > Cancel

Setup - BioStar 2(x64)

Custom installation
If you choose database type, you must enter the Root privilege account information.

DB Type : Maria DB

Server IP :

Server port :

AC DB name :

AC Username :

AC Password :

TA DB name :

TA Username :

TA Password :

VE DB name :

VE Username :

VE Password :

Warning
-All database and tables should set the Collation as CI(case-insensitive).

☒ Generate the database tables

< Back Next > Cancel

Note

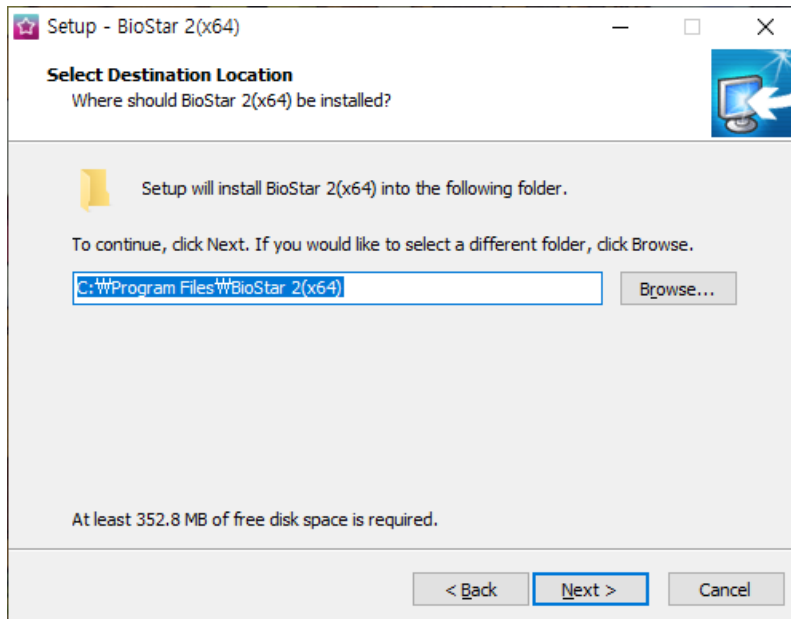
- BioStar 2 supports the following databases.
 - MariaDB 11.4.4
 - MS SQL Server 2012 SP3
 - MS SQL Server 2014 SP2
 - MS SQL Server 2016 SP1
 - MS SQL Server 2017
 - MS SQL Server 2019
 - MS SQL Server 2022
- TLS 1.2 is supported for MS SQL secure communication.
- MariaDB 11.4.4 is not supported on Windows Server 2012 operating system, so BioStar 2 cannot be upgraded to version 2.9.10 or later.
- If the database table creation fails when MS SQL Server is set as the Database Type, you can

2 Installation

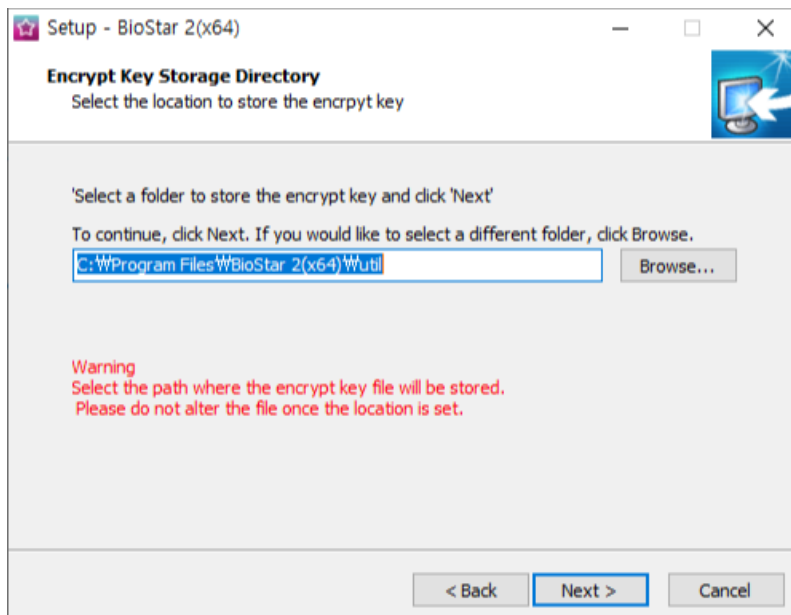
create the table by executing the script in C:\Program Files\BioStar 2 (x64)\dbscript\mssql folder.

- When installing with custom settings, AC DB name, TA DB name, and VE DB name cannot be set the same.
- To use Windows authentication, [Microsoft ODBC Driver 17 for SQL Server](#) is required. Please install the driver first.

7) Click Next after setting a path for BioStar 2 to be installed.



8) Click Next after setting a path for the encryption key to be stored.



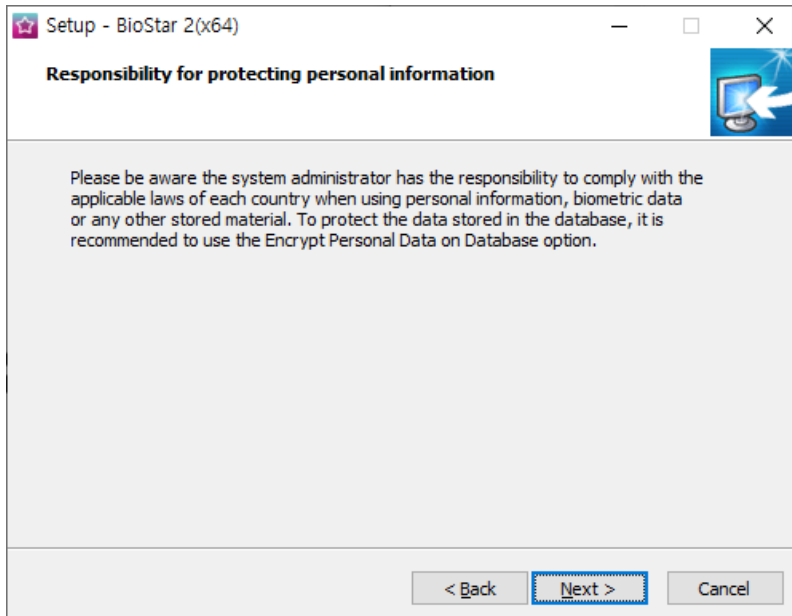
Note

- You can set a path for the encryption key to be stored. However, if the encryption key file is modified or moved after selecting the path, a system error may occur.

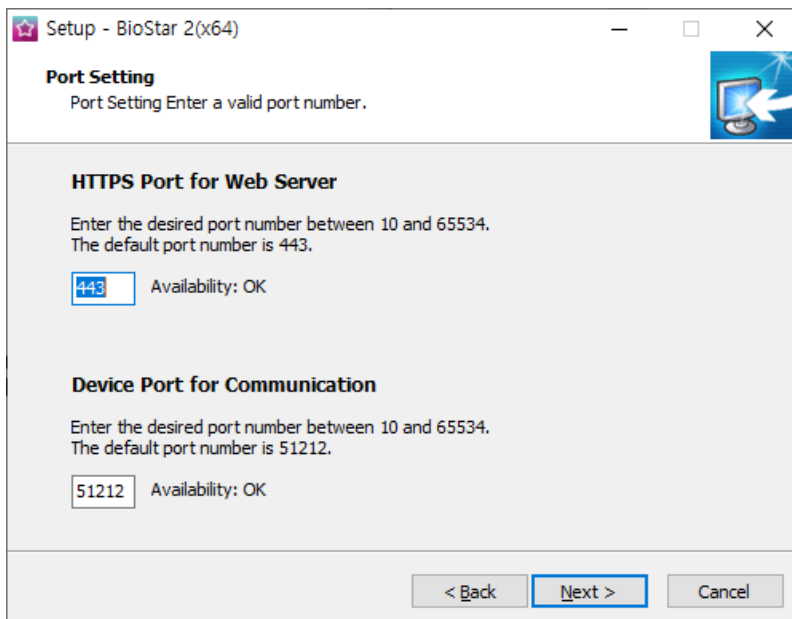
2 Installation

- If you delete BioStar 2, the encryption key files will be deleted.

- 9) Read the instructions on the responsibility for protecting personal information stored in the database and click Next to continue the installation.



- 10) Enter the port number and click Next.

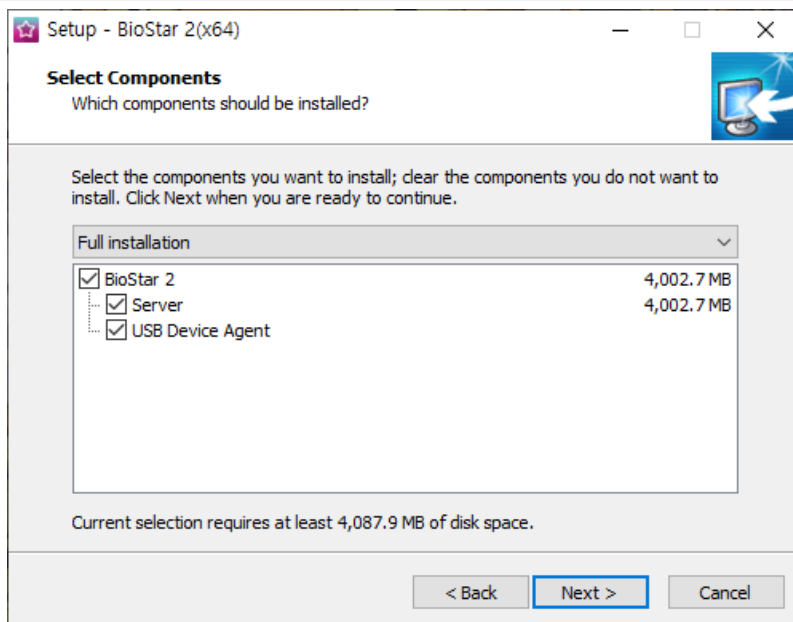


Note

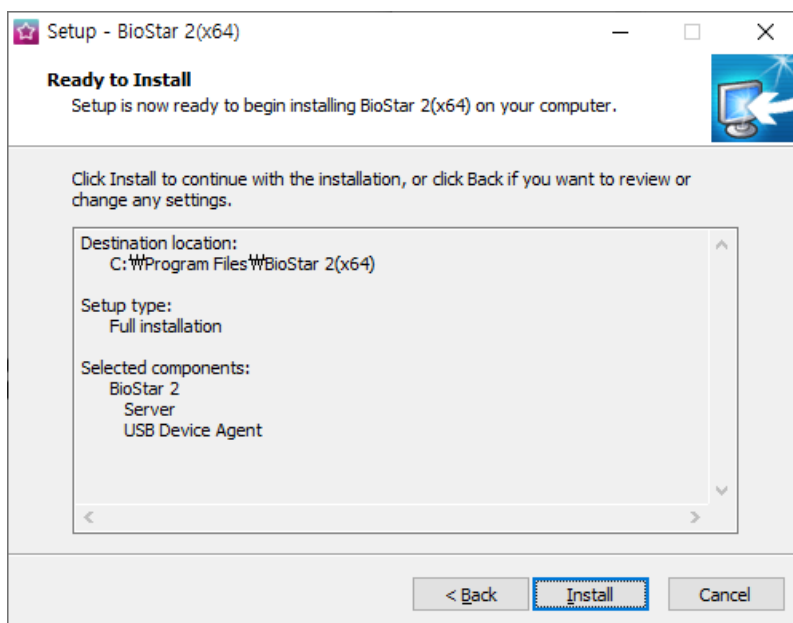
- When you install BioStar 2 on a PC where BioStar 1 is installed, the device port (51212) is not available. In this case, we recommend that you uninstall BioStar 1.

- 11) Select a component of BioStar 2 and click Next. If you select USB Device Agent, a USB-Agent and a driver for using BioMini, BioMini Plus 2, DUALi DE-620, and BioMini Slim 2 will be installed together.

2 Installation

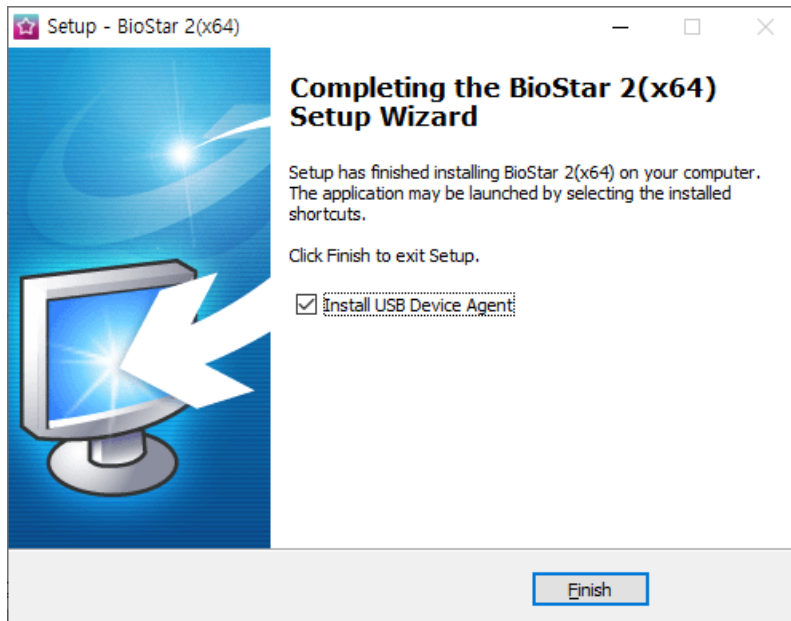


12) If ready to install, click Install.



13) Select whether to install additional program and click Finish. Follow on screen instructions to complete.

2 Installation



Note

- The USB Device Agent Certificate provided can be applied to a local network only.
- When another program uses port 443, BioStar 2 Setting program will be launched automatically and then you can change the port number. For more information, see [Changing port of BioStar 2](#).
- For more information on Database setting changes, see [Changing database of BioStar 2](#).

BioStar 2 is a web-based system which can be accessed from anywhere as long as you remember your login ID and password.

- 1) Run your web browser.
 - We recommend that you use Google Chrome 100 or later.
- 2) Run BioStar 2.
 - If running from the PC installed with BioStar 2, enter '[https://127.0.0.1](#)' in the address input field of the web browser.
 - If BioStar 2 is installed on another PC, enter '[https://BioStar 2 server IP address](#)' in the address input field of the web browser.
 - Do not use the 'Localhost' to access the BioStar 2.

Note

- BioStar 2 uses port 443. If port 443 is used by a program, quit the program and try again. If the program cannot be closed, run 'Biostar Setting' to change the port number. For more

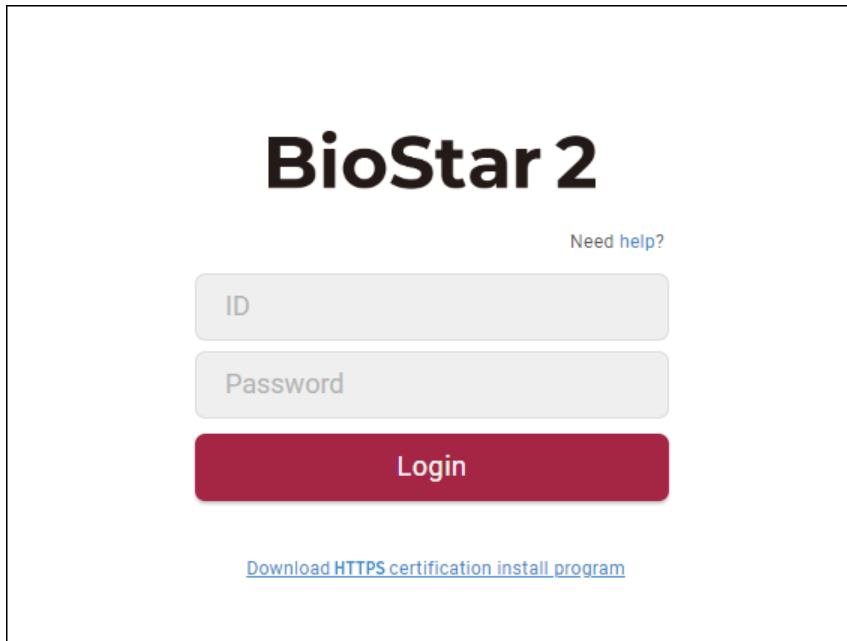
3 Login

information, see [Changing port of BioStar 2](#).

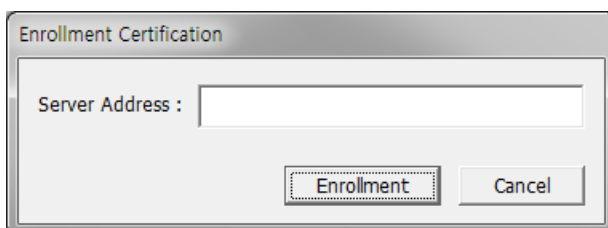
- 3) Log in with the administrator account. The administrator account ID is 'admin' and when you log in for the first time, Not secure warning will be displayed in the address bar.



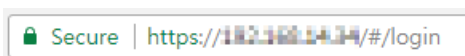
- 4) To use HTTPS properly, register the IP address of the PC where BioStar 2 is installed. Click Download HTTPS certification install program.



- 5) Unzip the downloaded file and run cert-register.exe file. Enrollment Certification window will appear.
- 6) Enter the IP address of the PC where BioStar 2 is installed and click Enrollment.



- 7) Check the security warning message and click Yes.
- 8) When you restart the web browser and enter the registered IP address, Secure will appear on the address bar of the web browser.

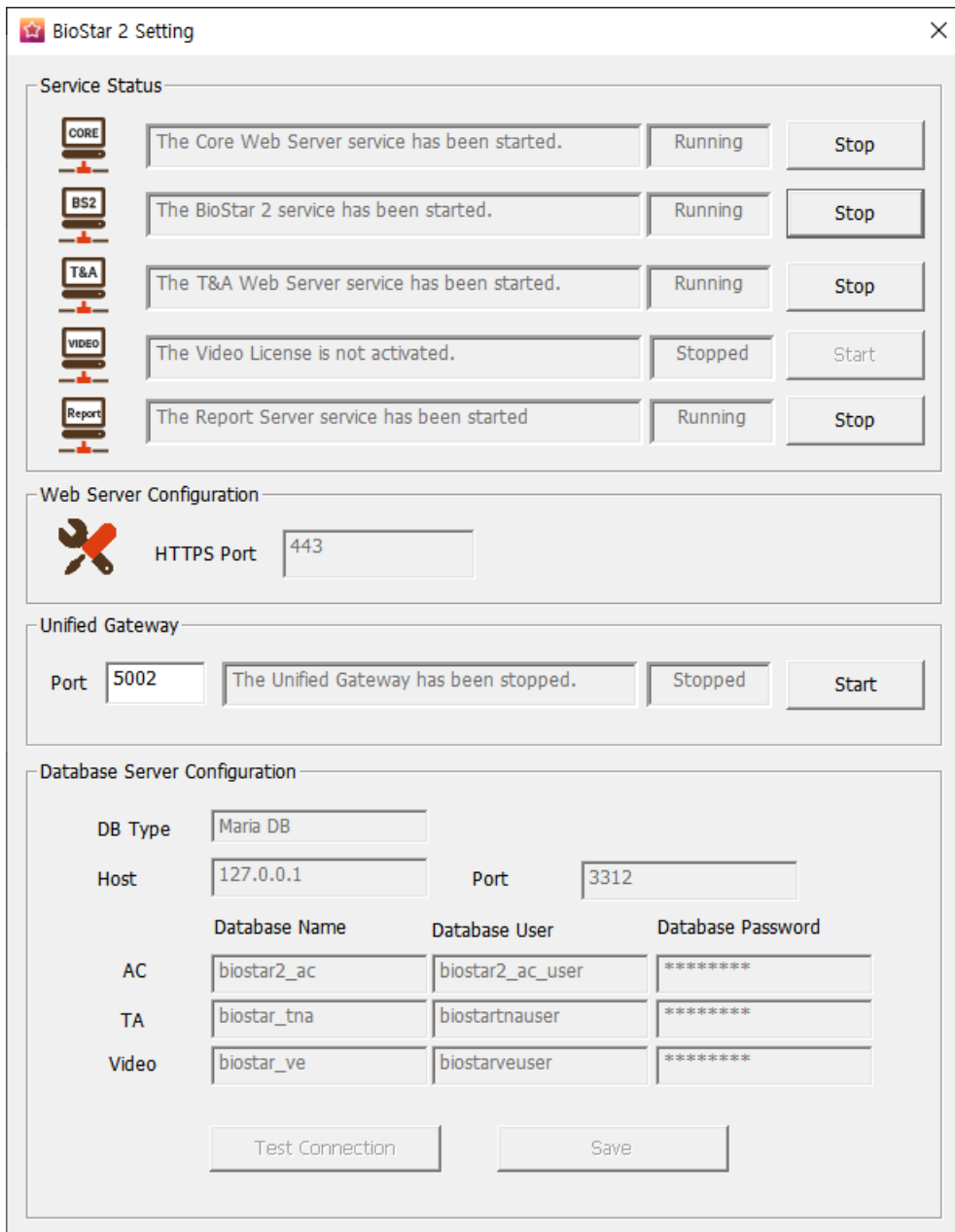


3 Login

Changing server status of BioStar 2

You can check the status of the BioStar 2 server and stop or start the server.

- 1) Click  Start > BioStar 2 > BioStar 2 Setting.



BioStar 2 Setting

Service Status

Service	Status	Action
CORE	The Core Web Server service has been started.	Running / Stop
BS2	The BioStar 2 service has been started.	Running / Stop
T&A	The T&A Web Server service has been started.	Running / Stop
VIDEO	The Video License is not activated.	Stopped / Start
Report	The Report Server service has been started	Running / Stop

Web Server Configuration

 HTTPS Port: 443

Unified Gateway

Port: 5002 | The Unified Gateway has been stopped. | Stopped / Start

Database Server Configuration

DB Type: Maria DB

Host: 127.0.0.1 | Port: 3312

	Database Name	Database User	Database Password
AC	biostar2_ac	biostar2_ac_user	*****
TA	biostar_tna	biostartnauser	*****
Video	biostar_ve	biostarveuser	*****

Test Connection | Save

- 2) Click Stop button of the server you want to stop.

3 Login



3) Click Start button to restart the server.



Note

- If the time setting on the BioStar 2 server has changed, stop and restart the Core Web Server. Otherwise, BioStar 2 may not work properly.

Changing port of BioStar 2

You can change the port used by BioStar 2. If BioStar 2 cannot use port 443, run BioStar 2 Setting to change the port.

Note

- If you use MS SQL as a database, when changes the port in BioStar 2, you must also change the port manually in the database. Otherwise, BioStar 2 may be disconnected from the database and may not work properly.

Changing with BioStar 2 Setting (HTTPS port)

- 1) Click  Start > BioStar 2 > BioStar 2 Setting.

3 Login

The screenshot shows the 'BioStar 2 Setting' window. It is divided into several sections: 'Service Status', 'Web Server Configuration', 'Unified Gateway', and 'Database Server Configuration'.

Service Status: This section contains five rows, each with an icon, a status message, a status label, and a control button.

Service	Status Message	Status	Action
CORE	The Core Web Server service has been started.	Running	Stop
BS2	The BioStar 2 service has been started.	Running	Stop
T&A	The T&A Web Server service has been started.	Running	Stop
VIDEO	The Video License is not activated.	Stopped	Start
Report	The Report Server service has been started	Running	Stop

Web Server Configuration: This section has a wrench icon and a text field for 'HTTPS Port' with the value '443'.

Unified Gateway: This section has a text field for 'Port' with the value '5002', a status message 'The Unified Gateway has been stopped.', a status label 'Stopped', and a 'Start' button.

Database Server Configuration: This section contains fields for 'DB Type' (Maria DB), 'Host' (127.0.0.1), and 'Port' (3312). Below these is a table for database users.

	Database Name	Database User	Database Password
AC	biostar2_ac	biostar2_ac_user	*****
TA	biostar_tna	biostartnauser	*****
Video	biostar_ve	biostarveuser	*****

At the bottom of the 'Database Server Configuration' section are two buttons: 'Test Connection' and 'Save'.

- 2) Click the Stop button for all BioStar 2 services. HTTPS Port is activated.
- 3) Enter the port number in HTTPS port field.

This screenshot shows the 'BioStar 2 Setting' window after the services have been stopped. The 'Service Status' section now shows all services as 'Stopped' with 'Start' buttons instead of 'Stop' buttons.

Service	Status Message	Status	Action
CORE	The Core Web Server service has been stopped.	Stopped	Start
BS2	The BioStar 2 service has been stopped.	Stopped	Start
T&A	The T&A Web Server service has been stopped.	Stopped	Start
VIDEO	The Video License is not activated.	Stopped	Start
Report	The Report Server service has been stopped.	Stopped	Start

The 'Web Server Configuration' section remains the same, with 'HTTPS Port' set to '443'.

3 Login

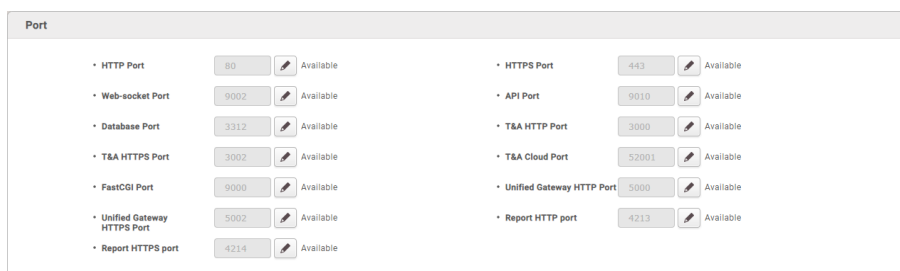
- 4) Click the Start button for all BioStar 2 services.
- 5) Run BioStar 2. If using port 450, enter '*IP address:450*'.

Changing with BioStar 2 for all port

Note

- The items may vary depending on the type of license that is activated.

- 1) Log in to BioStar 2 and click on the port. All ports in use in BioStar 2 are displayed.



Port			
• HTTP Port	80		Available
• Web-socket Port	9002		Available
• Database Port	3312		Available
• T&A HTTPS Port	3002		Available
• FastCGI Port	9000		Available
• Unified Gateway HTTPS Port	5002		Available
• Report HTTPS port	4214		Available
• HTTPS Port	443		Available
• API Port	9010		Available
• T&A HTTP Port	3000		Available
• T&A Cloud Port	52001		Available
• Unified Gateway HTTP Port	5000		Available
• Report HTTP port	4213		Available

- 2) Click the  of the port to change and enter the desired value.
- 3) Click Apply to save the settings.

Unified Gateway Setting

You can change the execution port of BioStar 2 to the Unified Gateway.

Unified Gateway allows efficient processing of requests to the BioStar 2 server through the reverse proxy method, improves security vulnerabilities in iframes, and minimizes SSL certificate errors.

Note

- When installing or upgrading BioStar 2, the Unified Gateway is Inactive, and the default port values are as follows.
 - Unified Gateway HTTPS Port: 5002
 - Unified Gateway HTTP Port: 5000

Setting up Unified Gateway in BioStar 2 Setting

- 1) Click  Start > BioStar 2 > BioStar 2 Setting.

3 Login

The screenshot shows the 'BioStar 2 Setting' window with the following sections:

- Service Status:** A list of services with their status and control buttons.

Service	Status	Action
CORE	The Core Web Server service has been started.	Running / Stop
BS2	The BioStar 2 service has been started.	Running / Stop
T&A	The T&A Web Server service has been started.	Running / Stop
VIDEO	The Video License is not activated.	Stopped / Start
Report	The Report Server service has been started	Running / Stop
- Web Server Configuration:** A section with a wrench icon and an 'HTTPS Port' field set to 443.
- Unified Gateway:** A section with a 'Port' field set to 5002, a status message 'The Unified Gateway has been stopped.', and a 'Start' button.
- Database Server Configuration:** A section for database settings.

	DB Type	Host	Port	Database Name	Database User	Database Password
AC	Maria DB	127.0.0.1	3312	biostar2_ac	biostar2_ac_user	*****
TA				biostar_tna	biostartnauser	*****
Video				biostar_ve	biostarveuser	*****

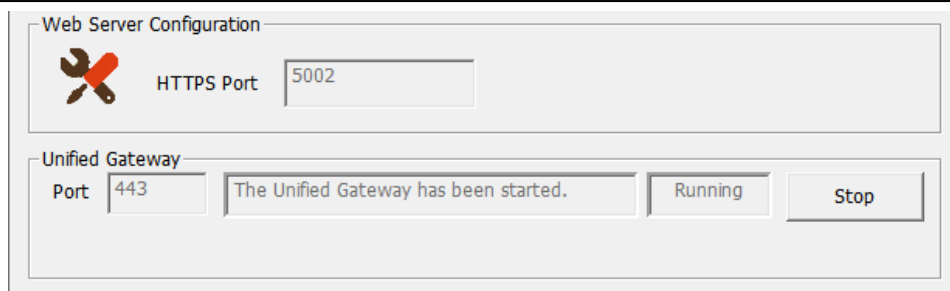
Buttons: Test Connection, Save

- 2) Click the Start button in the Unified Gateway section. Unified Gateway becomes active.

Note

- Activating Unified Gateway will restart the server.
 - If the port is in use, a pop-up message will appear. Enter a different port number and activate it again.
- 3) If the HTTPS connection, the HTTPS Port field changes to 5002 and the Unified Gateway's Port field changes to 443.
To change the port, click Stop to stop Unified Gateway and then change it.

3 Login



The screenshot shows two configuration panels. The top panel, titled 'Web Server Configuration', contains a wrench and screwdriver icon and an 'HTTPS Port' field with the value '5002'. The bottom panel, titled 'Unified Gateway', contains a 'Port' field with the value '443', a status message 'The Unified Gateway has been started.', a 'Running' button, and a 'Stop' button.

Setting up Unified Gateway in BioStar 2

- 1) Click Settings > Security.
- 2) Activate Unified Gateway in Unified Gateway Setting.



The screenshot shows the 'Unified Gateway Setting' panel. It features a toggle switch labeled 'Unified Gateway' which is currently turned on, indicated by a blue circle and the word 'Active'.

Note

- When you activate Unified Gateway, the server restarts and automatically directed to the login page.
- If the port is in use, a pop-up message will appear. Enter a different port number and activate it again.

Changing database of BioStar 2

You can change the database settings of BioStar 2.

- 1) Click  Start > BioStar 2 > BioStar 2 Setting.

3 Login

BioStar 2 Setting [X]

Service Status

	The Core Web Server service has been started.	Running	Stop
	The BioStar 2 service has been started.	Running	Stop
	The T&A Web Server service has been started.	Running	Stop
	The Video License is not activated.	Stopped	Start
	The Report Server service has been started.	Running	Stop

Web Server Configuration

 HTTPS Port

Unified Gateway

Port The Unified Gateway has been stopped. Stopped Start

Database Server Configuration

DB Type

Host Port

	Database Name	Database User	Database Password
AC	biostar2_ac	biostar2_ac_user	*****
TA	biostar_tna	biostartnauser	*****
Video	biostar_ve	biostarveuser	*****

- 2) Click the Stop button for all BioStar 2 services. Database Server Configuration is activated.

Database Server Configuration

DB Type

Host Port

	Database Name	Database User	Database Password
AC	biostar2_ac	biostar2_ac_user	*****
TA	biostar_tna	biostartnauser	*****
Video	biostar_ve	biostarveuser	*****

3 Login

- 3) Edit the necessary fields. If you are not sure about the each information, contact your system administrator.
- 4) Click Test Connection to check if the database has been set properly.
- 5) Click Save to save the settings.

BioStar 2 provides web-based services and various functions concerning access control.

Access groups configured in BioStar 2 refer to access privileges. An access group can be configured using a combination of user, access level and door (device) information.

Below is a step-by-step guide on how to use BioStar 2.

☐ Step 1. Register Activation Key

You can use more features by registering the activation key after purchasing the BioStar 2 license.

Related Information

[License](#)

☐ Step 2. Adding Devices

Add devices to connect to BioStar 2. You can set up an authentication mode for each device type or assign an administrator to each device.

You can also configure actions to be performed according to various events (authentication failure, duress fingerprint authentication, Anti-passback violation, etc.) occurring in the device.

Related Information

[Adding and Managing Device Groups](#)

[Basic Search and Registration](#)

[Advanced Search and Registration](#)

[Slave Device Search and Registration](#)

[Editing Device Settings and Information](#)

☐ Step 3. Adding and Configuring Doors

Add the information on the doors installed with devices. You can configure relay, Anti-passback, dual authentication, alarm, etc.

Related Information

4 Before Using

[Adding and Managing Door Groups](#)

[Add Door](#)

❑ Step 4. Configuring Access Levels

You can create an access level by combining door and schedule information. Multiple doors and schedules can be registered to a single access level.

➤ Related Information

[Adding and Managing Access Levels](#)

❑ Step 5. Configuring Access Groups

You can create an access group by combining access level (doors and schedules) and user information. Multiple access levels and users can be registered to a single access group.

➤ Related Information

[Adding and Managing Access Groups](#)

❑ Step 6. Adding Users

Add the information to use for access control such as user information, fingerprints, etc. User information can be registered directly on the device or on the PC running BioStar 2. You can also fetch the user information registered within the device to BioStar 2 or transfer the user information registered within BioStar to the device.

➤ Related Information

[Adding and Managing User Groups](#)

[Adding User Information](#)

[Adding User Credentials](#)

❑ Step 7. Zone Configuration

You can configure anti-passback and fire alarm zone. The fire alarm can be set to local zone and global zone. Only available when purchasing a standard license.

Related Information

[Zone](#)

4 Before Using

Zone Status

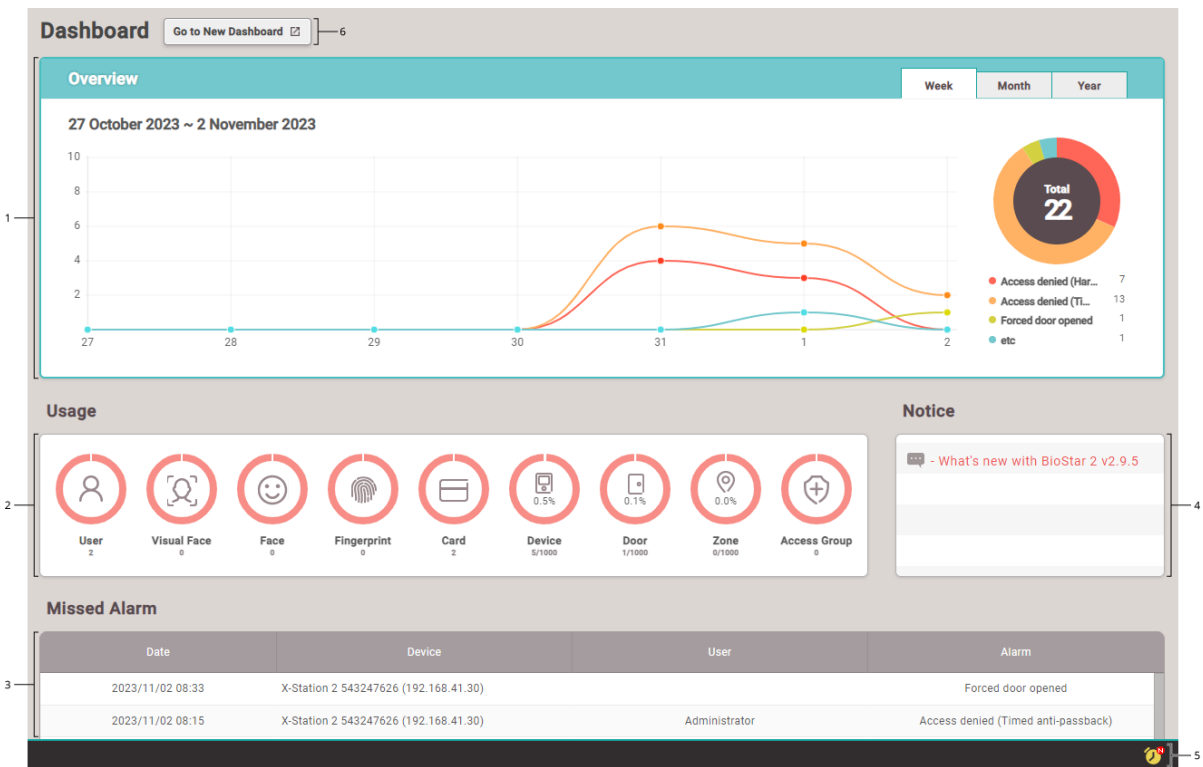
Step 8. Viewing Logs

You can view event logs, device status, door status and alert history, or just view the real-time log information.

Related Information

- Event Log
- Real-time Log
- Device Status
- Door Status
- Alert History

The DASHBOARD gives you an overview of the major event status, usage status, notice, alarms, etc.



- 1 Alert Event Status by Period
- 2 Usage Status
- 3 Missed Alarm
- 4 Notice
- 5 Alert List
- 6 Go to New Dashboard

5 Dashboard

 Note

- The newly added dashboard can be customized as desired by selecting the desired information for each user, adding widgets, and freely arranging the widgets. For more information on New Dashboard, see [How to Use the New Dashboard](#).
- You can set what to display in "Alert Event Status by Period" in the Setting > Alert.
- 15 alarms that have been missed in the last 1 month displayed in 'Missed Alarm' in the latest order.
- You can view the list of monitored alerts and write notes by clicking the alert list icon.

Alert List

View History

1 / 1

15 rows

	Date	Device	User	Alarm
☐	2024/04/18 09:11:53	BioStation 2a 547842056 (192.168.40.21...	2(Nayeon)	Access denied (Timed anti-passback)
☐	2024/04/18 09:10:35	BioStation 2a 547842056 (192.168.40.21...	2(Nayeon)	Access denied (Timed anti-passback)
☐	2024/04/18 09:07:22	BioStation 2a 547842056 (192.168.40.21...	2(Nayeon)	Access denied (Timed anti-passback)
☐	2024/04/18 09:07:18	BioStation 2a 547842056 (192.168.40.21...	2(Nayeon)	Access denied (Timed anti-passback)
☐	2024/04/18 09:06:52	BioStation 2a 547842056 (192.168.40.21...	2(Nayeon)	Access denied (Invalid access group)

Close

Related Information

[Alert History](#)

You can use the DEVICE menu to add, delete or edit registered devices, fetch the user information registered within the device to the server or upgrade the firmware.

[Adding and Managing Device Groups](#)

[Basic Search and Registration](#)

[Advanced Search and Registration](#)

[Wiegand Device Search and Registration](#)

[Slave Device Search and Registration](#)

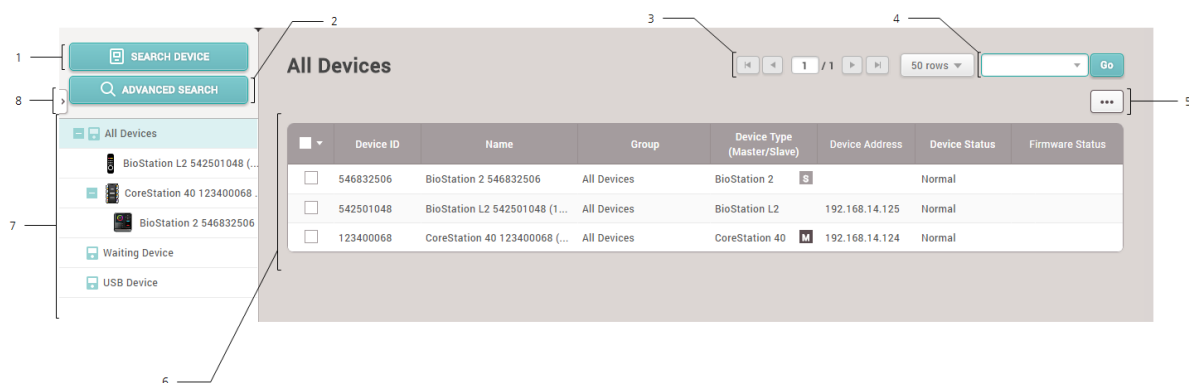
[Registering and replacing 3rd party OSDP devices on CoreStation](#)

[Managing Users Registered with Devices](#)

[Upgrading Firmware](#)

6 Device

Editing Device Settings and Information



1 Basic Search

2 Advanced Search

3 Page Navigation Buttons and Number of List Rows

4 Registered Device Search

5 Function Button (Delete Data & Sync Device, Print, Column Setting)

6 Device List

7 Device and Group List

8 Expand Button

Note

- Registered devices can be searched by Device ID, Name, Device Address.
- Only BioMini, BioMini Plus 2, DUALi DE-620, and BioMini Slim 2 can be connected as USB devices.

When you select a device on the list, you can use the following functions.

- Reconnect:** Reconnects the selected device. This function is available when only one device is selected.
- Sync Device:** Synchronizes the user and access control information from BioStar 2 with the registered devices. The synchronization will occur based on the information on the server database, and the users that exist on the devices only will be deleted. Click Manage Users in Device to retrieve users from the device to the BioStar server.
- Delete Data & Sync Device:** You can delete user related data including users, access groups and schedules on the device and transfer the data on the server to the device. On the device list page, select the target devices, click the Function button () and choose the Delete Data & Sync Device.
- Batch Edit:** Edits the information on multiple devices at once. This function is available only when multiple devices are selected.
- Manage Users in Device:** Uploads the user information registered with the device to BioStar 2 or deletes it.
- Firmware Upgrade:** Easily upgrades the firmware of the device.

6 Device

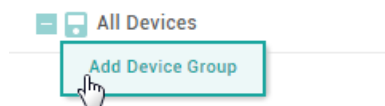
- **Delete Device:** Deletes the selected device from the list. You cannot delete a device that is set as a door or a zone.

Adding and Managing Device Groups

You can register device groups for easy management of multiple devices. Name your device groups according to installation locations of the devices for greater convenience.

— Adding Device Groups

- 1) Click **DEVICE**.
- 2) Right-click on **All Devices** and click **Add Device Group**.



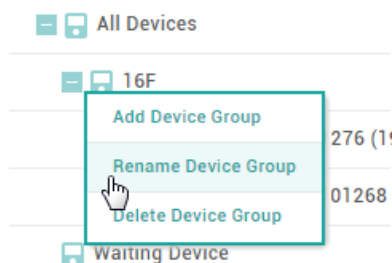
- 3) Enter a name.

Note

- Device groups may be created in up to 8 levels.
- Up to 48 characters may be entered for a device group name.

— Renaming Device Groups

- 1) Click **DEVICE**.
- 2) Right-click on the name of a group you wish to rename and click **Rename Device Group**.



- 3) Enter a name.

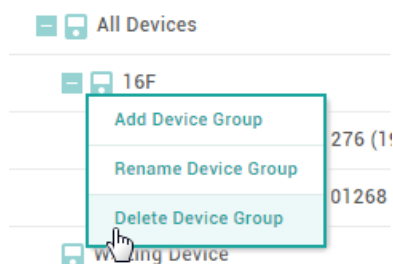
Note

- Up to 48 characters may be entered for a device group name.

6 Device

— Deleting Device Groups

- 1) Click DEVICE.
- 2) Right-click on the name of a group you wish to delete and click Delete Device Group.



Note

- Deleting a group deletes all devices included in the group.

Basic Search and Registration

You can automatically search for devices connected to BioStar 2 and register them. Before searching for devices, check whether they are correctly connected. When adding multiple devices at once, it will be more convenient to know the location, ID and IP address information of each device in advance.

- 1) Click DEVICE > SEARCH DEVICE.
- 2) All available devices are shown. When the user ID type is mismatch with BioStar 2, the user ID type of the device will be automatically changed according to BioStar 2.

Search Device

Found 7 device(s). 2 device(s) have invalid IP addresses.

Search

	Device ID	Name	Group	Device Type (Master/Slave)	IP Address	Status	Secure Mode Status
☐	541531041	BioStation A2 541531041 (...)	All Devices	BioStation A2 M	192.168.16.179	OK	Connectable.
☐	546832590	BioStation 2 546832590 (19...)	All Devices	BioStation 2 M	192.168.16.196	OK	Connectable.
☐	546832437	BioStation 2 546832437 (19...)	All Devices	BioStation 2	192.168.16.193	OK	Connectable.
☐	541531014	BioStation A2 541531014 (...)	All Devices	BioStation A2 M	192.168.16.160	OK	Connectable.
☐	539308121	BioEntryPlus 539308121 (1...)	All Devices	BioEntryPlus M	192.168.16.239	OK	Connectable.
☐	544108056	BioEntry W2 544108056 (192.168.16.238)	All Devices	BioEntry W2 M	192.168.16.238	N/A (192.168.1.23)	Connectable.
☐	542501008	BioStation L2 542501008 (192.168.16.231)	All Devices	BioStation L2	192.168.16.231	N/A (192.168.1.23)	Connectable.

Set IP

Add

Close

6 Device

- 3) To view newly found devices only, click  and then click Show New Devices Only.

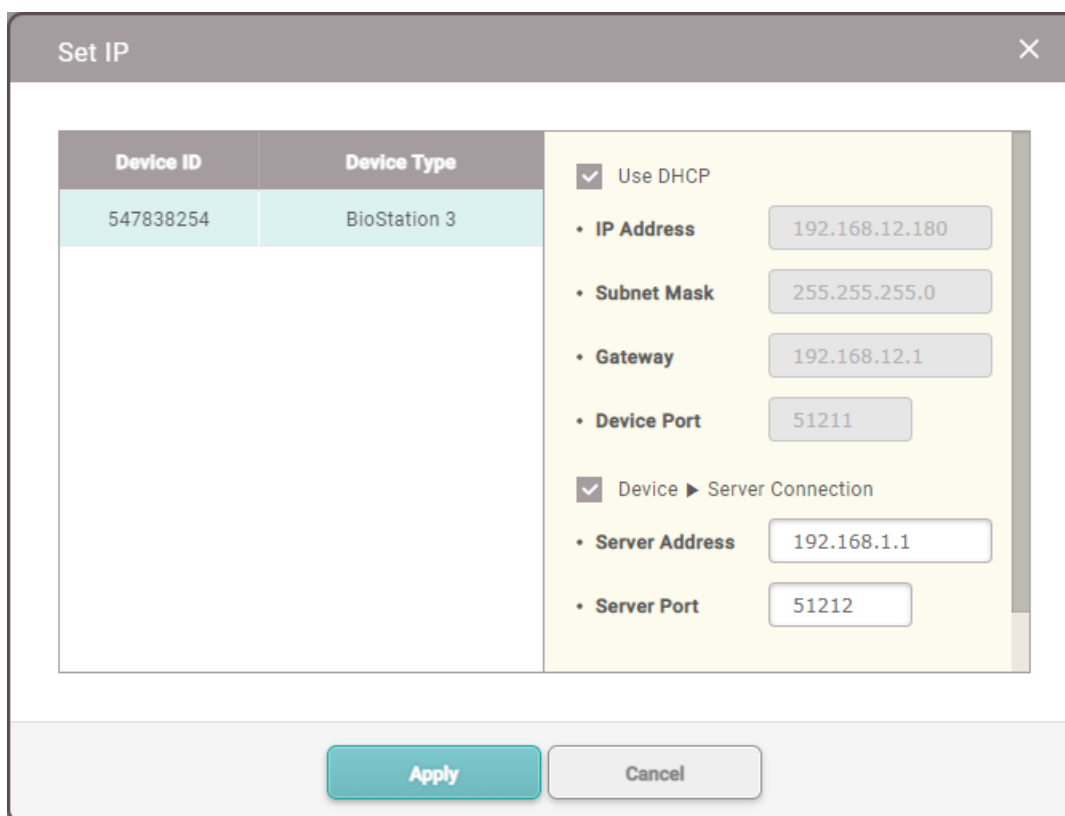
Search Option

☒ Show New Devices Only

• Timeout(sec)

Note

- To hide devices which do not respond within a set period of time, click  and then enter a duration in Timeout(sec).
 - If the devices you are looking for are not shown on the list, click Search to search for the devices again.
- 4) You may change the Name and Group of a device found to anything you like. If the IP address of the device cannot be used or otherwise needs to be changed, click Set IP to change it.
- 5) To use a dynamic IP address, select Use DHCP. To manually enter the IP Address, Subnet Mask and Gateway, deselect the option. To enter the BioStar 2 network information, select **Device** → Server Connection and enter the Server Address and Server Port.



The 'Set IP' dialog box is shown. It contains a table with two columns: 'Device ID' and 'Device Type'. The first row has '547838254' and 'BioStation 3'. To the right of the table are two sections. The first section is 'Use DHCP' (checked) with fields for IP Address (192.168.12.180), Subnet Mask (255.255.255.0), Gateway (192.168.12.1), and Device Port (51211). The second section is 'Device ► Server Connection' (checked) with fields for Server Address (192.168.1.1) and Server Port (51212). At the bottom are 'Apply' and 'Cancel' buttons.

Device ID	Device Type
547838254	BioStation 3

☒ Use DHCP

- IP Address: 192.168.12.180
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.12.1
- Device Port: 51211

☒ Device ► Server Connection

- Server Address: 192.168.1.1
- Server Port: 51212

Apply Cancel

- 6) To save the IP settings, click Apply.
- 7) To register the configured device, click Add.
- 8) Select the registered device, and click Sync Device.

Note

6 Device

- If you add a new device, the key of the device changed to the value of the data encryption key on the server. All user data on the device will be deleted when the key is changed.
- If you want to delete user related data including users, access groups and schedules on the device and transfer the data on the server to the device, click the Delete Data & Sync Device. On the device list page, select the target devices, click the Function button () and choose the Delete Data & Sync Device.
- After registering a device, you can edit its details by referring to [Editing Device Settings and Information](#).
- To register all waiting devices in the Waiting Device group, right-click on the group name and click Add All Waiting Devices. To register each device, right-click on the device name and click Add Waiting Device.
- If a different user ID type is set for BioStar 2 and a device, change the device setting according to the user ID setting of BioStar 2.
- If the user ID type of BioStar 2 is set with alphanumeric characters, some devices may not be used and/or limitations may occur. For more details, refer to [Server](#).

Advanced Search and Registration

You can register a device by specifying its IP address and port number.

- 1) Click DEVICE > ADVANCED SEARCH.
- 2) Enter the IP address and port number of a device to search.
- 3) Click Search to view the list of devices found. If the device you are looking for is not shown on the list, click Search to search again.

Advanced Search 

Device ID	Name	Group	Device Type (Master/Slave)	IP Address
538101276	BioLiteNet 538101276 (192.168.1...	모든 장치	BioLiteNet	192.168.16.230

Search

Add

Cancel

- 4) Select a group to add the found device to and click Add.
- 5) Select the registered device, and click Sync Device.

Note

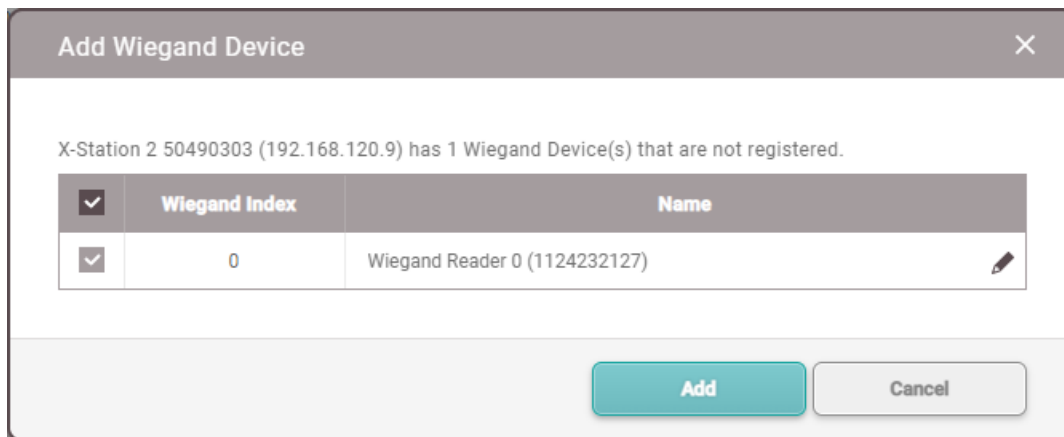
- After registering a device, you can edit its details by referring to [Editing Device Settings and Information](#).

6 Device

Wiegand Device Search and Registration

You can easily add Wiegand devices connected to master/slave devices.

- 1) Click DEVICE.
- 2) Right-click on the name of a master/slave device to search for Wiegand devices and click Add Wiegand Device.
- 3) The list of Wiegand devices connected to the master/slave device is shown.



- 4) Select the device to add, and click Add.

Slave Device Search and Registration

You can easily expand your access control system network by adding slave devices to existing master devices. Master devices and slave devices can be connected together via RS-485. Besides regular devices, additional devices such as Secure I/O can be connected.

- 1) Click DEVICE.
- 2) Right-click on the name of a master device to search for slave devices and click Search Slave Device.
- 3) The list of slave devices connected to the master device is shown. If the devices you are looking for are not shown on the list, click Search to search for the devices again.

6 Device

Search Slave Device

×

Search

☐	Device ID	Name	Device Type
☐	538101268	BioLiteNet 538101268	BioLiteNet

BioLiteNet 538101276 (192.168.16.230) has 1 slave Device(s).

Add

Cancel

- 4) Select a group to register the device to and click Add.

Note

- If the fingerprint authentication device is the master device, the face authentication device cannot be added as a slave device.
- If the face authentication device is the master device and a different slave device has been added already, a face authentication device cannot be added as a slave device.
- When you connect the face authentication device as a slave device while the face authentication device is the master device, only one face authentication device can be added as a slave device.
- When the face authentication device is the master device and another face authentication device is connected to it as a slave device, you can connect one additional Secure I/O 2 and DM-20 each.
- The maximum number of slave devices available to connect varies according to the authentication method, number of users, and number of devices. Also note that the number of slave devices affects the authentication speed.

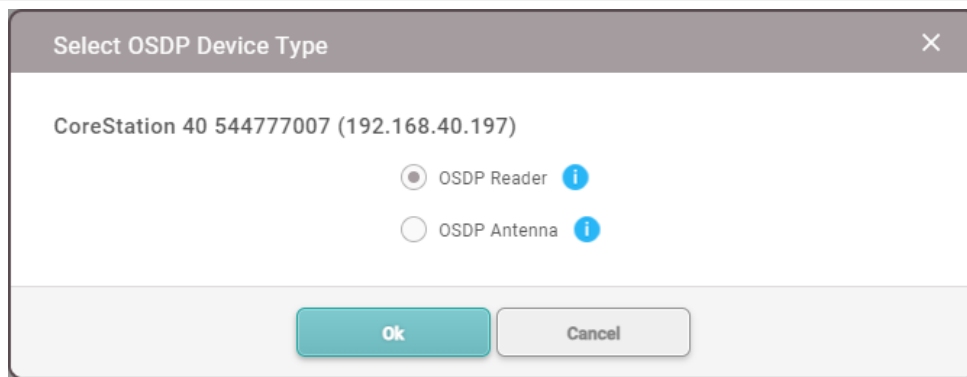
Registering and replacing 3rd party OSDP devices on CoreStation

Registering 3rd party OSDP Reader

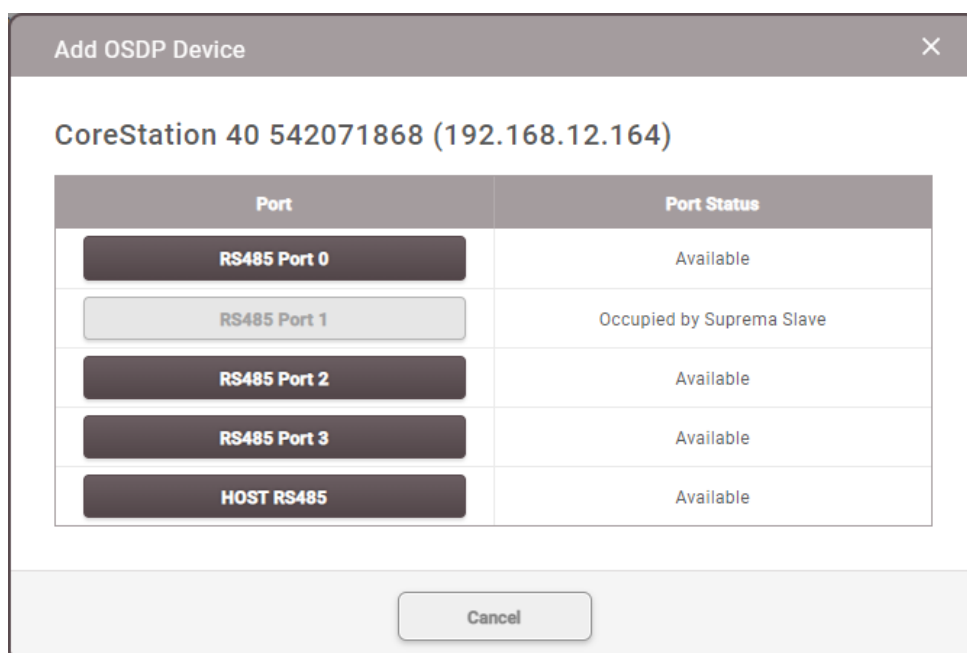
Add 3rd party OSDP reader to a registered CoreStation.

- 1) Click DEVICE.
- 2) Right-click on the name of a CoreStation and click Add OSDP Device.
- 3) The Select OSDP Device Type window appears. Select OSDP Reader.

6 Device



- 4) A list of ports appears. Among the ports whose Port Status is Available, select the port to add the OSDP reader.



 Note

- Connect up to 2 units per port on CoreStation, for a total of 8 units.

- 5) Set the Information, Network (RS-485), and Authentication.

6 Device

←

Add New OSDP Device

Information

• Name

OSDP Reader (1108280240)

• Port

RS485 Port 0

• Device ID

1108280240

• Vendor Code

• Firmware Version

• Status

Active

• OSDP Device Type

OSDP Reader

• Serial Number

• Product Name

• Hardware Version

• Locked

Unlock

Network (RS-485)

• OSDP ID

0

• Secure Communication

Use

Authentication

• Auth Mode

Always

+ Add

• Full Access

Disable

• Auth Timeout

5 sec

Apply

Cancel

Item	Description
Information	▪ Name: Enter a device name. If not entered, it will be assigned automatically. ▪ Status: Set the reader status. If set to Inactive, CoreStation will not communicate with the OSDP reader.
Network (RS-485)	▪ OSDP ID: Enter the address of the OSDP reader. Enter a number between 0 and 126. ▪ Secure Communication: Communication between CoreStation and OSDP readers can be protected with an SCB key. When Secure Communication is set to Use, CoreStation sends the SCB key to the OSDP reader. OSDP readers can use this SCB key to send and receive data to and from CoreStation through a secure channel.
Authentication	▪ Auth Mode: You can configure the authentication modes of the OSDP reader. BioStar 2 can use combinations of card and PIN as authentication modes.  Note ▪ Click + Add and create an authentication mode by dragging and dropping available options. Select a schedule and click OK to register the authentication mode. If no desired schedule is available, click + Add Schedule to create it. ▪ For more information on configuring schedules, see Schedule. ▪ Full Access: You can grant full access to users registered within the OSDP reader without setting any access groups.

6 Device

Item	Description
	▪ Auth Timeout: When using a combination of multiple credentials in Auth Mode, the system waits for this length of time to authenticate the second credential. Set a timeout period for authenticating the second credential after authenticating the first credential. If the second credential is not input within this time, the authentication fails.

- 6) Click OK to register the configured OSDP reader.

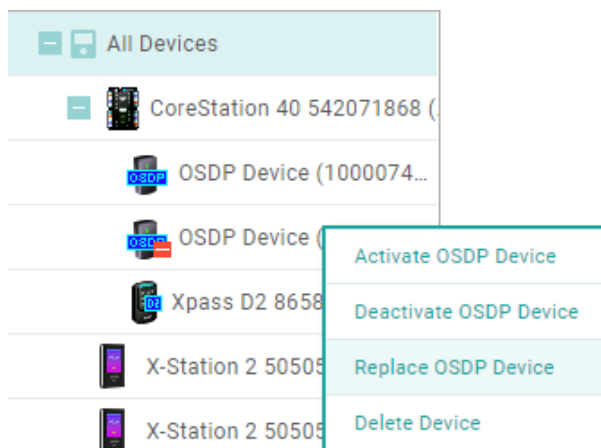
Note

- Set the LED/Buzzer behavior of the connected OSDP reader. For detailed configuring of the OSDP Device LED/Buzzer, refer to [OSDP Device LED/Buzzer](#).

Replacing 3rd party OSDP devices

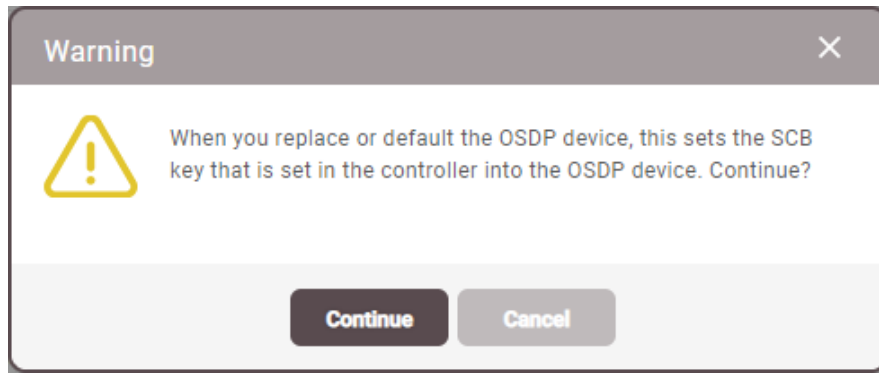
Replace the OSDP device registered to CoreStation with another device.

- 1) Click DEVICE.
- 2) Among the OSDP devices registered to CoreStation, right-click on the name of the OSDP device to be replaced and click Replace OSDP Device.



- 3) Click Continue after reading the warning pop-up message, Replace OSDP device process will proceed.

6 Device



Note

- OSDP device replacement may fail if the OSDP device is disconnected or if the SCB key is already set. Check the connection status of the device and the SCB key, then try again.

Registering Wireless Door Lock

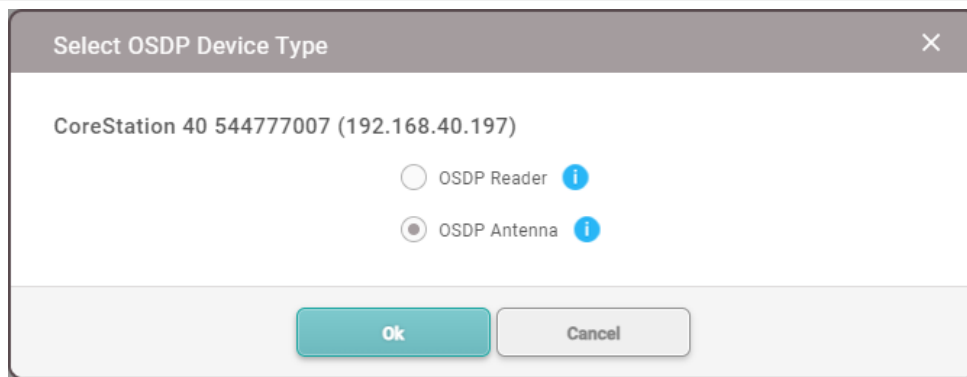
Add the Wireless Door Lock to a registered CoreStation.

Note

- Supported OSDP antenna and wireless door lock are as below.
 - U&Z OSDP Antenna: CX8936
 - U&Z Wireless Door Lock: CX217x(Handle), CX212x(Knob)
- A separate Device License is required to register and use the Wireless Door Lock. For more information, refer to [Device License](#).
- Wireless Door Lock is available for CoreStation v1.7.1 or later and BioStar 2 v2.9.4 or later.
- To connect the Wireless Door Lock, the wireless antenna module must be connected to the CoreStation. Only two wireless antenna module can be connected.
- 6 wireless door locks can be connected to one wireless antenna module, and the maximum number of wireless door locks that can be connected to one CoreStation is 12.
- Replacement of Wireless Door Lock is not supported in BioStar 2.

- 1) Click DEVICE.
- 2) Right-click on the name of a CoreStation and click Add OSDP Device.
- 3) The Select OSDP Device Type window appears. Select OSDP Antenna.

6 Device



Select OSDP Device Type

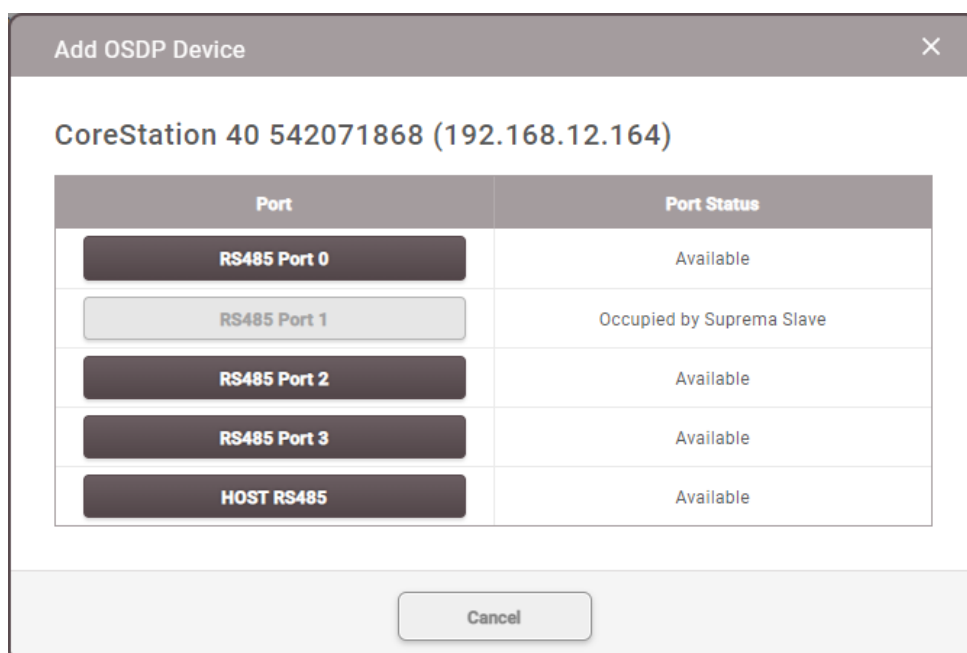
CoreStation 40 544777007 (192.168.40.197)

☐ OSDP Reader ⓘ

☒ OSDP Antenna ⓘ

Ok Cancel

- 4) A list of ports appears. Among the ports whose Port Status is Available, select the port to add the OSDP antenna.



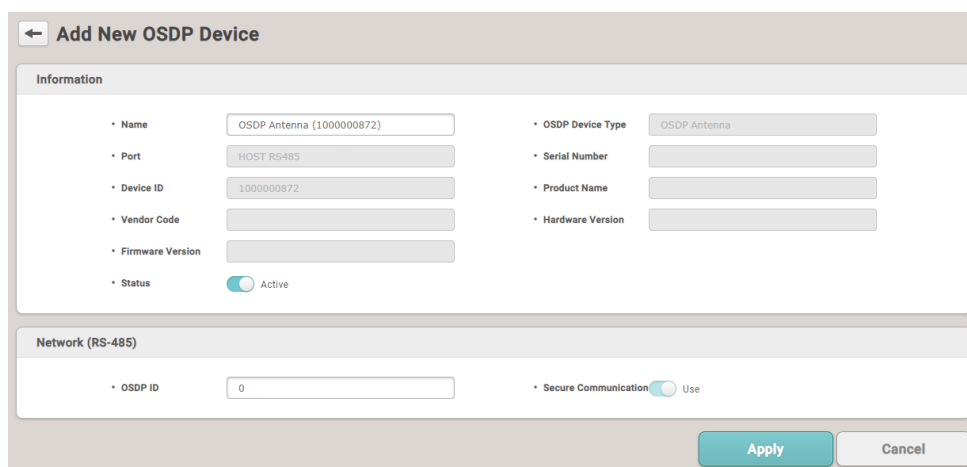
Add OSDP Device

CoreStation 40 542071868 (192.168.12.164)

Port	Port Status
RS485 Port 0	Available
RS485 Port 1	Occupied by Suprema Slave
RS485 Port 2	Available
RS485 Port 3	Available
HOST RS485	Available

Cancel

- 5) Set the Information, Network (RS-485), and click Apply.



← Add New OSDP Device

Information

• Name	OSDP Antenna (1000000872)	• OSDP Device Type	OSDP Antenna
• Port	HOST RS485	• Serial Number	
• Device ID	1000000872	• Product Name	
• Vendor Code		• Hardware Version	
• Firmware Version			
• Status	☒ Active		

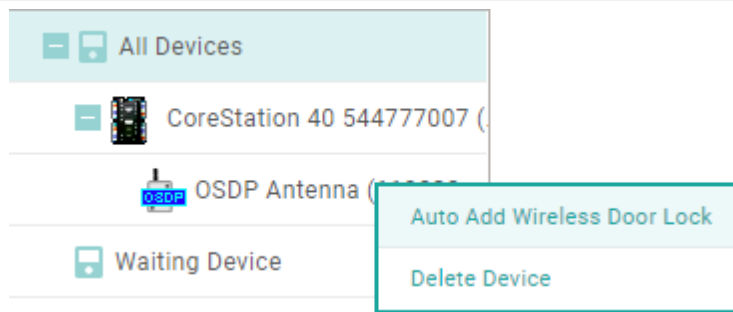
Network (RS-485)

• OSDP ID	0	• Secure Communication	☐ Use
-----------	---	------------------------	------------------------------

Apply Cancel

- 6) Right-click the added OSDP antenna and click Auto Add Wireless Door Lock.

6 Device



- 7) Tag the provided SERVICEKEY card on the Wireless Door Lock.
- 8) The OSDP antenna connects to the wireless door lock

🔗 Related Information

[Wireless Door Lock](#)

Managing Users Registered with Devices

You can see the number of users, fingerprints, faces, and cards stored in the device.

You can compare the user information stored in the device with the user information registered in BioStar 2, transfer the information to BioStar 2 or delete the information.

📋 Note

- The Manage Users in Device function is available only when one device is selected.

- 1) Click DEVICE.
- 2) Select a device and click Manage Users in Device. A comparison of the user information registered within the device and the user information registered within BioStar 2 is displayed.

6 Device

Manage Users in Device

BioStation A2 541531008 (192.168.14.223)

1 / 2

50 rows

54

9

0

1

All Users

Different Users

Upload

Delete

	User ID			1:1 Security Le...	Status
	50	0	0	Device Default	New User
	49	0	0	Device Default	New User
	48	0	0	Device Default	New User
	47	0	0	Device Default	New User
	46	0	0	Device Default	New User
	45	0	0	Device Default	New User
	44	0	0	Device Default	New User
	43	0	0	Device Default	New User

Close

- Same: The user's information is the same as the information registered within BioStar 2.
- Different: The user's information is different from the information registered with BioStar 2.
- New User: The user has not been registered with BioStar 2.

3) After selecting user information, click Delete to delete it or click Upload to upload it to BioStar 2. When you click Upload, if BioStar 2 contains user information of the same ID, it can be updated with the information in the device.

Note

- After registering a device, you can edit its details by referring to [Editing Device Settings and Information](#).
- When you delete user information, it is only deleted from the device and the information in BioStar 2 remains intact.

Upgrading Firmware

You can easily upgrade the firmware on any device connected to BioStar 2 without any additional connection or action.

Copy the firmware files that you have downloaded to the following folder. If the folder does not exist, you need to create it.

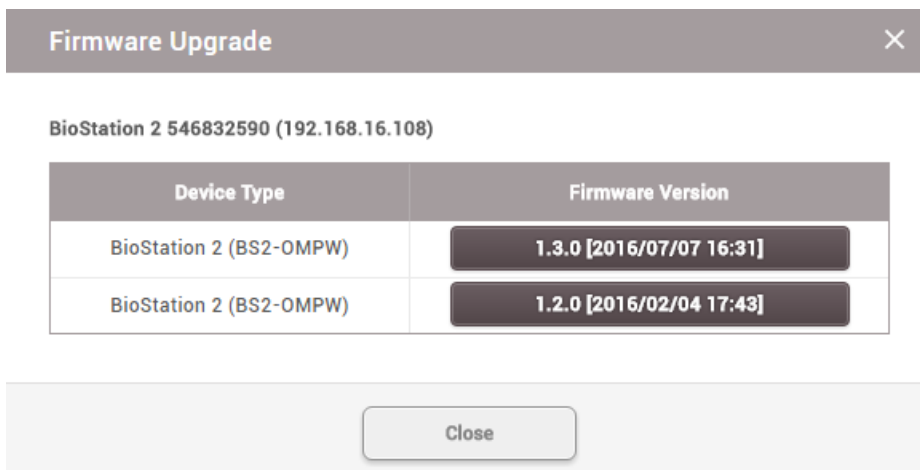
- 32-Bit Operating Systems: C:\Program Files\BioStar 2\firmware

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6 Device

- 64-Bit Operating Systems: C:\Program Files\BioStar 2(x64)\firmware

- 1) Click DEVICE.
- 2) Select a device and click Firmware Upgrade. Multiple devices of the same type can be batch upgraded.



- 3) Click the firmware version to start the upgrade.

Note

- It is possible to upgrade a number of devices with the same RS-485 mode simultaneously. For example, a number of master devices can be upgraded simultaneously and a number of slave devices can be upgraded simultaneously as well.
- It is possible to upgrade a number of master devices or slave devices that have no master device simultaneously.
- It is not possible to upgrade a number of slave devices which is connected to the same master device simultaneously.

Related Information

Information

Editing Device Settings and Information

You can edit detailed information of registered devices. For more information on registering devices, see [Basic Search and Registration](#) or [Advanced Search and Registration](#).

The details shown may vary depending on the RS-485 connection type or the device type.

- 1) Click DEVICE.

6 Device

- 2) Click a device on the device list to edit.
- 3) Edit the fields by referring to [Information](#), [Network](#), [Authentication](#), [Advanced Settings](#), [Thermal & Mask](#), [SIP Intercom](#), [RTSP](#), [DM-20](#), [OM-120](#), [CoreStation](#) and [Wiegand Device](#).
- 4) To edit information of multiple devices, select multiple devices and click Batch Edit.

Device Batch Edit

Devices (2)

- OSDP Device Status ☒ Active
- Use DHCP ☐ Use DHCP
- Full Access ☐ Full Access
- Image Log ☐ Use Image Log
- Time Zone
- Daylight Saving Time
- Suprema Smart Card ☐ Disabled ☐ Classic/Plus ☐ DESFire, DESFire EV1/EV2/EV3 ☐ SR/SE ☐ SEOS
- Suprema Smart Card Layout None
- Custom Smart Card ☐ Disabled ☐ Classic/Plus ☐ DESFire, DESFire EV1/EV2/EV3 ☐ FeliCa Standard
- Custom Smart Card Layout None
- Subnet Mask
- Gateway
- Auth Mode
- Matching Timeout 7 sec
- User ID Display Display All
- User Name Display Display All

- 5) Click of the field you want to edit and edit the information.
- 6) After editing all information, click Apply.

Note

- The fields displayed for Batch Edit may vary depending on the device type selected.
- If you select both master devices and slave devices and click Batch Edit, only some of the [Authentication](#) and [Display/Sound](#) fields can be edited.
- Auth Mode can be batch edited only when devices with the same model name are selected.

6 Device

Information

You can enter or edit the name and the group of a device. If a new firmware version is available, you can upgrade to it.

1) Edit all fields of the Information tab.

The screenshot shows the 'Information' tab of a device management interface. It contains several sections of fields and buttons. On the left, there are fields for Name, Device ID, Firmware Version, Kernel Version, Restore to default, Time Zone, and Daylight Saving Time. On the right, there are fields for Group, Device Type, Product Name, Hardware Version, Locked, and Time Synchronization with Server. At the bottom, there is a 'System' section with a 'Display Date' field and 'Get Time' and 'Set Time' buttons. A bracket labeled 15 points to the 'Get Time' button.

No.	Item	Description
1	Name	Enter a device name.
2	Device ID	View the device ID.
3	Firmware Version	Click Upgrade to install a new firmware version.
4	Kernel Version	View the kernel version.
5	Restore to default	Reset the settings of the device. - All: Reset all settings. - Without Network: Reset all settings excluding the network settings.
6	Time Zone	Set the time zone of the device.
7	Daylight Saving Time	Apply the daylight saving time to the device. To add a new daylight saving time rule, see Daylight Saving Time .
8	Group	Change the device group. For more information on adding device groups, see Adding and Managing Device Groups .
9	Device Type	View the device type.
10	Product Name	View the model name.

6 Device

No.	Item	Description
11	Hardware Version	View the hardware version.
12	Locked	Unlock button will be available when the device is disabled via Trigger & Action.
13	Time Synchronization with Server	Select the option to synchronize the time information of the device with the server.
14	Date and Time	Click  to manually set the date and time. If the Time Synchronization with Server option is selected, the date and time cannot be selected manually.
15	Get Time	Click the button to fetch the time set in the device.
16	Set Time	Click the button to apply the time set in BioStar 2 to the device.

2) Click Apply to save the settings.

Note

- Make sure to set the correct date and time as they are recorded in the **Event Log** and the **Real-time Log**.

Network

You can configure various connection settings such as TCP/IP and RS-485, etc.

Note

- Editable fields vary depending on the device type.

1) Edit all fields of the Network tab.

6 Device

The screenshot shows the 'Network' configuration page with the following sections and callouts:

- 1** points to the **TCP/IP** section, which includes a 'Use DHCP' checkbox and fields for IP Address (192.168.12.171), Subnet Mask (255.255.255.0), Gateway (192.168.12.1), Device Port (51211), and DNS Server Address.
- 2** points to the **WLAN** section, which includes a 'Use' checkbox, Operation Mode (Infrastructure), Authorization Type (Open System), Authorization Key, SSID, and Encryption Type (NONE).
- 3** points to the **Server** section, which includes a 'Device > Server Connection' checkbox, Server Address, and Server Port (51212).
- 4** points to the **Serial** section, which includes RS485 (Default), Authentication Result (Display Result from Controller), Baud Rate (115200), and an information icon.
- 5** points to the **Intelligent Slave** section, which includes Exception Code (Enabled), Exception Code Value (Decimal/Hexadecimal, 0, Max 8 bytes), Output Info (Card ID/User ID), and OSDP ID (126).

No.	Item	Description
1	TCP/IP	You can configure the TCP/IP connection settings of the device. ■ Use DHCP: Select this option to allow the device to use a dynamic IP address. If this option is selected, network settings cannot be entered. ■ IP Address, Subnet Mask, Gateway: Enter network settings of the device. ■ Device Port: Enter a port to be used by the device. ■ DNS Server Address: Enter a DNS server address. Note ■ The devices and the firmware versions where a DNS server address can be entered are as follows. - BioStation L2 FW 1.0.0 or later - BioStation A2 FW 1.0.0 or later - BioStation 2 FW 1.2.0 or later - BioLite Net FW 2.2.0 or later - BioEntry Plus FW 2.2.0 or later - BioEntry W FW 2.2.0 or later - XPass FW 2.2.0 or later - XPass S2 FW 2.2.0 or later - FaceStation 2 FW 1.0.0 or later

6 Device

No.	Item	Description
		- BioLite N2 FW 1.0.0 or later - FaceLite FW 1.0.0 or later - XPass 2 FW 1.0.0 or later - FaceStation F2 FW 1.0.0 or later - X-Station 2 FW 1.0.0 or later - BioStation 3 FW 1.0.0 or later - BioEntry W3 FW 1.0.0 or later - BioStation 3 Max FW 1.0.0 or later - XPass Q2 1.0.0 or later
2	WLAN	Turns on or off the wireless LAN. You can also configure the wireless LAN related settings from the device menu. For the detailed information, refer to the device's user guide.  Note ▪ Only for BioStation 2, BioStation A2, FaceStation 2 and BioStation 3.
3	Server	You can enter connection settings to use in the server mode. ▪ Device → Server Connection: Select this option to configure the BioStar 2 settings for connecting to the devices. If this option is selected, BioStar 2 server network settings can be entered. ▪ Server Address: Enter the IP address or domain name of the BioStar 2 server. ▪ Server Port: Enter the port number of the BioStar 2 server.  Note ▪ The devices and the firmware versions where a domain address can be entered for the server address are as follows. - BioStation L2 FW 1.0.0 or later - BioStation A2 FW 1.0.0 or later - BioStation 2 FW 1.2.0 or later - BioEntry W2 FW 1.0.0 or later - BioEntry P2 FW 1.0.0 or later - FaceStation 2 FW 1.0.0 or later - BioLite N2 FW 1.0.0 or later - BioLite Net FW 2.2.0 or later - BioEntry Plus FW 2.2.0 or later - BioEntry W FW 2.2.0 or later - XPass FW 2.2.0 or later - XPass S2 FW 2.2.0 or later - XPass 2 FW 1.0.0 or later - X-Station 2 FW 1.0.0 or later - BioStation 3 FW 1.0.0 or later - BioEntry W3 FW 1.0.0 or later

6 Device

No.	Item	Description
		- BioStation 3 Max FW 1.0.0 or later - XPass Q2 1.0.0 or later
4	Serial	You can configure the connection mode, baud rate, and display authentication results of devices connected over RS-485. ▪ RS-485: Set a RS-485 mode. ▪ Baud Rate: Set a baud rate of the RS-485 connection. ▪ Authentication Result: When using the device with a 3rd party controller, it selects a method to display the authentication results. - Display Result from Controller: Displays authentication results from 3rd party controllers on the device. - Display Device Matching Result: Displays the device's authentication results.  Note ▪ Authentication Result is activated only when RS-485 is set to Default or Slave.
5	Intelligent Slave	When a user performs fingerprint authentication with a Suprema device connected to a third-party controller, the authentication result is transmitted as OSDP card data to perform multiple 1:1 or 1:N matching. ▪ Exception Code: When using intelligent slaves, exception codes in decimal or hexadecimal can be sent to aggregate accurate logs in exceptional situations such as authentication failures. Decimal numbers can be entered from 0 to 18446744073709551615, and hexadecimal numbers can be entered from 0 to FFFFFFFFFFFFFFFF or hexadecimal characters. ▪ Output Info: You can output the card ID or user ID when authentication is successfully done. ▪ OSDP ID: Enter the OSDP address of the device. You can enter a number from 0 to 126.  Note ▪ Intelligent slave is activated only when the RS-485 option for Serial is set as Default. ▪ The devices and firmware versions that support Intelligent Slave are as follows. - BioEntry W2 FW 1.6.3 or later - BioStation L2 FW 1.6.1 or later - BioEntry P2 FW 1.4.1 or later - XPass 2 FW 1.2.3 or later - X-Station 2 FW 1.1.0 or later - BioLite N2 FW 1.4.1 or later

6 Device

No.	Item	Description
		- FaceStation F2 FW 1.1.2 or later - BioStation 3 FW 1.0.0 or later - BioEntry W3 FW 1.0.0 or later - BioStation 3 Max FW 1.0.0 or later - XPass Q2 1.0.0 or later ▪ The data size of the Exception Code can be entered up to 8 bytes.

2) Click Apply to save the settings.

Authentication

You can configure the user authentication settings of the device.

Note

- Editable fields vary depending on the device type.

1) Edit all fields of the Authentication tab.

6 Device

Authentication

Auth Mode

	Always		
+	Always		
+	Always		

+ Add

Full Access

Disable

Server Matching

Inactive

User Name Display

Display All

Auth Timeout

10 sec

Face Detection Level

Not Use

User ID Display

Display All

Fingerprint

1:N Security Level

Normal

Sensor Sensitivity

7

Template Format

Suprema

View Image

Disabled

Advanced Enrollment

Enabled

Duplicate Check

Enabled

Scan Timeout

10 sec

1:N Fast Mode

Auto

Matching Timeout

5 sec

Sensor Mode

Auto On

Fingerprint LFD

Not Use

Face

1:N Security Level

Normal

Motion Sensor

Medium

Enhanced fake face enrollment block

Disabled

Enrollment Time

60 sec

Ambient Brightness

Normal

Quick Enrollment

Enable

Duplicate Check

Enabled

Face Detect Setting

Maximum Head Pose Angle

15 °

Detection Distance

30 cm

40 cm

Wide Search

OFF

Operation Mode

Fusion Matching Mode

Fake Detection

Normal

Secure

More Secure

Most Secure

6 Device

10

QR/Barcode

Use QR/Barcode through Camera

Enabled

Use QR as Card

Disabled

Camera Timeout

4 sec

Motion Sensor

Medium

Use QR/Barcode through Scanner

Enabled

Scanner Timeout

4 sec

11

Card Type

CSN Card

Enabled

EM4100

Mifare/Felica

Byte Order

MSB

Format Type

Normal

Wiegand Card

Disabled

Suprema Smart Card

Enabled

MIFARE

Classic/Plus

DESFire, DESFire EV1/EV2/EV3

iCLASS

SR/SE

SEOS

Suprema Smart Card Layout

None

Suprema Smart Card Output Byte Order

MSB

Custom Smart Card

Enabled

MIFARE

Classic/Plus

DESFire, DESFire EV1/EV2/EV3

Felica

Felica Standard

Custom Smart Card Layout

None

Custom Smart Card Byte Order

MSB

CSN Mobile

Enabled

NFC

BLE

Template on Mobile

Enabled

NFC

BLE

ToM Enrollment

Visual Face

ToM Output Byte Order

MSB

No.	Item	Description
1	Auth Mode	You can configure the authentication modes of the device. BioStar 2 can use any combinations of fingerprint, ID, card, PIN and face as authentication modes. - Click + Add and create an authentication mode by dragging and dropping available options. Select a schedule and click OK to register the authentication mode. If no desired schedule is available, click + Add Schedule to create it. - For more information on configuring schedules, see Schedules.

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6 Device

No.	Item	Description
2	Full Access	You can grant full access to users registered within the device without setting any access groups.
3	Server Matching	It is possible to set server matching. When Active is set, the authentication is carried out using the user information stored in the PC where BioStar 2 is installed, and when Inactive is set, the authentication is carried out using the user information stored in the device. When using server matching, the server matching of BioStar 2 should be also activated. For more information, refer to Server.  Note ▪ The devices and the firmware versions where server matching can be used are as follows. - CoreStation FW 1.0.0 or later - BioEntry P2 FW 1.0.0 or later - BioEntry W2 FW 1.0.0 or later - BioStation L2 FW 1.0.0 or later - BioStation A2 FW 1.0.0 or later - BioStation 2 FW 1.2.0 or later - BioLite Net FW 2.2.0 or later - BioEntry Plus FW 2.2.0 or later - BioEntry W FW 2.2.0 or later - XPass FW 2.2.0 or later - XPass S2 FW 2.2.0 or later - BioLite N2 FW 1.0.0 or later - XPass D2 FW 1.0.0 or later - XPass 2 FW 1.0.0 or later - FaceStation 2 FW 1.4.0 or later - FaceStation F2 FW 1.0.0 or later - X-Station 2 FW 1.0.0 or later - BioStation 3 FW 1.0.0 or later - BioEntry W3 FW 1.0.0 or later - BioStation 3 Max FW 1.0.0 or later - XPass Q2 1.0.0 or later ▪ Server Matching is not available for FaceLite. ▪ Server Matching of Visual Face is not available for FaceStation F2, BioStation 3, BioEntry W3 and BioStation 3 Max.
4	Auth Timeout	When using a combination of multiple credentials in Auth Mode, the system waits for this length of time to authenticate the second credential. Set a timeout period for authenticating the second credential after authenticating the first credential. If the second credential is not authenticated within this time, the authentication fails.
5	Face Detection	You can set an algorithm step for recognizing a face with a camera built in a device when a user tries to authenticate.

6 Device

No.	Item	Description
		If it is set to Normal, it can detect a face at an arm's length. If it is set to High, it can detect a face at a shorter distance. If it is set to Not Use, it cannot use the face detection function.  Note Support only for BioStation A2.
6	User Name Display	Masking or displaying the user name displayed on the device when authentication is successful. Display All / Mask All but First Letter / Hide All
7	User ID Display	Masking or displaying the user ID displayed on the device when authentication is successful. Display All / Mask All but First Letter / Hide All
8	Fingerprint	You can configure the detail settings concerning fingerprint authentication. 1:N Security Level: You can set a security level to use for fingerprint authentication. The higher the security level is set, the false rejection rate (FRR) gets higher, but the false acceptance rate (FAR) gets lower. - Scan Timeout: You can set a fingerprint scan timeout period. If the fingerprint is not scanned within the set time, the authentication fails. - Sensor Sensitivity: You can set a sensitivity level of the fingerprint recognition sensor. Set the sensor sensitivity higher if you wish to use a higher sensor sensitivity level and obtain more detailed fingerprint information. 1:N Fast Mode: You can set the fingerprint authentication speed. Select Auto to have the authentication speed configured according to the total amount of fingerprint templates registered within the device. - Template Format: You can view the fingerprint template format. - Matching Timeout: You can set the matching timeout period. If the authentication is not completed within the set time, the authentication fails. - View Image: Displays the image of the fingerprint on the screen during the authentication process. - Sensor Mode: If the option is set to Auto On, the sensor will automatically go on when it detects a finger. If the option is set to Always On, the sensor will always be on. - Advanced Enrollment: Checks the quality of the scanned fingerprint to avoid the poor quality fingerprint template enrollment. The user will be alerted when the quality of the fingerprint scanned is low and given enrollment instructions. - Fingerprint LFD: It is possible to set the live fingerprint detection level. If the live fingerprint detection level is higher, the false rejection rate on actual human fingerprints will increase. - Duplicate Check: You can check for duplicates when registering

6 Device

No.	Item	Description
		fingerprints.  Note ▪ Editable fields vary depending on the device type. ▪ View Image is available only for BioStation 2, BioStation A2, BioStation L2, BioLite N2, FaceStation F2 (FSF2-ODB), X-Station 2 (XS2-ODPB, XS2-OAPB) and BioStation 3 Max(BS3M-ODB, BS3M-OAPB). ▪ Fingerprint LFD is available only for BioStation A2, BioStation L2, BioEntry W2, BioLite N2, FaceStation F2 (FSF2-ODB), X-Station 2 (XS2-ODPB, XS2-OAPB) and BioStation 3 Max(BS3M-ODB, BS3M-OAPB).
9	Face / Visual Face	You can configure the detail settings concerning face authentication. ▪ 1:N Security Level: You can set a security level to use for face authentication. The higher the security level is set, the false rejection rate (FRR) gets higher, but the false acceptance rate (FAR) gets lower. ▪ Enrollment Time: If a face is not registered during the set time when registering a user's face, the face registration will be canceled. ▪ Motion Sensor: Set the sensitivity for detecting motion near the device. ▪ Ambient Brightness: Sense the brightness near the device and adjust the intensity of IR LED. ▪ Enhanced fake face enrollment block: It is possible to set the Enhanced fake face enrollment block. If the live face detection level is higher, the false rejection rate on actual faces will increase. ▪ Light Brightness: Adjust the brightness level of IR LED manually. Select Normal or High to change the level or select Not Use to turn off the light. ▪ Quick Enrollment: Set whether or not to use a Quick Enrollment. When you set this option to Enabled, the face registration procedure is set to 1 step. If you set the option to Disabled, it is set to 3 steps. To register high-quality face templates, disable Quick Enrollment. ▪ Face Detect Setting: Set the environment for recognizing the user's face during face authentication. - Maximum Head Pose Angle: Set maximum angle of head rotation. - Detection Distance: Set the minimum and maximum detection distance. - Wide Search: Set to ON, search for a face in the entire camera image. ▪ Operation Mode: Set the operation mode of the device when the face is authenticated. - Fusion Matching Mode: Use both visual and infrared cameras to increase the face authentication accuracy. - Fast Matching Mode: The device authenticates users who pass an access point without a pause within the authentication distance. ▪ Fake Detection: The device prevents user authentication using fake

6 Device

No.	Item	Description
		faces, such as photos. It is available when Operation Mode is set to Fusion Matching Mode. ▪ Duplicate Check: You can check for duplicates when registering faces.  Note ▪ Editable fields vary depending on the device type. ▪ Ambient Brightness, Enhanced fake face enrollment block and Quick Enrollment is available only for FaceStation 2 and FaceLite. ▪ Light Brightness is only available on FaceStation F2 firmware version 1.1.0 or later. ▪ Face Detect Setting and Operation Mode are available only for FaceStation F2, BioStation 3, and BioStation 3 Max.
10	QR/Barcode	You can configure the detail settings concerning QR/Barcode authentication. ▪ Use QR/Barcode through Camera: Set whether to use QR/Barcode authentication through the device's camera. ▪ Camera Timeout: You can set the camera's QR/barcode scan timeout period. If the QR/Barcode is not scanned within the set time, the authentication fails. ▪ Use QR as Card: Allows authentication with a QR code of the same data as the issued CSN card or Wiegand card. ▪ Motion Sensor: Set the sensor sensitivity of the camera for starting scanning. ▪ Use QR/Barcode through Scanner: Set whether to use QR/Barcode authentication through the device's scanner. ▪ Scanner Timeout: You can set a QR/Barcode scan timeout period. If the QR/Barcode is not scanned within the set time, the authentication fails.  Note ▪ Using Use QR/Barcode through Camera requires a separate device license. For more information, refer to Device License. ▪ The devices that can use Use QR/Barcode through Camera, Camera Timeout, Use QR as Card, and Motion Sensor are as follows. - X-Station 2 (XS2-ODPB, XS2-OAPB, XS2-DPB, XS2-APB) firmware 1.2.0 or higher - BioStation 3 (BS3-DB, BS3-APWB) firmware 1.1.0 or higher - BioStation 3 Max firmware 1.0.0 or higher ▪ The devices that can use Use QR/Barcode through Scanner, and Scanner Timeout are as follows. - X-Station 2 (XS2-QDPB, XS2-QAPB) ▪ The devices that can use Use QR/Barcode, Use QR as Card and

6 Device

No.	Item	Description
		Scanner Timeout are as follows. - XPass Q2 (XPQ2-DB, XPQ2-APB)
11	Card Type	You can set the type of card used by the device.  Note ▪ The type of card supported by the device is displayed. ▪ CSN Card: You can select the CSN card and format type and set the byte order.  Note ▪ If Format Type is set to Normal, the device will read the card serial number (CSN). If the option is set to Wiegand, the device will read the card serial number in a Wiegand format that the user has defined. ▪ If Format Type is set to Wiegand, you can select the Wiegand format to be used in the device. To set a new Wiegand format, refer to Wiegand. ▪ When Byte Order is set to MSB, the device reads a card ID from the highest byte to the lowest byte. For example, the highest byte of the card ID 0x12345678 is 0x12 and the device sequentially reads 0x12, 0x34, 0x56 and 0x78. When the option is set to LSB, the device reads a card ID from the lowest byte to the highest byte. ▪ Wiegand Card: You can select a Wiegand card type and set the Wiegand format.  Note ▪ You can select the Wiegand format to be used in the device. To set a new Wiegand format, refer to Wiegand. ▪ Suprema Smart Card: It is possible to select the Suprema smart card layout to be used in the device and set the byte order. To set a new smart card layout, refer to Smart / Mobile Card.  Note ▪ When Suprema Smart Card Output Byte Order is set to MSB, the device reads a card ID from the highest byte to the lowest byte. When the option is set to LSB, the device reads a card ID from the lowest byte to the highest byte. ▪ Custom Smart Card: Select the type of Custom Smart Card issued by a

6 Device

No.	Item	Description
		third party and set Custom Smart Card Layout and byte order. To set a new smart card layout, refer to Smart / Mobile Card.  Note ▪ The devices and the firmware versions that can use the Custom Smart Card are as follows. - XPass D2 FW 1.7.1 or later - BioEntry P2 FW 1.5.1 or later - BioEntry W2 FW 1.8.0 or later - BioStation 2a FW 1.1.0 or later - X-Station 2 FW 1.3.0 or later - BioStation 3 FW 1.3.0 or later - BioEntry W3 FW 1.0.0 or later - BioLite N2 FW 1.6.2 or later - BioStation 3 Max FW 1.0.0 or later - XPass Q2 FW 1.0.0 or later ▪ When Custom Smart Card Byte Order is set to MSB, the device reads a card ID from the highest byte to the lowest byte. When the option is set to LSB, the device reads a card ID from the lowest byte to the highest byte. ▪ CSN Mobile: Select the recognition method for the mobile card. ▪ Template on Mobile: Select the recognition method for Template on Mobile, specify which biometrics the user will enroll directly on the device, and set the byte order.  Note ▪ The devices and the firmware versions that can use the Template on Mobile are as follows. - BioStation 3 FW 1.2.0 or later - BioEntry W3 FW 1.0.0 or later - FaceStation F2 FW 2.2.0 or later - X-Station 2 FW 1.3.1 or later - BioStation 3 Max FW 1.0.0 or later ▪ When ToM Output Byte Order is set to MSB, the device reads a card ID from the highest byte to the lowest byte. When the option is set to LSB, the device reads a card ID from the lowest byte to the highest byte.

 Note

- Changing the fingerprint template format makes all previously stored fingerprints unusable. Be sure to select the correct template format before registering user fingerprints.

6 Device

- If Full Access is set to Enable, the device cannot be added to an Access Level and Floor Level.

2) Click Apply to save the settings.

Related Information

Server

Advanced Settings

You can set the administrator, display/sound and trigger & action.

- 1) Click Advanced tab.
- 2) Edit the fields by referring to [Administrator](#), [T&A](#), [Display/Sound](#), [Trigger & Action](#), [Image Log](#), [Wiegand](#), [Secure Tamper](#), [Analog Interphone](#) and [Camera](#).
- 3) Click Apply to save the settings.

Note

- Editable fields vary depending on the device type.

Administrator

You can assign and manage administration rights of the devices.

Note

- You can add and manage up to 1,000 administrators. The number of administrators that can be added depends on the device firmware version.

- 1) Click + Add and select a user.

6 Device

The screenshot displays the 'Administrator' interface with three main sections: 'All', 'User', and 'Configuration'. Each section contains a table with one row of data. The 'All' section shows '1(Administrator)', the 'User' section shows '2(COKE)', and the 'Configuration' section shows '3(CIDER)'. Each table has a 'Select All' checkbox, '+ Add' and 'Delete' buttons, and a trash icon. The pagination for each table shows '1 / 1'.

No.	Item	Description
1	All	The assigned administrators can use all menu functions such as adding and editing users.
2	User	The assigned administrators can manage the user information but cannot change the display, sound, network and RS-485 settings of the device.
3	Configuration	The assigned administrators can change the display, sound, network and RS-485 settings of the device but cannot manage the user information.

Note

- Click  to delete the registered users.
- The administrator settings configured for each device do not affect the BioStar 2 privileges.

T&A

You can change the device's name of the T&A event or configure the device's T&A Mode.

- 1) Edit the necessary fields.

6 Device

The screenshot displays the T&A configuration screen. On the left, a tree view shows 'T&A' expanded, with 'T&A Mode' and 'T&A Event' listed. 'T&A Mode' is selected, showing a dropdown menu with 'By User' chosen. To the right, there's a 'T&A Required' toggle switch set to 'Not Use'. Below this is a table for 'T&A Event' with four rows, each with a 'Code' and a 'Label'.

T&A Event Key	Label
Code 1	check in
Code 2	check out
Code 3	meal start
Code 4	meal end

No.	Item	Description
1	T&A Mode	You can configure the T&A event settings. ▪ Not Use: The user cannot record T&A events. ▪ By User: The user can manually select a T&A event before the authentication. ▪ By Schedule: T&A event automatically changes according to the pre-defined schedule. You can select the schedule under the T&A Event option. ▪ Last Choice: The T&A event that the last user has selected remains unchanged until you change the T&A event manually. ▪ Fixed: The user can use the fixed T&A event only. Configure the T&A Mode to Fixed and select the event you want to use as fixed.
2	T&A Required	The user will be forced to select a T&A event during the authentication process. The T&A Mode option must be set to By User in order to use the Require T&A option.
3	T&A Event	You can set the name of T&A events or you can add schedules which will be used when you set the T&A Mode as By Schedule. ▪ T&A Key: Lists the keys that you can use for T&A event selection. Choose one of the function keys that you want to edit. ▪ Label: You can change the name of the T&A event for the T&A key. ▪ Schedule: You can set a schedule for the By Schedule. The T&A mode must be set to By Schedule in order to enable this option. For more Information on configuring new schedules, see Schedules.

Note

- For a device with no LCD screen, T&A Mode can set to Fixed or By Schedule. You can register a fixed T&A event or a T&A event that changes according to the schedule.
Supported devices are BioEntry P2, BioEntry W2, BioEntry Plus, BioEntry W, XPass, XPass S2, XPass D2 and XPass 2.

6 Device

Display/Sound

You can edit display and sound settings of the device. You can configure LED or buzzer action for each event.

Note

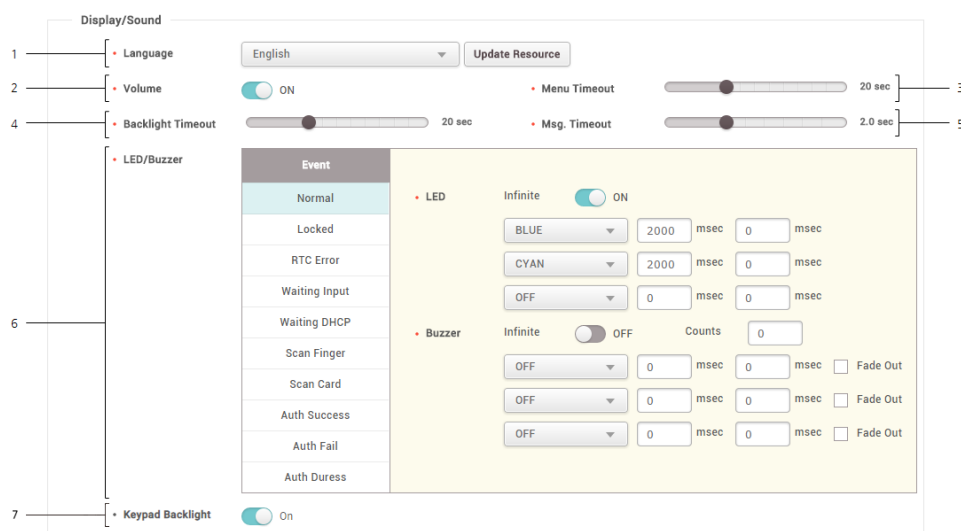
- Editable fields may vary depending on the device type.

1) Edit the necessary fields.

— BioEntry P2, BioEntry W2, BioLite Net, BioEntry Plus, BioEntry W, XPass, XPass S2, XPass D2, XPass 2, BioEntry W3, XPass Q2

Note

- Language, Menu Timeout, Backlight Timeout, Msgs. Timeout can only be used by BioLite Net.
- Keypad Backlight is only available with XPass D2 hardware V02M, firmware 1.7.1 or higher.

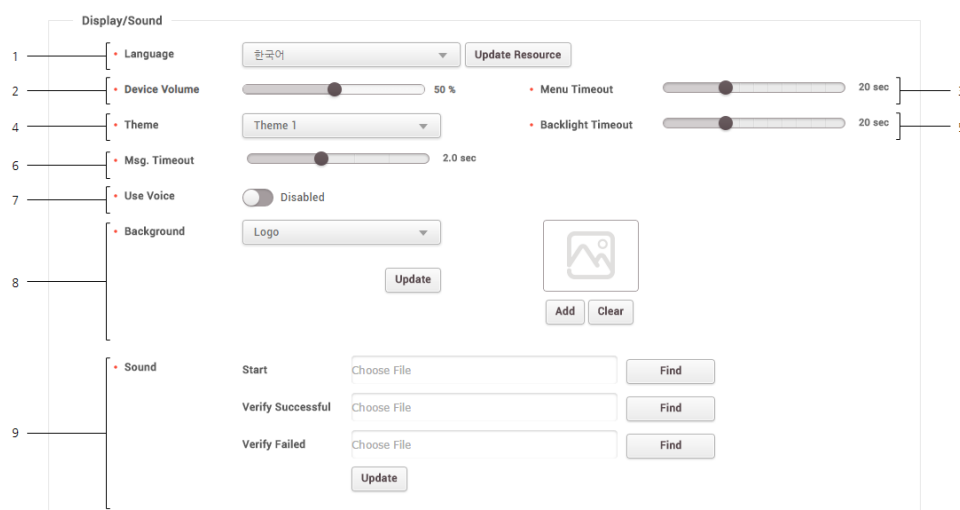


No.	Item	Description
1	Language	Sets the display language of the device. Click Update Resource to transfer a language resource file to the device.
2	Volume	Turns the sound on or off.
3	Menu Timeout	Sets the timeout period for changing from the menu screen

6 Device

No.	Item	Description
		to the standby screen.
4	Backlight Timeout	Sets the timeout period for the display backlight to turn off automatically.
5	Msg. Timeout	Sets the timeout period for various messages to disappear automatically.
6	LED/ Buzzer	Selects an event and set LED or buzzer actions for the event.
7	Keypad Backlight	Turn the keypad backlight on or off. Enabling the keypad backlight illuminates the back of the keypad to facilitate key identification in dark environments.

— BioStation 2, BioStation L2, BioLite N2, FaceLite

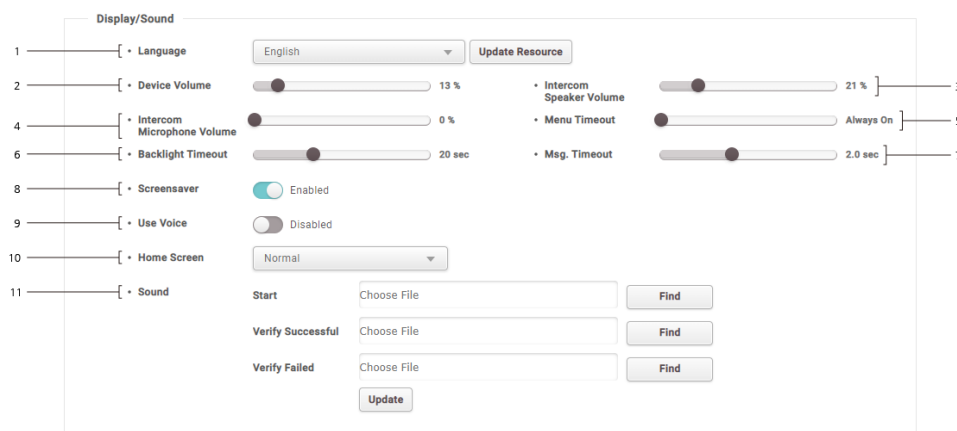


No.	Item	Description
1	Language	Sets the display language of the device. Click Update Resource to transfer a language resource file to the device.
2	Device Volume	Controls the volume.
3	Menu Timeout	Sets the timeout for the menu screen.
4	Theme	Changes the style of the device's home screen.
5	Backlight Timeout	Sets the timeout for the backlight.
6	Msg. Timeout	Sets the timeout period for various messages to disappear automatically.

6 Device

No.	Item	Description
7	Use Voice	Enables voice guidance.
8	Background	Sets the items to be displayed on the device's home screen. - Logo: Displays the user's uploaded image on the home screen. You can upload an image by clicking Add. - Notice: Displays messages typed by the administrator. - Slide Show: Displays a slideshow of maximum 10 images. You can upload an image by clicking Add.  Note - Click Update to apply the configurations to the device instantly. - Clicking Update will not apply when you change the type of the Background. Click Apply to save the configuration. - Notice and Slide Show are supported on BioStation 2.
9	Sound	Configures the sound effect for boot, authentication success, and authentication failure events. Click Find and select a *.wav file(less than 500KB).  Note Click Update to apply the configurations to the device in real-time.

— BioStation 3, BioStation A2, FaceStation 2, FaceStation F2, X-Station 2, BioStation 3 Max



Display/Sound

1 — [• Language: English (dropdown) Update Resource

2 — [• Device Volume: 13% (slider) 3 — [• Intercom Speaker Volume: 21% (slider)

4 — [• Intercom Microphone Volume: 0% (slider) 5 — [• Menu Timeout: Always On (dropdown)

6 — [• Backlight Timeout: 20 sec (slider) 7 — [• Msg. Timeout: 2.0 sec (slider)

8 — [• Screensaver: Enabled (toggle)

9 — [• Use Voice: Disabled (toggle)

10 — [• Home Screen: Normal (dropdown)

11 — [• Sound: Start: Choose File (button) Find (button)

Verify Successful: Choose File (button) Find (button)

Verify Failed: Choose File (button) Find (button)

Update (button)

6 Device

No.	Item	Description
1	Language	Sets the display language of the device. Click Update Resource to transfer a language resource file to the device.
2	Device Volume	Controls the device's default volume.
3	Intercom Speaker Volume	Sets the speaker volume when using the Intercom function.
4	Intercom Microphone Volume	Sets the microphone volume when using the Intercom function.
5	Menu Timeout	Sets the timeout for the menu screen.
6	Backlight Timeout	Sets the timeout for the backlight.
7	Msg. Timeout	Sets the timeout period for various messages to disappear automatically.
8	Screensaver	Sets this option to use the screen saver feature. It reduces unnecessary energy consumption by lowering the brightness of the LCD screen when the device is not in use.  Note ▪ Screensaver is supported on FaceStation 2, FaceStation F2, X-Station 2 and BioStation 3.
9	Use Voice	Enables voice guidance.
10	Home Screen	Sets the items to be displayed on the device's home screen. ▪ Normal: Displays the default image on the home screen. ▪ Logo: Displays the user's uploaded image on the home screen. You can upload an image by clicking Add. ▪ Notice: Displays messages typed by the administrator.  Note ▪ Click Update to apply the configurations to the device instantly. ▪ Clicking Update will not apply when you change the type of the Background. Click Apply to save the configuration. ▪ When you set Logo for Home Screen and set Slide Show Enabled, you can display a slideshow of maximum 10 images on the home screen. You

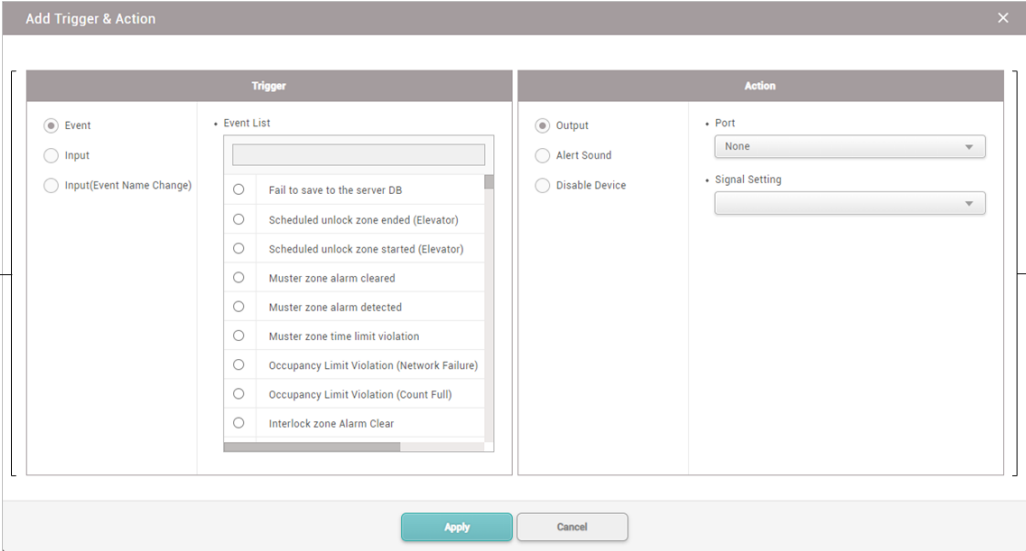
6 Device

No.	Item	Description
		can upload an image by clicking Add.
11	Sound	Configures the sound effect for boot, authentication success, and authentication failure events. Click Find and select a *.wav file(less than 500KB).  Note Click Update to apply the configurations to the device in real-time.

Trigger & Action

You can configure triggers and actions for each situation. For instance, you can get all alarms to go off when an authentication fails or disable the device when its RS-485 connection is lost. You can select an event or you can configure the desired triggers and actions.

- 1) Click + Add and configure the settings.



No.	Item	Description
1	Trigger	You can select a pre-defined event or add a user defined trigger. - Event: You can select a pre-defined event. - Input: You can set a user defined trigger by selecting Port, Switch, Duration(ms), Schedule, and Ignore Repeated Signals Duration(ms).

6 Device

		- Input(Event Name Change): You can set a user defined trigger by selecting Port, Switch, Duration(ms), Schedule, and Event Name.  Note - If you set the trigger as an event, you can select only one event from the event list. - When configuring a user defined condition by selecting Input or Input(Event Name Change), if no desired schedule is available, click + Add Schedule to create it. For more information on configuring schedules, see Schedules. - When configuring a user defined condition by selecting Input(Event Name Change), if no desired event name is available, click Add Event Name to create it. When the event occurs, the event name is displayed in the Event Log and Real-time Log. - Up to 64 characters may be entered for the event name.
2	Action	You can select a pre-defined action or add a user defined action.  Note - When configuring a user defined action by selecting Output, if no desired signal is available, click + Add Signal to create it. - If you set the trigger as Input(Event Name Change), you can set the Action to None.

Image Log

You can set an image log event and schedule to be used in the device.

 Note

- Only for BioStation A2, FaceStation 2, FaceStation F2, X-Station 2 and BioStation 3.

- 1) Set Enabled for the image log. It is possible to set Preset from Setting > Image Log. For more information, see [Image Log](#).
- 2) Click + Add and set a desired event and schedule.

6 Device

Image Log

Image Log

Configuration

Enabled

Event	Schedule	
1:1 authentication succeeded	Always	
1:1 authentication failed	Always	
1:1 duress authentication succeeded	Always	
1:N authentication succeeded	Always	
1:N authentication failed	Always	
1:N duress authentication succeeded	Always	
Dual authentication succeeded	Always	
Dual authentication failed	Always	
Authentication failed	Always	
Access denied	Always	
Administrator menu entered	Always	

+ Add

Wiegand

You can define the Wiegand Input/Output.

1) Edit the necessary fields.

Wiegand

1

Input/Output

Input

2

Wiegand Input Format

Default

3

Output Mode

Normal

Fail Code

0x00

Pulse Width(μs)

40

4

Pulse Interval(μs)

10000

5

Output Info

Card ID

User ID

6

No.	Item	Description
1	Input/Output	You can select input/output mode.
2	Wiegand Input Format	You can set a format for Wiegand. For more information on setting a Wiegand format, see Card Format .
3	Output Mode	You can set the Wiegand signal output mode. If it is set to Normal, a card will be scanned in the set Wiegand format. If it is set to ByPass, CSN will be sent regardless of Wiegand authentication. ByPass should be set when using the device without an entrance door control function. If it is set to Normal mode, it is possible to set Fail Code, and select a value to be transmitted when Wiegand card authentication fails.
4	Pulse Width	You can set the pulse width of the Wiegand signal.

6 Device

5	Pulse Interval	You can set the pulse interval of the Wiegand signal.
6	Output info	You can select the information output to the device when the user authenticates.

Secure Tamper

If a tamper event occurs on the device, you can set to delete the entire user information, the entire log, and the security key stored on the device.

- 1) To use the secure tamper, set to On.

• Secure Tamper  On • All the users, logs, and encryption key in the device will be removed at the secure tamper event.

Analog Interphone

It is possible to set whether or not to use an analog interphone.

Note

- Only for BioStation 2.

- 1) Click Use to use a connected intercom.

Interphone

☐ Use

Camera

It is possible to set the camera frequency. If you set the frequency incorrectly in the environment where the fluorescent light is used, flickering on the image may occur.

Different camera frequencies are used depending on geographic location. 60 Hz is generally used in U.S., and 50 Hz is used in all other areas.

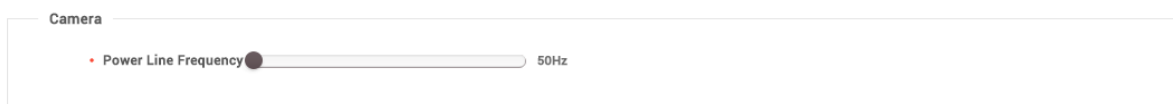
For the camera frequency of a given area, contact a sales agent.

Note

- Only supported on FaceStation F2 FW v2.1.4 or later and BioStation A2.

- 1) Select the frequency.

6 Device



Thermal & Mask

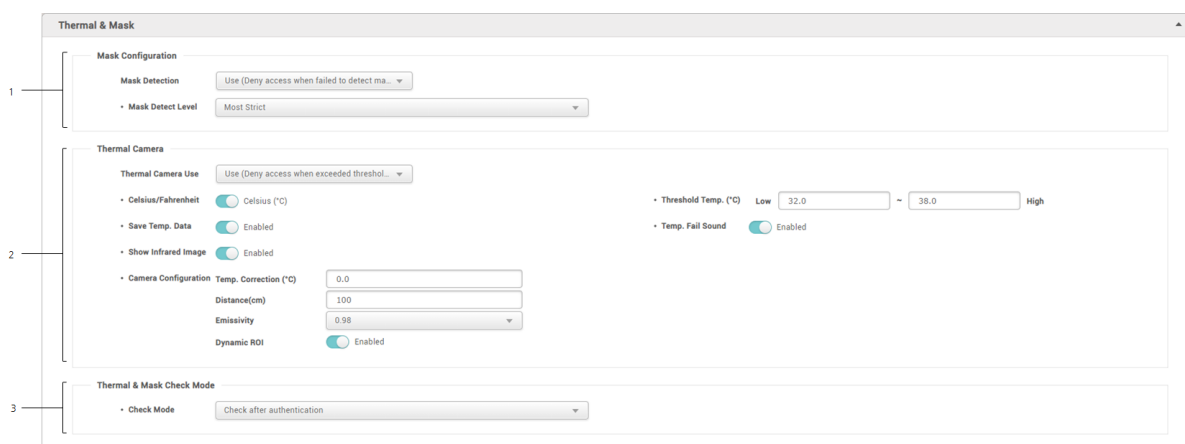
You can set the detailed settings of thermal camera and mask detection.

Thermal camera with Suprema face authentication devices measures temperature of users passing the access point and limit the access of users with higher temperature than preset threshold. And the face authentication devices can also detect masks and restrict access to users without masks.

Note

- Only FaceStation 2 and FaceStation F2 support thermal cameras.
- The supported thermal cameras are as follows.
 - TCM10-FS2
 - TCM10-FSF2
- Only FaceStation F2, BioStation 3 and BioEntry W3 support mask detection.

1) Edit the necessary items.



No.	Item	Description
1	Mask Configuration	You can set whether to use mask detection or not. ▪ Mask Detection: You can set whether to use mask detection or not. If you select Use (Deny access when failed to detect mask), it refuses authentication of users who are not wearing a mask and saves event logs. If you select Use (Allow access after leaving log when failed to detect mask) users who are not wearing a mask can authenticate but event logs still be saved. ▪ Mask Detect Level: You can set sensitivity for mask detection.

6 Device

No.	Item	Description
2	Thermal Camera	You can set options whether to use the thermal camera and edit the detailed settings. - Thermal Camera Use: You can set whether to use thermal camera or not. If you select Use (Deny access when exceeded threshold temperature), it refuses authentication of users with elevated temperature than the preset threshold and saves event logs. If you select Use (Allow access after leaving log when exceeded threshold temperature), users with elevated temperature than the preset threshold can authenticate but event logs still be saved. - Celsius / Fahrenheit: Change the unit of temperature. - Threshold Temp. (? / ?): You can set the minimum and maximum temperature values to limit the access. The access of users with a lower or higher skin temperature than threshold temperature will be restricted depending on the Thermal Camera Use settings. It can be set in the range of 1 °C to 45 °C, and the Low value cannot be set higher than the High value. - Save Temp. Data: Save temperature data. When this mode is Enabled, it saves both authentication and temperature logs. When this mode is Disabled, it only saves authentication logs. - Temp. Fail Sound: Set the alerts to trigger when the temperature is higher than the preset threshold. - Show Infrared Image: Display infrared imaging on the screen of the devices. - Camera Configuration: Configure the thermal camera settings for accurate measurement. - Temp. Correction (?): Depending on the device usage environment, the temperature can be calibrated to measure as high or low as a certain value. For example, in an environment where the temperature value is always measured high by 0.1? , set the temperature compensation value to -0.1? . - Distance(cm): Set up the distance between the user and device. - Emissivity: Set up the emissivity to precisely measure the temperature of the user. - Dynamic ROI: If there are lights in the device field of view, you can set the thermal camera to automatically measure the user's temperature rather than that light. - ROI X(%), ROI Y(%), ROI Width h(%), ROI Height (%): If you set Dynamic ROI to Disabled, you can manually set the ROI(Region of Interest). Set the temperature measurement area by adjusting the size and position of ROI.  Note - Low and High value settings of Threshold Temp. can be used from

6 Device

No.	Item	Description																					
		the firmware version below. - FaceStation 2 FW 1.4.2 or later - FaceStation F2 FW 1.0.2 or later - It is recommended to maintain the default values of the camera configuration settings for the best performance. The default values ? for each option per device are as follows: <table> <tr> <th>Items</th><th>FaceStation 2</th><th>FaceStation F2</th></tr> <tr> <td>Distance(cm)</td><td>100</td><td>100</td></tr> <tr> <td>Emissivity</td><td>0.98</td><td>0.98</td></tr> <tr> <td>ROI X(%)</td><td>47</td><td>30</td></tr> <tr> <td>ROI Y(%)</td><td>45</td><td>25</td></tr> <tr> <td>ROI Width(%)</td><td>15</td><td>50</td></tr> <tr> <td>ROI Height(%)</td><td>10</td><td>55</td></tr> </table>	Items	FaceStation 2	FaceStation F2	Distance(cm)	100	100	Emissivity	0.98	0.98	ROI X(%)	47	30	ROI Y(%)	45	25	ROI Width(%)	15	50	ROI Height(%)	10	55
Items	FaceStation 2	FaceStation F2																					
Distance(cm)	100	100																					
Emissivity	0.98	0.98																					
ROI X(%)	47	30																					
ROI Y(%)	45	25																					
ROI Width(%)	15	50																					
ROI Height(%)	10	55																					
3	Thermal & Mask Check Mode	Set the thermal & mask check mode depending on the desired usage. - Check after authentication: Measure the temperature or detect the mask after a successful authentication. - Check before authentication: Authentication is performed after checking whether the user is wearing a mask or measuring the temperature. When using this mode, it does not attempt to authenticate user's identity if they does not wear masks or their temperature has been detected to be above the threshold. - Check without authentication: The device may only be used to determine whether a mask is worn or to measure temperature. In this mode, regardless of authentication, all users wearing a mask or below the reference temperature can enter.																					

2) Click Apply to save the settings.

SIP Intercom

You can set the detailed settings of SIP Intercom.

Note

- SIP Intercom is only supported on BioStation 3, FaceStation 2, BioStation A2.
- Editable fields vary depending on the device type.

6 Device

- 1) Set Intercom to Use.
- 2) Fill SIP configurations to register the device to your SIP server.

Intercom

• Intercom

Use

1

• SIP Server Address

192.111.222.33

3

• SIP Username

KIM

5

• Authorization ID

7

• Open Door Button (DTMF)

0

9

• Outbound Proxy Server

Not Use

10

• Outbound Proxy Server Address

12

• Intercom Video Resolution

360x640

13

• Display Extension Number

Use

14

• Extension Number

• SIP Server Port

5060

• Password

• Registration Duration (sec)

60

• SIP Server Transport

UDP

• Outbound Proxy Server Port

Order

Extension Number(*)

Display Name

Edit

Not found

No.	Item	Description
1	SIP Server Address	Enter SIP server address.
2	SIP Server Port	Enter SIP server port.
3	SIP Username	Enter username of your SIP account. Note ▪ SIP Username can only enter alphanumeric (case sensitive), and special characters (+, -, @, .).
4	Password	Enter password of your SIP account.
5	Authorization ID	Enter authorization ID of your SIP account. Note

6 Device

		Authorization ID can only enter alphanumeric (case sensitive), and special characters (+, -, @, .).
6	Registration Duration(second)	Enter Registration Duration in seconds. The device(SIP endpoint) tries to register to the SIP server every set Registration Duration.  Note Registration Duration can be set between 60 to 600 secs.
7	Open Door Button(DTMF)	Set a button to open the door on the phone.
8	SIP Server Transport	When setting up the Intercom SIP server, it selects the SIP transmission method. - UDP / TCP / SSL  Note - SIP Server Transport is only supported on BioStation 3 FW 1.3.0 or later.
9	Outbound Proxy Server	If your SIP service has a separate (outbound) proxy server, set this to Use.
10	Outbound Proxy Server Address	Enter the outbound proxy server address.
11	Outbound Proxy Server Port	Enter the outbound proxy server port.
12	Intercom Video Resolution	Select the resolution of the video output when using an Intercom. 360 x 640 (Default) / 720 x 480  Note - Intercom Video Resolution is only supported on BioStation 3 FW 1.3.0 or later.
13	Display Extension Number	If you mind the device displaying extension numbers on the screen, set this to Not Use.  Note If Display Name is not set, it will not be possible to distinguish receivers.

6 Device

14	Extension Number	Register extension numbers up to 128. Click Edit to add / edit ▪ Send to Top: Selected extension number moves to the top of the list. ▪ CSV Import: Import extension numbers from a CSV file. ▪ CSV Export: Export extension numbers to a CSV file. ▪ Add: Add an extension number ▪ Delete: Delete an extension number ▪ Reorder: Reorder extension numbers by drag and drop.  Note ▪ Max. Number of Extension Numbers for FaceStation 2 and BioStation A2 is up to 16. ▪ CSV file cannot contain more than maximum number of supported extension numbers. ▪ Extension Number can only enter alphanumeric (case sensitive), and special characters (+, -, @, .).
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3) Click Apply to save the settings.

RTSP

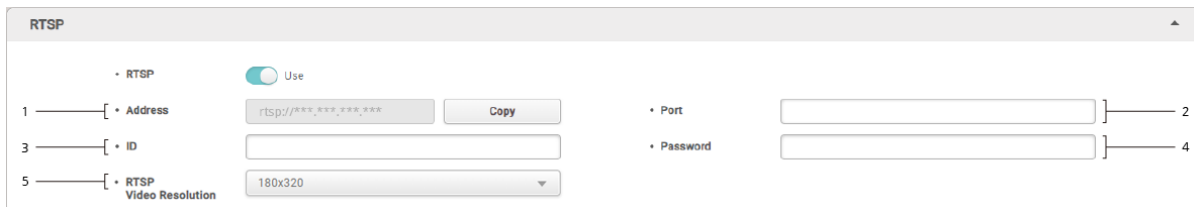
It is possible to set whether to use RTSP.

Note

- RTSP is only supported on BioStation 3 and BioEntry W3.

1) Set RTSP to Use.

2) Enter the necessary fields.



No.	Item	Description
1	Address	RTSP address is fixed. ▪ Copy: Easily copy the RTSP address.
2	Port	Set RTSP port.

6 Device

3	ID	Set ID of your RTSP credential.
4	Password	Set password of your RTSP credential.
5	RTSP Video Resolution	Select the resolution of the video output when using a RTSP. 180 x 320 (Default) / 720 x 480  Note - RTSP Video Resolution is only supported on BioStation 3 FW 1.3.0 or later.

- Click Apply to save the settings.

DM-20

You can edit detailed settings of registered DM-20.

- Click DEVICE.
- Click a DM-20 on the device list to edit.

Information

Name

DoorModule20 200000013

Device ID

200000013

Device Type

DoorModule20

Firmware Version

1.0.8

Firmware Upgrade

Product Name

DM20

Advanced

Supervised Input

Configuration

Index	Supervised	Supervised Input Resistor
0	☒ Supervised	2.2kΩ
1	☒ Supervised	2.2kΩ
4	☒ Supervised	2.2kΩ
5	☒ Supervised	2.2kΩ

No.	Item	Description
1	Information	You can modify the device's settings. - Name: Enter a device name. - Device ID: View the device ID. - Device Type: View the device type. - Firmware Version: Click Firmware Upgrade to install a newer firmware version. - Product Name: View the model name.

6 Device

No.	Item	Description
2	Advanced	You can modify the Supervised Input settings. The DM-20 can oversee the On, Off, Open, and Short status of the device connected to the Supervised Input port, and can set the terminating resistor as 1k Ω , 2.2k Ω , 4.7k Ω , 10k Ω .

- 3) Click Apply to save the settings.

OM-120

You can edit detailed settings of registered OM-120.

- 1) Click DEVICE.
- 2) Click a OM-120 on the device list to edit.

Information	
• Name	OM-120 12345678
• Device ID	12345678
• Device Type	OM-120
• Firmware Version	1.0.0 Firmware Upgrade
• Product Name	OutputModule
• Kernel Version	0.0.0
• Hardware Version	0.0.0

Item	Description
Information	You can modify the device's settings. ▪ Name: Enter a device name. ▪ Device ID: View the device ID. ▪ Device Type: View the device type. ▪ Firmware Version: Click Firmware Upgrade to install a newer firmware version. ▪ Product Name: View the model name. ▪ Kernel Version: View the kernel version. ▪ Hardware Version: View the hardware version.

- 3) Click Apply to save the settings.

IM-120

IM-120 provides instant relay behavior by connecting to BioStar 2 for detected inputs in real-time and it operates a relay or saves logs for detected inputs while it is disconnected from the master device. You can edit detailed settings of registered OM-120.

6 Device

- 1) Click DEVICE.
- 2) Click a IM-120 on the device list to edit.
- 3) Edit the necessary items.

Information

Information

• Name

IM-120 123456789

• Device ID

123456789

• Device Type

IM-120

• Firmware Version

1.0.0 [2021/09/30]

Firmware Upgrade

• Product Name

InputModule

• Kernel Version

0.0.0

• Hardware Version

1.0.0

Item	Description
Information	You can modify the device's settings. ▪ Name: Enter a device name. ▪ Device ID: View the device ID. ▪ Device Type: View the device type. ▪ Firmware Version: Click Firmware Upgrade to install a newer firmware version. ▪ Product Name: View the model name. ▪ Kernel Version: View the kernel version. ▪ Hardware Version: View the hardware version.

Input

Input

Configuration

Index	Name	Supervised Input Register	Switch	Duration(ms)
Tamper	Tamper	Unsupervised	☒ N/O	50
Aux 0	Aux0	Unsupervised	☒ N/O	50
Aux 1	Aux1	Unsupervised	☒ N/O	50
Input 0	Input0	Unsupervised	☒ N/O	50
Input 1	Input1	Unsupervised	☒ N/O	50
Input 2	Input2	Unsupervised	☒ N/O	50
Input 3	Input3	Unsupervised	☒ N/O	50
Input 4	Input4	I/O	☒ N/O	50
Input 5	Input5	Unsupervised	☒ N/O	50
Input 6	Input6	Unsupervised	☒ N/O	50
Input 7	Input7	Unsupervised	☒ N/O	50
Input 8	Input8	Unsupervised	☒ N/O	50
Input 9	Input9	Unsupervised	☒ N/O	50
Input 10	Input10	Unsupervised	☒ N/O	50
Input 11	Input11	Unsupervised	☒ N/O	50

6 Device

Item	Description
Input	You can enter the name of each input port and set the resistance value, switch, and duration. ▪ Index: 12 inputs, 2 AUX inputs, and tamper supported by IM-120 are displayed in the index column. ▪ Name: Enter a name for each input. ▪ Supervised Input Resister: You can set whether to use supervised input or not and the resistance value. Supervised input allows you to monitor the on, off, cut, and short status of the device by detecting the voltage flowing through the device circuit connected to that port. When Supervised Input Resister is set to Unsupervised, the supervised input port is used as a TTL input. 1kΩ , 2.2kΩ , 4.7kΩ and 10kΩ can be set for the resistance value.  Note ▪ Set the resistance value the same as the resistor connected to the input device. ▪ Switch: The Switch can be set to N/C or N/O. ▪ Duration(ms): You can set the minimum time for an input signal to be considered valid when it occurs. Duration can only be entered numbers from 50 to 65535.

Linkage

6 Device

Linkage

Relay 0

Common

Name	Alarm
RS-485 disconnected	☒
Tamper	☐

Aux

Index	Name	Alarm
Aux 0	Aux0	☒
Aux 1	Aux1	☐

Input

Index	Name	Alarm	Fault
Input 0	Input0	☐	☐
Input 1	Input1	☐	☐
Input 2	Input2	☒	☐
Input 3	Input3	☐	☐
Input 4	Input4	☐	☐
Input 5	Input5	☐	☐
Input 6	Input6	☐	☐
Input 7	Input7	☐	☐
Input 8	Input8	☐	☐
Input 9	Input9	☐	☐
Input 10	Input10	☐	☐
Input 11	Input11	☐	☐

Relay 1

Common

Name	Alarm
RS-485 disconnected	☐
Tamper	☐

Aux

Index	Name	Alarm
Aux 0	Aux0	☐
Aux 1	Aux1	☐

Input

Index	Name	Alarm	Fault
Input 0	Input0	☐	☐
Input 1	Input1	☐	☐
Input 2	Input2	☐	☐
Input 3	Input3	☐	☐
Input 4	Input4	☐	☐
Input 5	Input5	☐	☐
Input 6	Input6	☐	☐
Input 7	Input7	☐	☐
Input 8	Input8	☐	☐
Input 9	Input9	☐	☐
Input 10	Input10	☐	☐
Input 11	Input11	☐	☐

Item	Description
Linkage	You can set the action of relay for each input. You can set the action of Relay 0 and Relay 1 respectively. - Common - RS-485 disconnected: You can set whether to trigger an alarm when the connection with the master device is lost. - Tamper: You can set whether to trigger an alarm when a tamper occurs. - AUX: You can set whether to trigger an alarm when an AUX signal occurs. The AUX port can be used to connect a power failure detector or a dry contact output from another device. - Input: You can set whether to operate an alarm or a fault when an input signal occurs. Fault (cut and short) is only activated when the supervised input is enabled by selecting a resistance value in the Supervised Input Resister.

4) Click Apply to save the settings.

CoreStation

You can edit detailed settings of registered CoreStation.

 Note

6 Device

- Please refer to [Link](#) for setup guides for CoreStation 20.
- Please refer to [Link](#) for setup guides for Facility Code Authentication for Offline Mode in Door Interface.

- 1) Click DEVICE.
- 2) Click a CoreStation on the device list to edit..
- 3) Edit the necessary items.

Information

The screenshot shows the 'Information' tab for a device. It contains two columns of settings. The left column includes: Name (CoreStation 40 542070627 (192.168.14.205)), Device ID (542070627), Firmware Version (1.4.0 [2020/05/2] with a Firmware Upgrade button), Kernel Version (1.1.1 [2020/05/2]), Restore to default (All and Without Network buttons), Time Zone ((UTC) W. Europe Standard Time, London, Lis...), and Daylight Saving Time. The right column includes: Group (All Devices dropdown), Device Type (CoreStation 40), Product Name (CS-40), Hardware Version (1.0.0), Locked (Unlock button), and a checked checkbox for Time Synchronization with Server. At the bottom, there is a System section with Display Date (2020/07/07), a clock (10:00:49), and Get Time and Set Time buttons.

Item	Description
Information	▪ Name: Enter a device name. ▪ Device ID: View the device ID. ▪ Firmware Version: Click Firmware Upgrade to install a newer firmware version. ▪ Kernel Version: View the kernel version. ▪ Restore to default: Reset the settings of the device. Click All to reset all settings. Click Without Network to reset all settings excluding the network settings. ▪ Time Zone: Set the time zone of the device. You can set a different standard time zone of the device from the time zone of the BioStar 2 server. ▪ Daylight Saving Time: Apply the daylight saving time to the device. To add a new daylight saving time rule, see Daylight Saving Time. ▪ Group: Change the device group. For more information on adding device groups, see Adding and Managing Device Groups. ▪ Device Type: View the device type. ▪ Product Name: View the model name. ▪ Hardware Version: View the hardware version. ▪ Locked: Unlock button will be available when the device is disabled via Trigger & Action. ▪ Time Synchronization with Server: Select the option to synchronize the time information of the device with the server.

6 Device

Item	Description
System	- Display Date: Click  to manually set the date and time. If the Time Synchronization with Server option is selected, the date and time cannot be selected manually. - Get Time: Click the button to fetch the time set in the device. - Set Time: Click the button to apply the time set in BioStar 2 to the device.

Network

Network

TCP/IP

☒ Use DHCP

IP Address

192.168.12.164

Subnet Mask

255.255.255.0

Gateway

192.168.12.1

Device Port

51211

DNS Server Address

Server

☐ Device ☒ Server Connection

Server Address

Server Port

51212

Serial

RS485

Master

SCB Key

SCB Key Confirm

Baud Rate

Port	Baud Rate
Host	115200
0	115200
1	115200
2	115200
3	115200

Item	Description
TCP/IP	- Use DHCP: Select this option to allow the device to use a dynamic IP address. If this option is selected, network settings cannot be entered. - IP Address, Subnet Mask, Gateway: To assign a fixed IP to the device, enter the information of each network. Uncheck Use DHCP and enter the information. - Device Port: Enter a port to be used by the device. This port is used for the communication between BioStar 2 and the device. - DNS Server Address: Enter a DNS server address.
Server	Device → Server Connection: Select this option to configure the BioStar 2 settings for connecting to the devices. If this option is selected, BioStar 2 server network settings can be entered. - Server Address: Enter the IP address or domain name of the BioStar 2 server. - Server Port: Enter the port number of the BioStar 2 server.
Serial	- RS-485: You can only use Master. - Baud Rate: Set a baud rate of the RS-485 connection.

6 Device

Item	Description
	▪ SCB Key: Set the SCB key of the device. This feature is active only when there is no RS-485 device connected to the CoreStation. ▪ SCB Key Confirm: Make sure it matches the SCB key you set. This feature is active only when there is no RS-485 device connected to the CoreStation.  Note ▪ The SCB Key can be entered up to 16 bytes.

Authentication

Authentication

Server Matching

Inactive

Fingerprint

1:N Security Level

Normal

1:N Fast Mode

Auto

Template Format

Suprema

Card Type

CSN Card

Enabled

EM4100

Mifare/Felica

Format Type

Normal

Byte Order

MSB

Mobile

Enabled

NFC

BLE

Item	Description
Authentic ation	▪ Server Matching: It is possible to set server matching. When Active is set, the authentication is carried out using the user information stored in the PC where BioStar 2 is installed, and when Inactive is set, the authentication is carried out using the user information stored in the device. When using server matching, the server matching of BioStar 2 should be also activated. For more information, refer to Server.
Fingerpri nt	▪ 1:N Security Level: You can set a security level to use for fingerprint or face authentication. The higher the security level is set, the false rejection rate (FRR) gets higher, but the false acceptance rate (FAR) gets lower. ▪ 1:N Fast Mode: You can set the fingerprint authentication speed. Select Auto to have the authentication speed configured according to the total amount of fingerprint templates registered within the device. ▪ Template Format: You can view the fingerprint template format.

6 Device

Item	Description
Card Type	You can set the type of card used by the device.  Note - The type of card supported by the device is displayed. ▪ CSN Card: You can select the CSN card and format type and set the byte order.  Note - If Format Type is set to Nornal, the device will read the card serial number (CSN). If the option is set to Wiegand, the device will read the card serial number in a Wiegand format that the user has defined. - If Format Type is set to Wiegand, you can select the Wiegand format to be used in the device. To set a new Wiegand format, refer to Wiegand. - When Byte Order is set to MSB, the device reads a card ID from the highest byte to the lowest byte. For example, the highest byte of the card ID 0x12345678 is 0x12 and the device sequentially reads 0x12, 0x34, 0x56 and 0x78. When the option is set to LSB, the device reads a card ID from the lowest byte to the highest byte. ▪ Mobile Card: You can set the type of mobile card.

Advanced

Advanced

TamperNone

AC FailNone

Switch TypeNormally Open

Switch TypeNormally Open

Trigger & Action

Configuration

TriggerAction

+ Add

Wiegand

Input/OutputInput

Wiegand Input FormatDefault

Pulse Width(μs)40

Pulse Interval(μs)10000

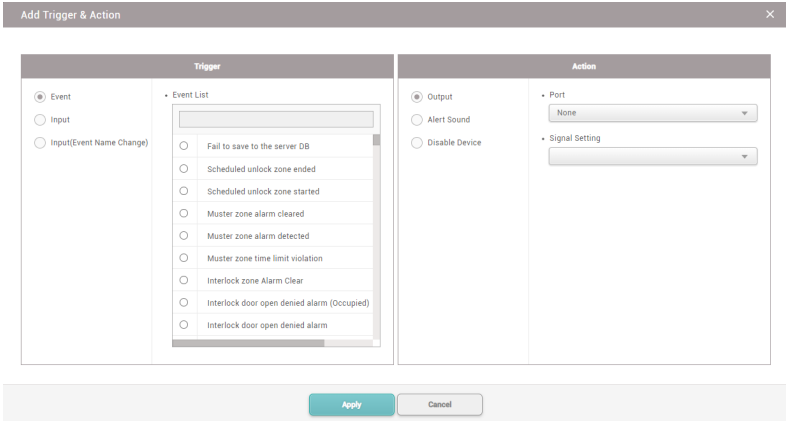
Supervised Input

Configuration

Index	Supervised	Supervised Input Resistor
0	☐ Input	
1	☐ Input	
2	☐ Input	
3	☐ Input	
4	☐ Input	
5	☐ Input	
6	☐ Input	
7	☐ Input	

Secure TamperOff

6 Device

Item	Description
Advanced	▪ Tamper: You can set the AUX port where the tamper is connected. ▪ AC Fail: You can set the AUX port that monitors the power input signal.
Trigger & Action	▪ Configuration: You can set the operation of the device according to a pre-defined alarm or signal input. For example, you can set to output a signal set by the user or not to use the device when a tamper on signal occurs in CoreStation. 
Wiegand	▪ In/Out: You can only use input mode. ▪ Input Format: You can set a format for Wiegand. For more information on setting a Wiegand format, see Card Format. ▪ Pulse Width: You can set the pulse width of the Wiegand signal. ▪ Pulse Interval: You can set the pulse interval of the Wiegand signal.
Supervised Input	You can set the supervised input port of CoreStation to be used as TTL input port and set a resistance value to be used for supervised input. 1k Ω , 2.2k Ω , 4.7k Ω and 10k Ω can be set for the resistance value.
Secure Tamper	If a tamper event occurs on the device, you can set to delete the entire user information, the entire log, and the security key stored on the device.

OSDP Reader LED/ Buzzer

6 Device

Item	Description
OSDP Reader LED/Buzzer	When an event occurs in all OSDP readers connected to CoreStation, LED and buzzer operations can be set collectively.  Note If the OSDP reader connected to CoreStation does not support LED and buzzer, it may not operate as set.
LED	Sets the LED operation when Waiting Input, Auth Success, and Auth Fail events occur. Mode: Set the desired operation among OFF, Constant, and Blinking. Cycle: When Mode is set to Blinking, enter the number of LED blinks. Check Infinite to continuously repeat the set Mode. Color / Duration: When Mode is set to Blinking, select two colors to blink at the set repeat count and enter Duration. When Mode is set to Constant, select one color to indicates and enter Duration.
Buzzer	Sets the buzzer operation when Waiting Input, Auth Success, and Auth Fail events occur. Mode: Set the desired operation among OFF, Constant, and Beeping. Cycle: When Mode is set to Beeping, enter the number of buzzer plays. Check Infinite to continuously repeat the set Mode. Duration: When Mode is set to Beeping, enter the duration for the buzzer to be plays at each set repeat count. When Mode is set to Constant, enter the duration for the buzzer to be plays.

4) Click Apply to save the settings.

6 Device

Wiegand Device

You can edit detailed information of registered Wiegand devices.

- 1) Click DEVICE.
- 2) Click a Wiegand device on the device list to edit.

The screenshot displays the configuration interface for a Wiegand device, organized into three main sections:

- Information:** Contains fields for Name (Wiegand Reader 1 (575624497)), Device ID (575624497), Device Type (TO Device), and a Locked status with an Unlock button.
- Authentication:** Includes Operation Schedule (Always), Matching Timeout (5 sec), Full Access (Disable toggle), and a Matching Timeout slider.
- Advanced:** Divided into two sub-sections:
 - Tamper:** Features Tamper Port (None) and Switch Type (Normally Open toggle).
 - LED/Buzzer:** Features Green LED Port (None) and Buzzer Port (None).

Numbered callouts 1, 2, and 3 point to the Information, Authentication, and Advanced sections respectively.

No.	Item	Description
1	Information	You can modify the settings of the Wiegand device. ▪ Name: Enter a device name. ▪ Device ID: View the device ID. ▪ Device Type: View the device type.
2	Authentication	Modify the Wiegand device's authentication settings. ▪ Operation Schedule: Configure the activating time for the device. ▪ Full Access: Allows the user to authenticate anytime. This overrides the access group of the user on the master device. ▪ Matching Timeout: You can set the matching timeout period. If the authentication is not completed within the set time, the authentication fails.
3	Advanced	Modify the Wiegand device's tamper switch and LED settings. ▪ Tamper Port: Select the input port where the Wiegand device's tamper switch is connected. ▪ Switch Type: Select the tamper switch type for the tamper operation. ▪ Green LED Port: Select the control port for the green LED. ▪ Buzzer Port: Select the control port for the buzzer.

6 Device

- 3) Click Apply to save the settings.

Wireless Door Lock

You can set the Name, Status, and Authentication of registered wireless door lock.

- 1) Click DEVICE.
- 2) Click a wireless door lock on the device list to edit.

Door Lock (1408280273) 2/3

Information

- Name: Door Lock (1408280273)
- Port: HOST RS485
- Device ID: 1408280273
- Vendor Code: 11.22.33
- Firmware Version: 2.8.24
- Status: ☒ Active
- Device Type: Wireless Door Handle
- Serial Number: 0011D58D
- Product Name: 87
- Hardware Version: 4
- Locked:

Authentication

- Auth Mode: Always
- Full Access: ☐ Disable

No.	Item	Description
1	Information	- Name: Enter a device name. If not entered, it will be assigned automatically. - Status: Set the device status. If set to Inactive, CoreStation will not communicate with the wireless door lock.
2	Authentication	- Auth Mode: The wireless door lock can only use CSN card as an authentication mode. ☒ Note - Click + Add, then drag and drop the Card. Select a schedule and click OK to register the authentication mode. If no desired schedule is available, click + Add Schedule to create it. - For more information on configuring schedules, see Schedule. - Full Access: Full access can be granted to users registered in the CoreStation to which the wireless door lock is connected without setting an access group.

- 3) Click Apply to save the settings.

You can use the DOOR menu to add the information on doors connected to devices.

You can configure relay, dual authentication, anti-passback, forced open and held open alarm settings of

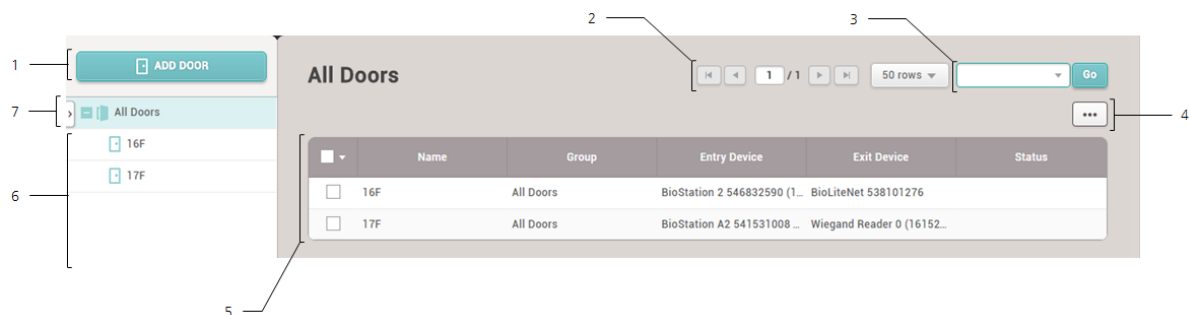
7 Door

the device. The door information is then used as a component of the access levels.

Adding and Managing Door Groups

Add Door

Editing Doors



- | | |
|---|-----------------------|
| 1 Add Door | 5 Door List |
| 2 Page Navigation Buttons and Number of List Rows | 6 Door and Group List |
| 3 Registered Device Search | 7 Expand Button |
| 4 Function Button (Print, Column Setting) | |

After selecting a door, you can perform the following actions.

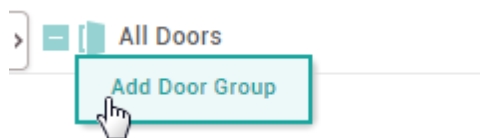
- Delete Door: Deletes the selected door from the list.

Adding and Managing Door Groups

You can add groups for easy management of multiple doors. Name your door groups according to door locations or office names for greater convenience.

— Adding Door Groups

- 1) Click DOOR.
- 2) Right-click on All Door Groups and click Add Door Group.



7 Door

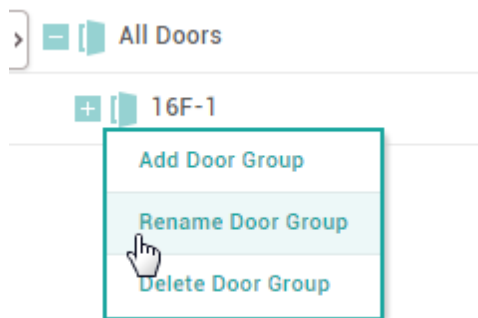
- 3) Enter a group name.

Note

- Door groups may be created in up to 8 levels.
- Up to 48 characters may be entered for a door group name.

— Renaming Door Groups

- 1) Click DOOR.
- 2) Right-click on the name of a group you wish to rename and click Rename Door Group.



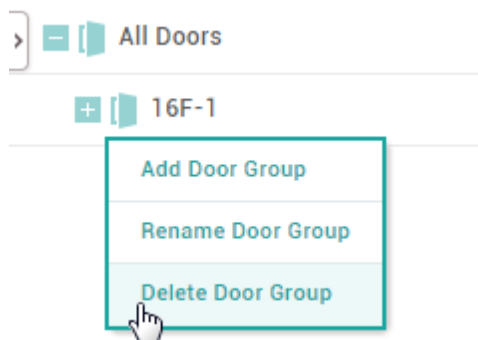
- 3) Enter a name.

Note

- Up to 48 characters may be entered for a door group name.

— Deleting Door Groups

- 1) Click DOOR.
- 2) Right-click on the name of a group you wish to delete and click Delete Door Group.



7 Door

 Note

- Deleting a group deletes all doors in the group.

Adding Doors

You can configure the doors to use in your access control installation. You can select an entry device and an exit device, configure Anti-passback settings for improved security, or configure alarms for each door.

- 1) Click DOOR and click ADD DOOR.
- 2) Configure the settings by referring to [Information](#), [Configuration](#), [Option](#), [Anti PassBack](#) and [Alarm](#).
- 3) After editing all information, click Apply.

 Related Information

- [Basic Search and Registration](#)
- [Slave Device Search and Registration](#)
- [Adding and Managing Access Levels](#)

Information

You can enter or edit the name, group and description of the door.

- 1) Edit all fields of the Information tab.

Information

1

Name

17F-1

• Group

All Door Groups

3

2

Description

No.	Item	Description
1	Name	Enter a door name.
2	Group	Set a door group. For more information on adding door groups, see Adding and Managing Door Groups .
3	Description	Enter a short description of the door.

- 2) Click Apply to save the settings.

7 Door

Configuration

You can configure various settings for the device, exit button, door sensor, etc.

1) Edit all fields of the Configuration tab.

No.	Item	Description
1	Entry device	Select a device to use for entry. You can select a device from the list of registered devices. If no registered device is available, see Basic Search and Registration, Advanced Search and Registration, Wiegand Device Search and Registration, or Slave Device Search and Registration.  Note ▪ If Wireless Door Lock is selected for Entry Device, Wireless Door Lock must also be selected for Exit Device.
2	Door relay	Select a relay to control the door lock.  Note ▪ If Wireless Door Lock is selected for Entry Device, the Door Relay option does not appear.
3	Exit button	Select a port to use for the exit button. ▪ The Switch can be set to Normally Closed or Normally Open. ▪ Does not activate relay: You can set the door open request log to occur but the relay not to operate when the exit button is pressed.
4	Door sensor	Select a port to check the door status. ▪ The Switch can be set to Normally Closed or Normally Open. ▪ Use sensor when Entry Confirmed APB enabled: You can set whether to use the door sensor when using Entry Confirmed APB. ▪ This feature is not available when Timed Anti PassBack is activated. ▪ If Door Sensor is set to None, the Alarm tab cannot be edited.
5	Exit device	Select a device to use at exit. An exit device can only be used when there is a slave device connected. If there is no registered slave device, see Basic

7 Door

No.	Item	Description
		Search and Registration, Advanced Search and Registration, Wiegand Device Search and Registration, or Slave Device Search and Registration. If no exit device is selected, the Anti Pass Back tab cannot be edited.

2) Click Apply to save the settings.

Note

- CoreStation can not be set as either an entry device or an exit device.

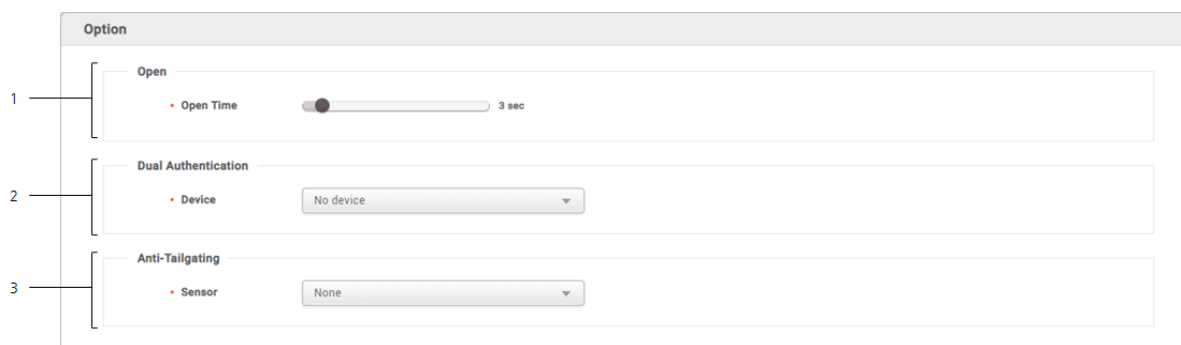
Related Information

Anti Passback

Option

You can configure additional options.

1) Edit all fields of the Option tab.



The screenshot shows the 'Option' tab configuration interface. It contains three main sections, each with a red bullet point and a control element:

- Open:** Open Time is set to 3 sec using a slider.
- Dual Authentication:** Device is set to 'No device' using a dropdown menu.
- Anti-Tailgating:** Sensor is set to 'None' using a dropdown menu.

No.	Item	Description
1	Open	You can configure options concerning the opening of the door. - Open Time: Set the duration for which the door will remain open after a user authentication is completed. When the authentication is successful, the relay will be activated for the set time. When this time elapses, the relay no longer sends the signal to the door.  Note - Open Time may vary depending on the type of

7 Door

No.	Item	Description
		door lock used. ▪ Lock when door is closed: When the door sensor detects that the door is closed, the door is locked. This option is not available if Use Automatic Door is set to ON. ▪ Use Automatic Door: When using an automatic door as an entrance door, a relay can operate regardless of the status of a door sensor. This option is not available if Lock when door is closed is set to ON.
2	Dual Authentication	You can configure the door to open only when authenticating credentials of two persons (an ordinary user and an administrator). ▪ Device: Select a device to use dual authentication. If No device is selected, the dual authentication mode is disabled.  Note ▪ If you want to use the Dual Authentication feature on the device previously set as either the Entry Device or the Exit Device in Occupancy Limit Zone, click Zone > Occupancy Limit and set the device as either the Entry Device or the Exit device again. For more information, refer to Occupancy Limit Zone. ▪ Schedule: Set a schedule to use dual authentication. If no desired schedule is available, click + Add Schedule to create it. For more information on configuring schedules, refer to Schedules. ▪ Approval Type: You can configure the administrator authentication order. Setting to None will require two users to authenticate regardless to the access group. Setting to Last will require an authentication by a user belonging to an access group that has been set after a normal user authentication. ▪ Authentication Group: You can configure a group to which the administrator belongs. ▪ Authentication Timeout: Set a timeout period for authenticating the second credential after the first credential has been authenticated. If the second credential is not authenticated within the timeout period after the first credential has been authenticated, the door will not open.
3	Anti-Tailgating	You can configure the door to detect the tailgating. ▪ Sensor: You can select the sensor to detect tailgating.

2) Click Apply to save the settings.

7 Door

Anti-passback

You can use Anti-passback to manage the access history and enhance security.

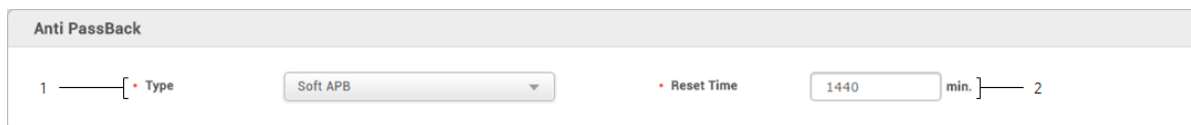
Anti-passback can help prevent the users from using an access card to enter and then passing the card over to another user. It can also prevent unauthorized persons who have entered by following users with access privileges from getting out on their own. This feature is available when both an entry device and an exit device are installed. If Exit Device is set to None, this feature is unavailable.

For more information on configuring exit devices, see [Configuration](#).

Note

- A master device and a slave device should be connected via the RS-485 interface in order to activate the Anti-passback section on the Door page.
- Anti PassBack is not available when Timed Anti PassBack is activated.

1) Edit all fields of the Anti PassBack tab.



No.	Item	Description
1	Type	Select an Anti-passback type. ▪ None: Select this option to disable the Anti-passback feature. ▪ Soft APB: Select this option to allow entry but set off an alarm or create a log entry in BioStar 2 when Anti-passback is violated. ▪ Hard APB: Select this option to prohibit entry and set off an alarm or create a log entry in BioStar 2 when Anti-passback is violated.
2	Reset Time	You can set a time period for resetting the Anti-passback feature. The maximum possible duration is 7 days (10080 min.). If set to 0, the feature is not reset.

2) Click Apply to save the settings.

Timed Anti PassBack

Timed Anti PassBack can limit frequent entry by setting the initialization time it takes for anti-passback, which occurs when a user attempts to re-authenticate with the same device after access authentication, until re-authentication is possible.

7 Door

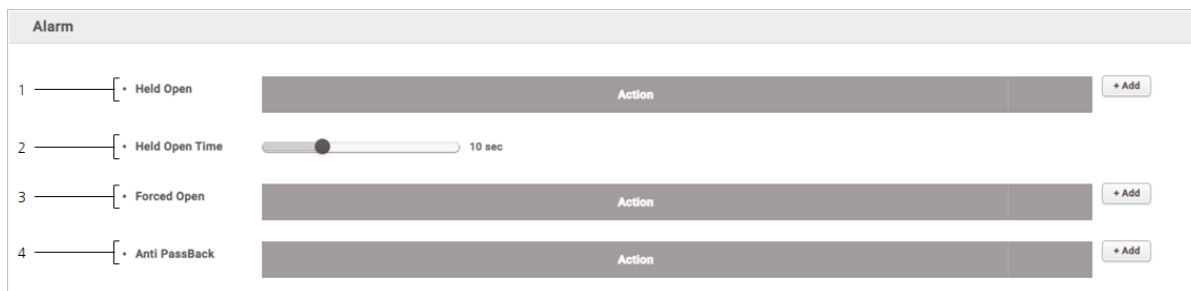
Note

- For more information, please refer to [How to Set Up the Timed Anti Passback](#).
- Anti PassBack is not available when Timed Anti PassBack is activated.

Alarm

You can configure an alarm to go off or the device to lock when the door is opened by force, held open or an anti-passback violation occurs.

1) Edit all fields of the Alarm tab. To add an action, click + Add.



No.	Item	Description
1	Held Open	You can configure alarm actions to be taken when the door is held open. Click + Add and select an action. Click OK to add the action.
2	Held Open Time	You can configure the maximum allowed time for the door to remain open.
3	Forced Open	You can configure alarm actions to be taken when the door is opened by force. Click + Add and select an action. Click OK to add the action.
4	Anti-passback	You can configure alarm actions to be taken when an Anti-passback violation occurs. Click + Add and select an action. Click OK to add the action. ▪ An exit device must be registered before the Anti-passback setting can be configured.

2) Click Apply to save the settings.

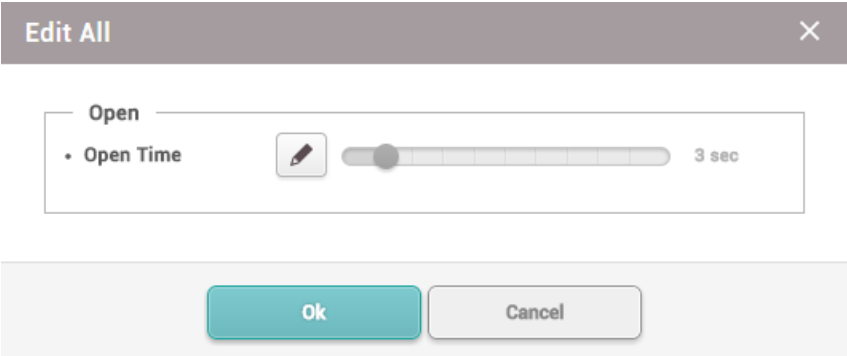
Editing Doors

You can edit an existing door or batch edit multiple doors.

1) Click DOOR.

7 Door

- 2) In the door list, click a door to edit.
- 3) Edit the details by referring to the instructions in [Adding Doors](#) .
- 4) To edit information on multiple doors, select multiple doors and click Batch Edit.



- 5) Click of the field you want to edit and edit the information.
- 6) After editing all information, click OK.

You can configure the elevator to control floors with the access control device and OM-120 by using the ELEVATOR menu.

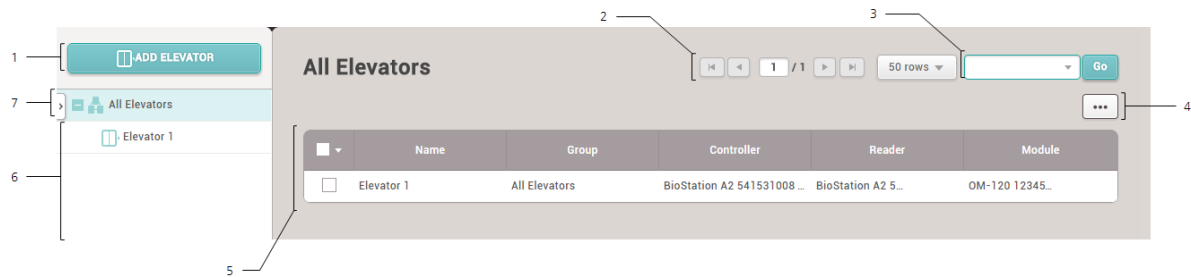
Adding and Managing Elevator Groups

Adding Elevators

Editing Elevatos

Note

- The ELEVATOR menu will appear when the Advanced or higher license is activated.



- | | |
|---|---------------------------|
| 1 Add Elevator | 5 Elevator List |
| 2 Page Navigation Buttons and Number of List Rows | 6 Elevator and Group List |
| 3 Registered Elevator Search | 7 Expand Button |
| 4 Function Button (Print, Column Setting) | |

8 Elevator

After selecting an elevator, you can perform the following actions.

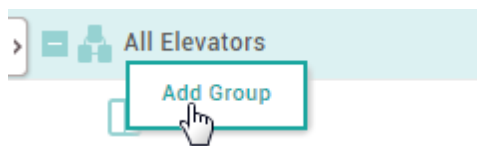
- Delete Elevator: Deletes the selected elevator from the list.

Adding and Managing Elevator Groups

You can add groups for easy management of multiple elevators. Name your elevator groups according to elevator locations for greater convenience.

— Adding Elevator Groups

- 1) Click ELEVATOR.
- 2) Right-click on All Elevators and click Add Group.



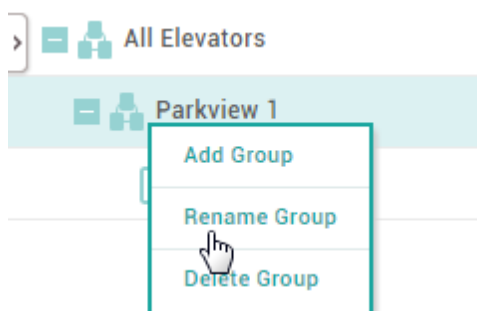
- 3) Enter a group name.

Note

- Elevator groups may be created in up to 8 levels.
- Up to 48 characters may be entered for an elevator group name.

— Renaming Elevator Groups

- 1) Click ELEVATOR.
- 2) Right-click on the name of a group you wish to rename and click Rename Group.



- 3) Enter a name.

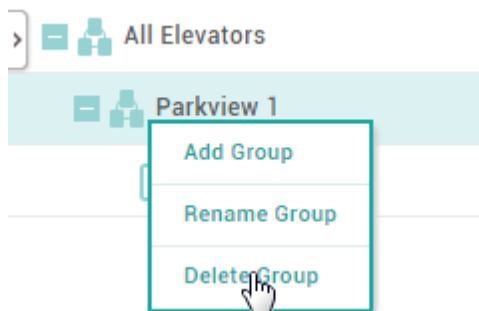
8 Elevator

Note

- Up to 48 characters may be entered for an elevator group name.

— Deleting Elevator Groups

- 1) Click ELEVATOR.
- 2) Right-click on the name of a group you wish to delete and click Delete Group.



Note

- Deleting a group deletes all elevators in the group.

Adding Elevators

You can configure the elevators to use for the floor control.

- 1) Click ELEVATOR and click ADD ELEVATOR.
- 2) Configure the settings by referring to [Information](#), [Detail](#), [Option](#), and [Alarm](#).
- 3) After editing all information, click Apply.

Related Information

[Basic Search and Registration](#)

[Slave Device Search and Registration](#)

[Adding and Managing Access Levels](#)

Information

You can enter or edit the name, group and description of the elevator.

8 Elevator

1) Edit all fields of the Information tab.

Information

1 — [• Name

Elevator 1

• Group

All Elevators ▼

] — 3

2 — [• Description

No.	Item	Description
1	Name	Enter an elevator name.
2	Group	Set an elevator group. For more information on adding door groups, see Adding and Managing Elevator Groups .
3	Description	Enter a short description of the elevator.

2) Click Apply to save the settings.

Detail

You can select a device to connect to the elevator and floor information.



Note

- BioEntry Plus, BioEntry W, BioLite Net are not available as a controller.

1) Edit all fields of the Detail tab.

8 Elevator

Detail

Configuration

1

Controller

BioStation A2 541531008 (192.168...

• Reader

BioStation A2 541531008 (192.168...

2

3

Module

OM-120 12345678

Floor

4

Total Number of Floors

12

Apply

• Auto-mapping

☐ Auto-mapping

5

6

Floor Settings

Floor Name	Device	Relay Number	
Elevator 1 - 1	OM-120 12345678	Relay 0 of OM-120 12345678 De...	
Elevator 1 - 2	OM-120 12345678	Relay 1 of OM-120 12345678 De...	
Elevator 1 - 3	OM-120 12345678	Relay 2 of OM-120 12345678 De...	
Elevator 1 - 4	OM-120 12345678	Relay 3 of OM-120 12345678 De...	
Elevator 1 - 5	OM-120 12345678	Relay 4 of OM-120 12345678 De...	
Elevator 1 - 6	OM-120 12345678	Relay 5 of OM-120 12345678 De...	
Elevator 1 - 7	OM-120 12345678	Relay 6 of OM-120 12345678 De...	
Elevator 1 - 8	OM-120 12345678	Relay 7 of OM-120 12345678 De...	
Elevator 1 - 9	OM-120 12345678	Relay 8 of OM-120 12345678 De...	
Elevator 1 - 10	OM-120 12345678	Relay 9 of OM-120 12345678 De...	
Elevator 1 - 11	OM-120 12345678	Relay 10 of OM-120 12345678 D...	
Elevator 1 - 12	OM-120 12345678	Relay 11 of OM-120 12345678 D...	

No.	Item	Description
1	Controller	Select a device that controls the elevator access permission.  Note - Only a master device can be selected. - You can select it from the list of registered devices. If there is no registered device, refer to Basic Search and Registration.
2	Reader	Select a device you intend to use for authentication.  Note - You can select a device among the master device, slave device, and Wiegand device. - You can select up to 4 readers. - OM-120 cannot be set as the reader.
3	Module	Select the device to control the elevator button relay.  Note Only OM-120, DM-20, IM-120, and SIO2 can be selected.

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8 Elevator

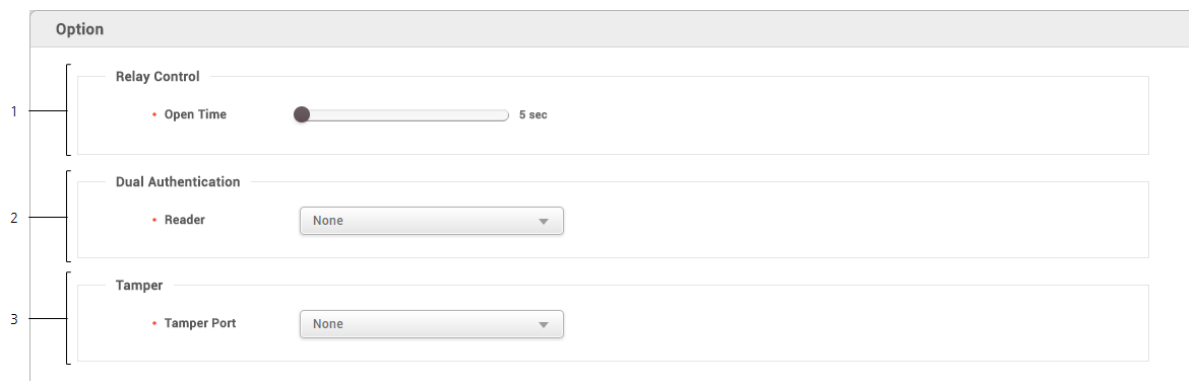
No.	Item	Description
4	Total Number of Floors	Enter the total number of floors that you can move using the elevator.  Note Up to 192 floors can be entered.
5	Auto-mapping	Select whether or not to use auto-mapping. If Auto-mapping is used, Relay Number is assigned in consecutive order.
6	Floor Settings	You can set the floor name and the relay number to control the floor.

- Click Apply to save the settings.

Option

You can configure additional options.

- Edit all fields of the Option tab.



No.	Item	Description
1	Relay Control	You can configure options concerning the activating of the relay of the floor. Open Time: Set the duration for which the floor button will remain activate after a user authentication is completed. When the authentication is successful, the relay will be activated for the set time. When this time elapses, the relay no longer sends the signal to the relay of the floor.
2	Dual Authentication	You can configure the floor button to activate only when authenticating credentials of two persons (an ordinary user and an administrator). Device: Select a device to use dual authentication. If No device is selected, the dual authentication mode is disabled.

8 Elevator

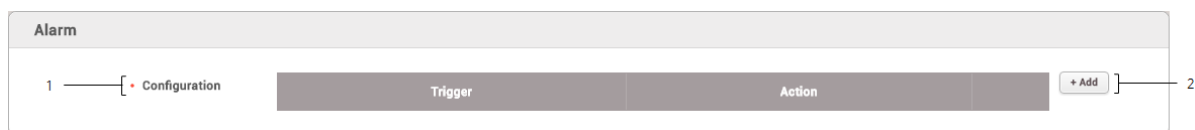
No.	Item	Description
		 Note - If you want to use the Dual Authentication feature on the device previously set as either the Entry Device or the Exit Device in Occupancy Limit Zone, click Zone > Occupancy Limit and set the device as either the Entry Device or the Exit device again. For more information, refer to Occupancy Limit Zone. - Schedule: Set a schedule to use dual authentication. If no desired schedule is available, click + Add Schedule to create it. For more information on configuring schedules, see Schedules. - Approval Type: You can configure the administrator authentication order. Setting to None will require two users to authenticate regardless to the access group. Setting to Last will require an authentication by a user belonging to an access group that has been set after a normal user authentication. - Authentication Group: You can configure a group to which the administrator belongs. - Authentication Timeout: Set a timeout period for authenticating the second credential after the first credential has been authenticated. If the second credential is not authenticated within the timeout period after the first credential has been authenticated, the door will not open.
3	Tamper	You can set a port to output the tamper signal.

2) Click Apply to save the settings.

Alarm

An action can be set to be performed when tamper input or a separate input signal is detected.

1) Edit all fields of the Alarm tab. To add an action, click + Add.



No.	Item	Description
1	Trigger	Tamper input detection or separate input signal detection can be set.

8 Elevator

No.	Item	Description
2	Action	An action can be set to be performed according to the status set under trigger. The floor button of the elevator can be activated, and/or output of a specific signal can be set.

- 2) Click Apply to save the settings.

Editing Elevators

You can edit an existing elevator or batch edit multiple elevators.

- 1) Click ELEVATOR.
- 2) In the elevator list, click an elevator to edit.
- 3) Edit the details by referring to the instructions in [Adding Elevators](#).
- 4) To edit information on multiple elevators, select multiple elevators and click Batch Edit.
- 5) Click  of the field you want to edit and edit the information.
- 6) After editing all information, click OK.

You can use the ACCESS CONTROL menu to create access levels by configuring doors and access schedules and to configure access groups using access levels and user group information.

The configured access groups are then used as components of the access control.

[Adding and Managing Access Levels](#)

[Adding and Managing Access Groups](#)

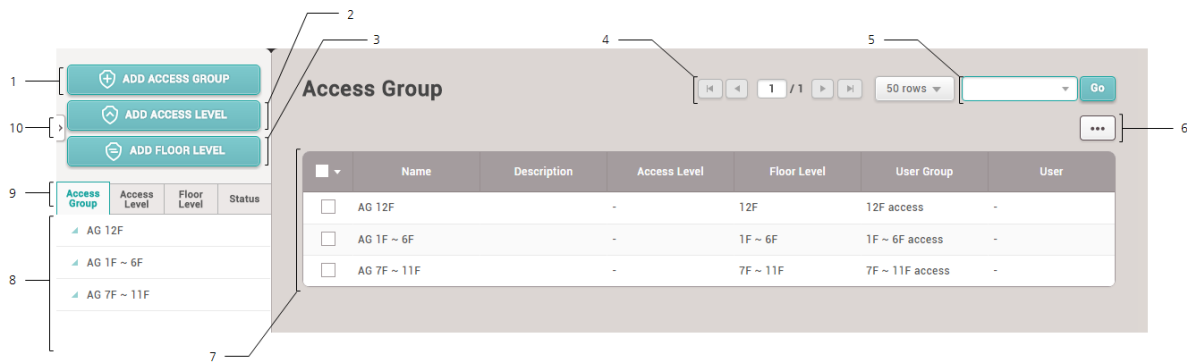
[Adding and Managing Floor Levels](#)

[Access Privilege Status](#)

Note

- The Floor Level tab and ADD FLOOR LEVEL button will appear when the Advanced or higher license is activated.

9 Access Control



- | | |
|---|---|
| 1 Add Access Group | 6 Function Button (Print, Column Setting) |
| 2 Add Access Level | 7 Access Group / Access Level / Floor Level List |
| 3 Add Floor Level | 8 Access Groups / Access Level / Floor Level Groups |
| 4 Page Navigation Buttons and Number of List Rows | 9 Tab buttons for the Access Group, Access Level, Floor Level and Status list pages |
| 5 Registered Item Search | 10 Expand Button |

After selecting an access group or an access level, you can perform the following actions.

- Delete Access Group: Deletes the selected access group from the list.
- Delete Access Level: Deletes the selected access level from the list.
- Delete Floor Level: Deletes the selected floor level from the list.

Adding and Managing Access Levels

You can configure a schedule during which users are allowed to access the door and add it to an access level.

— Adding Access Level

- 1) Click ACCESS CONTROL > ADD ACCESS LEVEL.
- 2) Enter Name and Description for the access level.
- 3) Click + Add.
- 4) Click ▼ to select a door and a schedule.

9 Access Control

• Name

• Description

Door	Schedule	
Door 1	Always	

[+ Add](#)

Note

- Click  to search for an item.
- If no desired door is available, add it by referring to [Adding Doors](#).
- If no desired schedule is available, click + Add Schedule to create it. For more information on configuring schedules, see [Schedules](#).
- You can add up to 128 access levels per access group.
- Click  to delete an item.

- 5) Click Apply to save the settings.

— Editing Access Level

- 1) Click ACCESS CONTROL > Access Level tab.
- 2) In the access level list, select an access level to edit.
- 3) After editing the necessary fields, click Apply.

— Deleting Access Level

- 1) Click ACCESS CONTROL > Access Level tab.
- 2) In the access level list, select an access level to delete.
- 3) Click Delete Access Level.

Adding and Managing Access Groups

You can configure access privileges by using access levels and user group information.

— Adding Access Group

- 1) Click ACCESS CONTROL > ADD ACCESS GROUP.
- 2) Enter Name and Description for the access group.
- 3) Click + Add for each field.
- 4) Click ▼ to select an access level, a floor level, a user group or a user.

9 Access Control

• Name

• Description

• Access Rule

Access Level	+ Add	Floor Level	+ Add
User Group	+ Add	User	+ Add

Note

- If no desired access level is available, click + Add Access Level to create it. For more information on access levels, see [Adding and Managing Access Levels](#).
- If no desired floor level is available, click + Add Floor Level to create it. For more information on floor levels, see [Adding and Managing Floor Levels](#).
- Click  to delete an item.

5) Click Apply to save the settings.

— Editing Access Group

- 1) Click ACCESS CONTROL > Access Group tab.
- 2) In the access group list, select an access group to edit.
- 3) After editing the necessary fields, click Apply.

— Deleting Access Group

- 1) Click ACCESS CONTROL > Access Group tab.
- 2) In the access group list, select an access group to delete.
- 3) Click Delete Access Group.

Adding and Managing Floor Levels

You can configure the floor access privileges by using elevators and floor information.

Note

9 Access Control

- The Floor Level tab and ADD FLOOR LEVEL button will appear when the AC standard license is activated.

— Adding Floor Level

- 1) Click ACCESS CONTROL > ADD FLOOR LEVEL.
- 2) Enter Name and Description for the floor level.
- 3) Click + Add.
- 4) Click ▼ to select an elevator, a floor name, and a schedule.

• Name

• Description

Elevator	Floor Name	Schedule	
Elevator 1 ▼	Elevator 1 - 1 +	Always ▼	

+ Add

Note

- Click to search for an item.
 - If no desired elevator is available, add it by referring to [Adding Elevators](#).
 - If no desired schedule is available, click + Add Schedule to create it. For more information on configuring schedules, see [Schedules](#).
 - Click to delete an item.
- 5) Click Apply to save the settings.

— Editing Floor Level

- 1) Click ACCESS CONTROL > Floor Level tab.
- 2) In the floor level list, select a floor level to edit.
- 3) After editing the necessary fields, click Apply.

— Deleting Floor Level

- 1) Click ACCESS CONTROL > Floor Level tab.
- 2) In the floor level list, select a floor level to delete.
- 3) Click Delete Access Level.

Access Group Status

On the Status page, you can view who has the right to access certain doors. You can use a filter or

9 Access Control

combine filters to narrow down the result. You can also export the result as a CSV file. There are two types of the access privilege status view: by user and by door.

- 1) Click ACCESS CONTROL > Status.
- 2) Choose Door Permission by Door, Door Permission by User, Elevator permission by Floor, or Elevator Permission by User.
- 3) To view the result of a specific type only, click the ▼ of a column and apply a filter.

The screenshot shows the 'Access Group by Door' interface. Callout 1 points to the 'Save Filter' button. Callout 2 points to the page navigation controls (first, previous, page number, next, last, and rows per page). Callout 3 points to the menu icon (three dots). Callout 4 points to the table of access data.

Door Group ▼	Door ▼	Schedule ▼	User ID ▼	User Name ▼	User Group ▼	User Level ▼
All Doors	16F	Always	15	User 006	All Users	None
All Doors	16F	Always	556	User 26	All Users	None
All Doors	16F	Always	33	User 024	All Users	None
All Doors	16F	Always	30	User 021	All Users	None
All Doors	16F	Always	27	User 018	All Users	None
All Doors	16F	Always	24	User 015	All Users	None
All Doors	16F	Always	19	User 010	All Users	None
All Doors	16F	Always	1	Administrator	All Users	Administrator
All Doors	16F	Always	99	kyle	All Users	None

No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Page Navigation Buttons and Number of List Rows	You can move a page or set the number of list rows to be displayed on one page. ◀: Go to the first page. ◀◀: Go to the previous page. 2 / 2: Enter the page number to move to. ▶: Go to the next page. ▶▶: Go to the last page. 25 rows ▼: Set the number of list rows to be displayed on one page.
3	Function Buttons (Print, CSV Export, Column Setting)	You can print the list of logs or save it as a CSV file. Also, the column settings can be modified.
4	Access Privilege Status List	Shows the access privilege status of users.

9 Access Control

You can use the USER menu to add users to BioStar 2 or to devices and manage their information. You can also add users' fingerprints, manage their authentication credentials such as cards and PINs and use them in access control, or grant administrator privileges.

Adding and Managing User Groups

Adding User Information

Adding User Credentials

Enroll Card

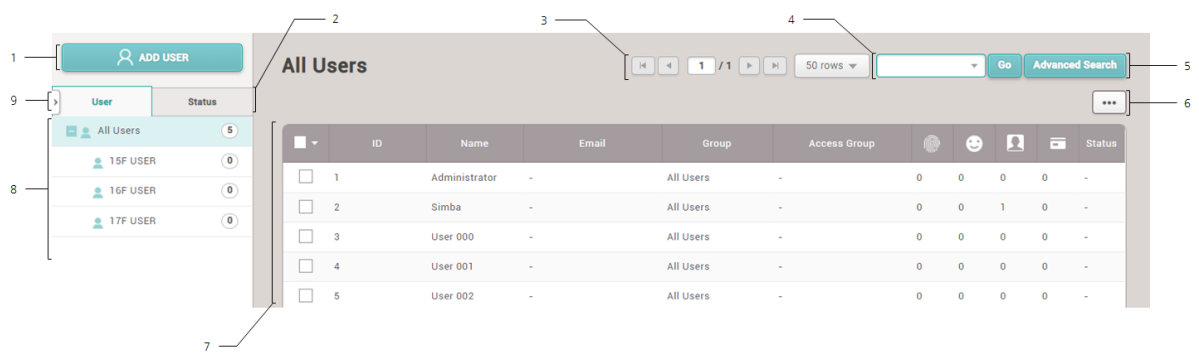
Transferring User Information to Devices

Deleting User from Devices

Editing User Information

Managing Long-term Idle Users

Visual Face Migration



- 1 Add User

2 Tab buttons for the User and Long-term Idle User list pages

3 Page Navigation Buttons and Number of List Rows

4 Registered User Search

5 Advanced Search
- Function Button (Print, Column Setting, CSV Export, CSV Import, Visual Face Import, Data File Export, Data File Import, Send Visual Face Mobile Enrollment Link, Visual Face Migration)

6 Import, Data File Export, Data File Import, Send Visual Face Mobile Enrollment Link, Visual Face Migration)

7 User List

8 User Group

9 Expand Button

10 Users

Note

- Registered users can be searched by Name, Email.
- For more information on Send Visual Face Mobile Enrollment Link, refer to [Enroll Visual Face](#).
- For more information on Advanced Search, refer to [How to Search for Users With Advanced Search](#).

When you select a user, you can perform the following functions.

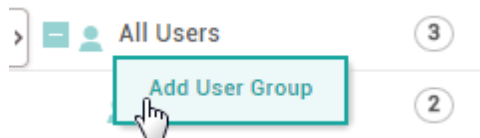
- Batch Edit: Batch edits the information on multiple users. This function is available only when multiple users are selected.
- Transfer to Device: Transfers user information registered with BioStar 2 to devices.
- Delete User: Deletes the selected user from BioStar 2. User information registered in devices is not deleted.

Adding and Managing User Groups

You can add groups for easy management of multiple users. Name your user groups according to users' organizations for greater convenience.

— Adding User Groups

- 1) Click USER.
- 2) Right-click on All User Groups and click Add User Group.



- 3) Enter a group name.

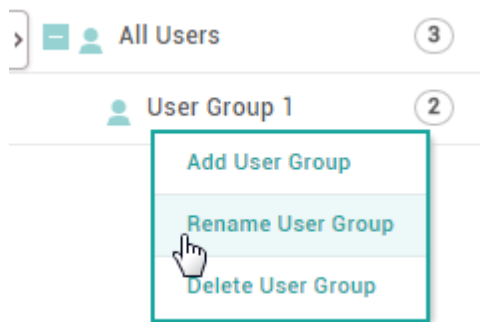
Note

- User groups may be created in up to 8 levels.
- Up to 48 characters may be entered for a user group name.

— Renaming User Groups

- 1) Click USER.
- 2) Right-click on the name of a group you wish to rename and click Rename User Group.

10 Users



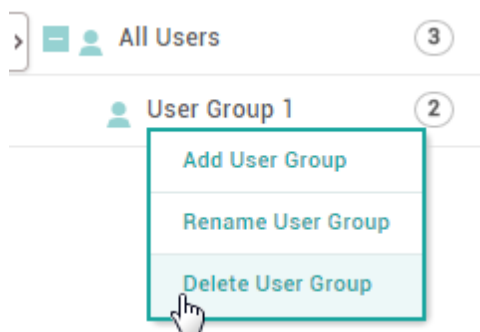
- 3) Enter a group name.

Note

- Up to 48 characters may be entered for a user group name.

Deleting User Groups

- 1) Click USER.
- 2) Right-click on the name of a group you wish to delete and click Delete User Group.



Adding User Information

You can add photo, name, email, telephone, etc. of a user.

A fingerprint scanner is required for adding users' fingerprints. If a fingerprint scanner is already connected to BioStar 2, you can use the scanner to add fingerprints.

- 1) Click USER > ADD USER.
- 2) Enter or select the necessary fields in the Information tab.

Note

10 Users

- The information with * must be entered.

No.	Item	Description
1	Photo	Add the user's photo. Click + Add Photo to take a photo with a webcam or select a photo from a PC. Note - For more information about how to enroll profile photo using a webcam, refer to How to Enroll Profile Photo & Visual Face Using a Webcam. - Only an image file can be uploaded. - User's photo is required to display the user's image on the mobile access card.
2	Name	Enter the user's name. Note It is possible to enter up to 48 characters including special characters (~, !, @, #, \$, %, ^, &, (,), -, _ , =, +, [,], {, }, ;, ,).
3	Department	Enter the department the user belongs to. Note - Department is required to display the user's department on the mobile access card. - It is possible to enter up to 64 characters including spaces or underbars(_) only.
4	ID	Enter a unique ID to assign to the user. Note - When Number is set for User ID Type in Setting > Server, a number between 1 and 4294967294 can be entered. - When Alphanumeric is set for User ID Type in Setting > Server, a combination of alphabetic characters and numbers can be

10 Users

No.	Item	Description
		entered. - Do not use spaces when entering ID. - Numbers or Alphanumeric characters can be set for the user ID type. For more details, refer to Server.
5	Group	Select a user group. If no desired user group is available, add it by referring to Adding and Managing User Groups .
6	Period	Set an active period of the account.
7	Operator Level	Set a BioStar operator privilege level. - None: The user has no operator privilege. - Administrator: The user can use all menus. - User Operator: The user can only use the USER and PREFERENCE menus. - Monitoring Operator: The user can use the MONITORING and PREFERENCE menus and only view the DASHBOARD, USER, DEVICE, DOOR, ZONE and ACCESS CONTROL menus. - T&A Operator: The user can only use the TIME ATTENDANCE menu and only view the USER menu. - User: The user can only view own information and T&A records.  Note - To set a new user permission, refer to Adding Custom Account Level. - If you have upgraded from BioStar 2.5.0 to BioStar 2.6.0 and you are using custom account level for monitoring, set operator level again.
8	Login ID	Enter the login ID.  Note The login ID appears when you set the Operator Level.
9	Password	Enter the login password. You can change the password level by referring to Security.  Note - The password appears when you set the Operator Level. - The Confirm Password will appear when you enter the password. Enter the password again to confirm.
10	Email	Enter the email address.

10 Users

No.	Item	Description
		 Note ▪ If the mobile access messaging option set as Email, user's email address is required when using the mobile access. ▪ User's email address is required when using Visual Face Mobile Enrollment or Secure QR.
11	Title	Enter the user's title.  Note ▪ Title is required to display the user's title on the mobile access card. ▪ It is possible to enter up to 64 characters including spaces or underbars(_) only.
12	Telephone	Enter the telephone number.  Note ▪ If the mobile access messaging option set as Text Message, user's telephone number is required when using the mobile access.
13	Status	You can temporarily deactivate the user's account.
14	Access Group	Set an access group. If no desired access group is available, add it by referring to Adding and Managing Access Groups .
15	USER IP	Enter the user IP. If you register user IP, you can strengthen the security by allowing access only when the IP information registered in the account and the IP information of the PC match.  Note ▪ The user IP can be entered in the format xxx.xxx.xxx.xxx. Each octet can only be entered in numbers between 0 and 255. ▪ Users whose user IP is not registered can log in regardless of the IP information of the PC.
16	Print Card	It can be printed as a card template with user information. Refer to CARD PRINTER for details on how to use the card printer.

- 3) Enter or select the necessary fields in the Credential tab and click Apply. For more information on adding credentials, see [Adding User Credentials](#).

 Note

- You can refer to the User / Device Management on the [Server](#) to learn how to add custom user fields for extra user information.

10 Users

🔗 Related Information

[Adding User Credentials](#)

[Enroll Card](#)

[Account](#)

[Server](#)

Export/Import CSV

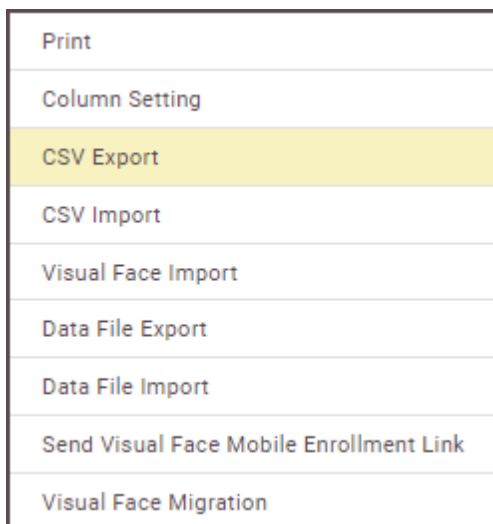
You can export/import user data in CSV files. This feature is useful when you create users in bulk or when you transfer users to another 3rd party systems.

📌 Note

- If a CSV file to import contains data for custom user fields and the fields do not exist on the server, then the data for the fields will be ignored during the import process. You can refer to the [Server](#) to learn how to add custom user fields.
- If you enter the user information in a language other than English or Korean, save the CSV file in UTF-8 format.

— CSV Export

- 1) Select users from the user list you intend to save to a CSV file and click .
- 2) Click CSV Export.

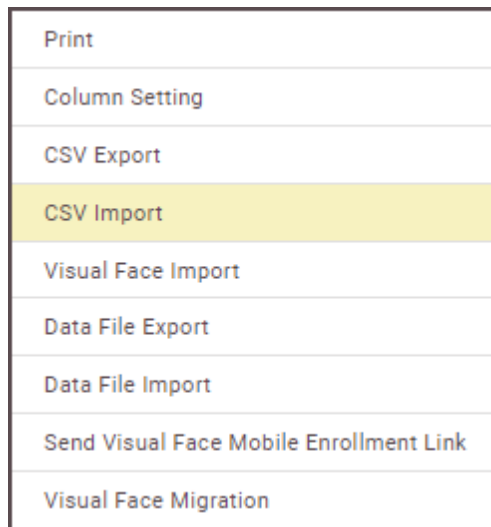


- 3) The CSV file will be downloaded automatically.

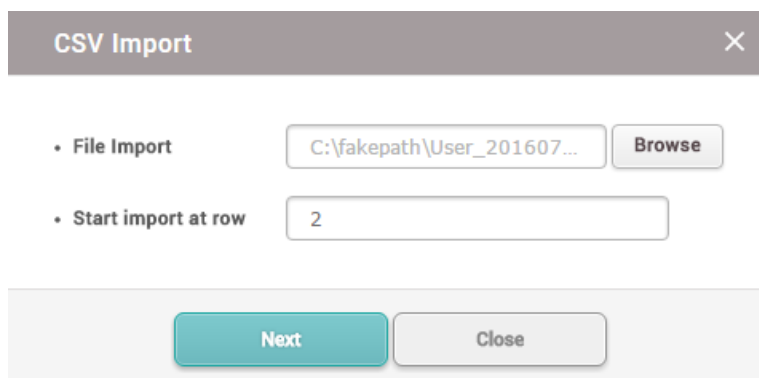
— CSV Import

10 Users

- 1) Click  and then click CSV Import.



- 2) Select the CSV file and then click Open.
- 3) Set Start import at row and then click Next.



- 4) The user data field of the CSV file and the user data field of BioStar 2 are mapped and displayed automatically. When you click Remap, the fields of the same name will be remapped.

10 Users

CSV Import

×

Remap

CSV Field	User Data Field
user_id	user_id ▼
name	name ▼
department	department ▼
user_title	user_title ▼
phone	phone ▼
email	email ▼
user_group	user_group ▼
start_datetime	start_datetime ▼
expiry_datetime	expiry_datetime ▼
csn	csn ▼
mobile_start_dateti...	mobile_start_datetime ▼
mobile_expiry_date...	mobile_expiry_datetime ▼

Back

Next

Close

- 5) Click **Next** after selecting whether to maintain the user data of which user ID has been already registered to BioStar 2 or overwrite with the CSV file information.

Note

- You can issue Mobile Access Cards via CSV Import. When using Regular site, 1 credit will be deducted per Mobile Access Card in the Airfob Portal once CSV import is complete. Disable matching if you do not want to issue Mobile Access Cards.
- If the same data as the Mobile Access Card issued to the user who is already registered in BioStar 2 exists in the CSV file, data can be maintained or overwritten, and the existing Mobile Access Card is maintained.
- If there is data different from the mobile access card issued to the user who is already registered in BioStar 2 in the CSV file, the existing Mobile Access Card is maintained if the data is retained, and if overwritten, a new Mobile Access Card is issued to the user.

10 Users

- When using a dynamic site, if you issue a mobile access card to a user using CSV import, `mobile_start_datetime` and `mobile_expiry_datetime` fields must be entered.
 - You cannot issue BioStar 2 QR via CSV import.
 - You can enroll user's visual face via CSV Import. For more information, see [Enroll Visual Face](#).
 - You can enroll user's PIN via CSV Import. For more information, see [Adding PIN](#).
- 6) If an error occurs during the import of CSV file information, you can upload it again after checking only the erroneous CSV data.

Note

- If there are additional columns in the CSV file other than the basic user columns, BioStar 2 will fail to import the CSV file.

Export/Import User Information

You can store the data file on external storage (USB) and import to BioStar 2 or device. Up to 500,000 users can be moved from server to device or from device to device.

Note

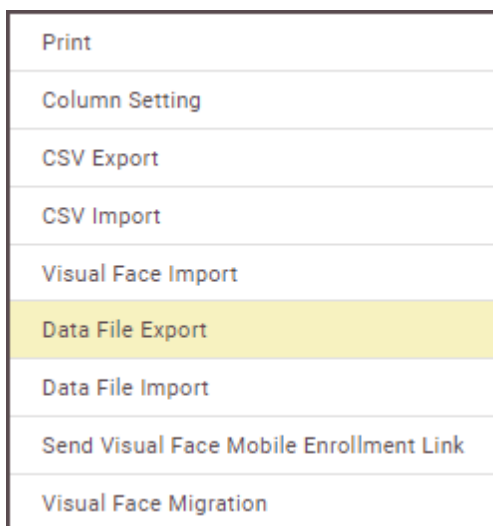
- The exported data file from devices using older firmware version cannot be imported into BioStar 2. Make sure always use the latest version of firmware.
- If you use BioStar 2.8.10 or later, data exported from the previous version of BioStar 2 cannot be imported.
- If you use BioStar 2 latest version, it is impossible to read data from a device using an older firmware version. Upgrade the device's firmware to a compatible version. Compatible devices and firmware versions are as follows.
 - BioStation 2 FW 1.9.0 or later
 - BioStation A2 FW 1.8.0 or later
 - FaceStation 2 FW 1.4.0 or later
 - FaceStation F2 FW 2.2.0 or later
 - X-Station 2 FW 1.0.0 or later
 - BioStation 3 FW 1.3.1 or later
 - BioStation 2a FW 1.0.0 or later
 - BioStation 3 Max FW 1.0.0 or later
- If the fingerprint template format is different, the data file cannot be imported. For example, the data file exported from a device which uses the Suprema fingerprint template format cannot be imported into a device which uses the ISO fingerprint template format.

10 Users

- When importing user data with visual faces enrolled from FaceStation F2, the existing data will be overwritten if there is already visual face data enrolled on BioStar 2 via Upload Image or a mobile device.

— Data File Export

- 1) Select users from the user list you intend to export to a data file and click .
- 2) Click Data File Export.



- 3) Select a device type to apply the exported data file. Only devices with USB port is displayed.



- 4) The data file is automatically downloaded.

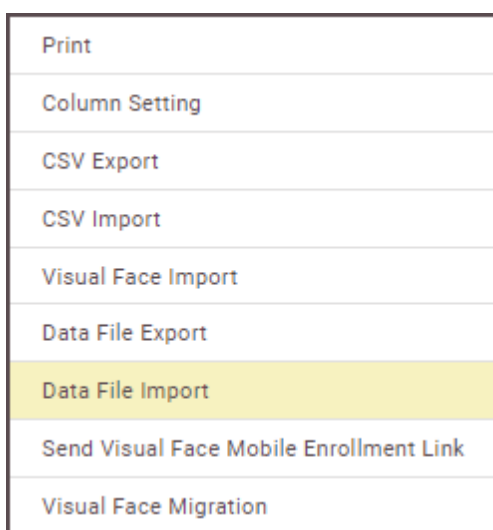
10 Users

Note

- The exported data file includes the profile photo, user ID, name, period, access group, PIN, auth mode, credentials (face, fingerprint, card, mobile access card, visual face, BioStar 2 QR, QR/Barcode), 1:1 security level.
- Be sure that the device is selected correctly. Otherwise, the device cannot recognize the data file.

— Data File Import

- 1) Click  and then click Data File Import.



- 2) Select the desired file (*.tgz) and then click Open.
- 3) A success message will appear on the screen when import successfully.

Adding User Credentials

You can add various user credentials such as PINs, fingerprints and cards.

Adding PIN

Auth Mode

Enroll Fingerprint

Enroll Face

Enroll Visual Face

Enroll Card

Enroll Mobile Access Card

10 Users

Enroll QR/Barcode

1:1 Security Level

Biometric Credential Sync

Adding PIN

Add a PIN.

- 1) Select the PIN option and enter a PIN to use.



- 2) For confirmation, enter the PIN again in Confirm PIN.
- 3) Click Apply to save the settings.

— Register by CSV Import

You can enroll user's PIN by importing CSV file.

- 1) Add the pin column to the CSV file to be imported.
- 2) Enter the user's PIN on the pin column and save the file.
- 3) Import CSV file that added PINs into BioStar 2 by referring to [Import CSV](#).

Note

- Enrolled PIN data cannot be exported to a CSV file.

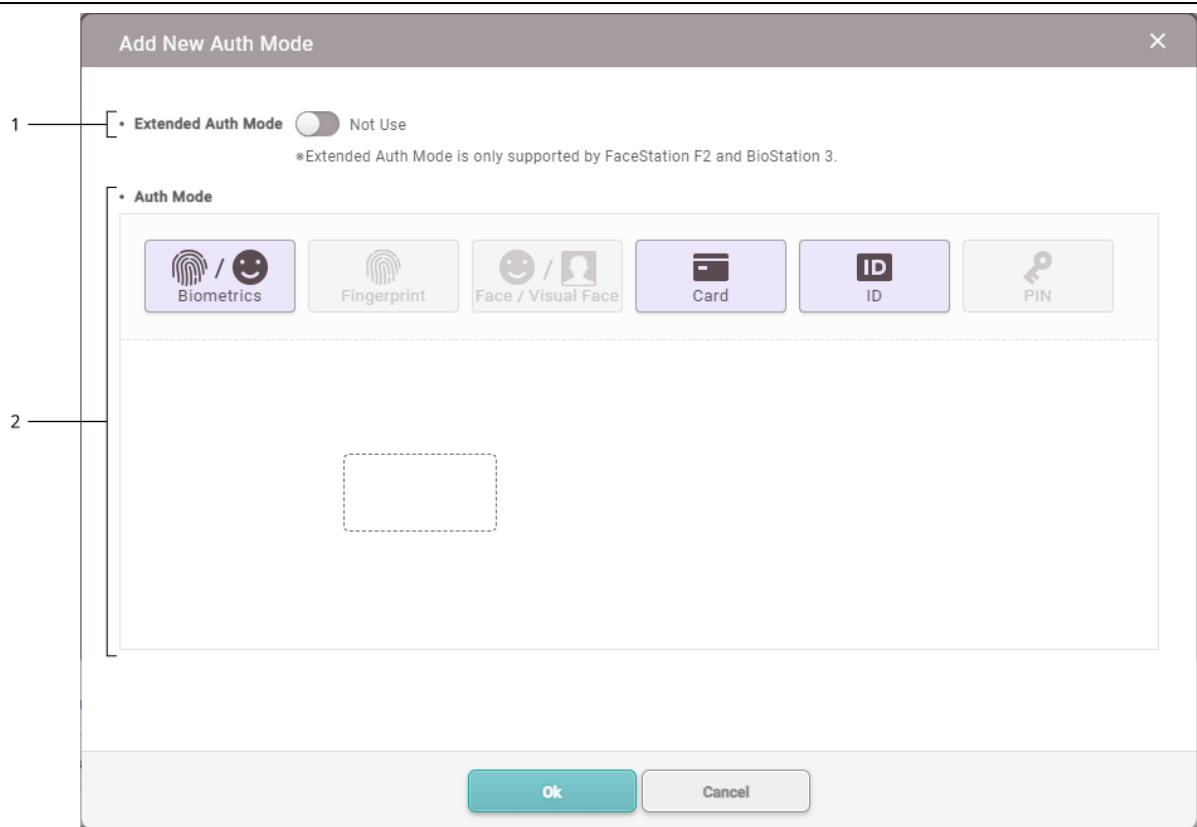
Auth Mode

You can configure an authentication mode for each user.

Select Device Default to allow the user to authenticate using the modes configured in [Authentication](#), or select Private Mode to assign a unique authentication mode to each user.

- 1) Set Auth Mode to Private Mode.
- 2) Click + Add and configure the settings.

10 Users

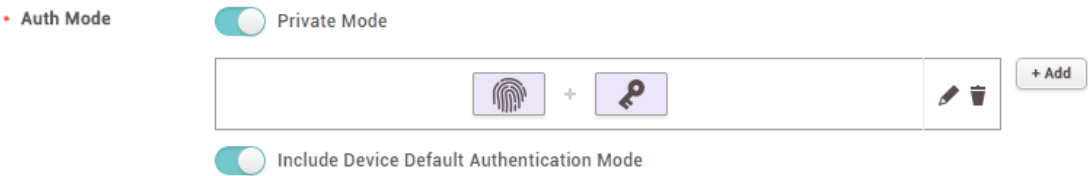


No.	Item	Description
1	Extended Auth Mode	Set whether to use Extended Auth Mode. When Extended Auth Mode is set to Use, the auth mode can be combined including both face and fingerprint. Note ▪ Extended Auth Mode is only supported by FaceStation F2, BioStation 3 and BioEntry W3.
2	Auth Mode	Drag and drop authentication methods to use.

3) Click Apply to add the authentication mode.

 Note

- If Exclude Device Default Authentication Mode is set, only the personal authentication mode set in BioStar 2 can be used. If Include Device Default Authentication Mode is set, both the authentication mode set in the device and the personal authentication mode set in BioStar 2 can be used.



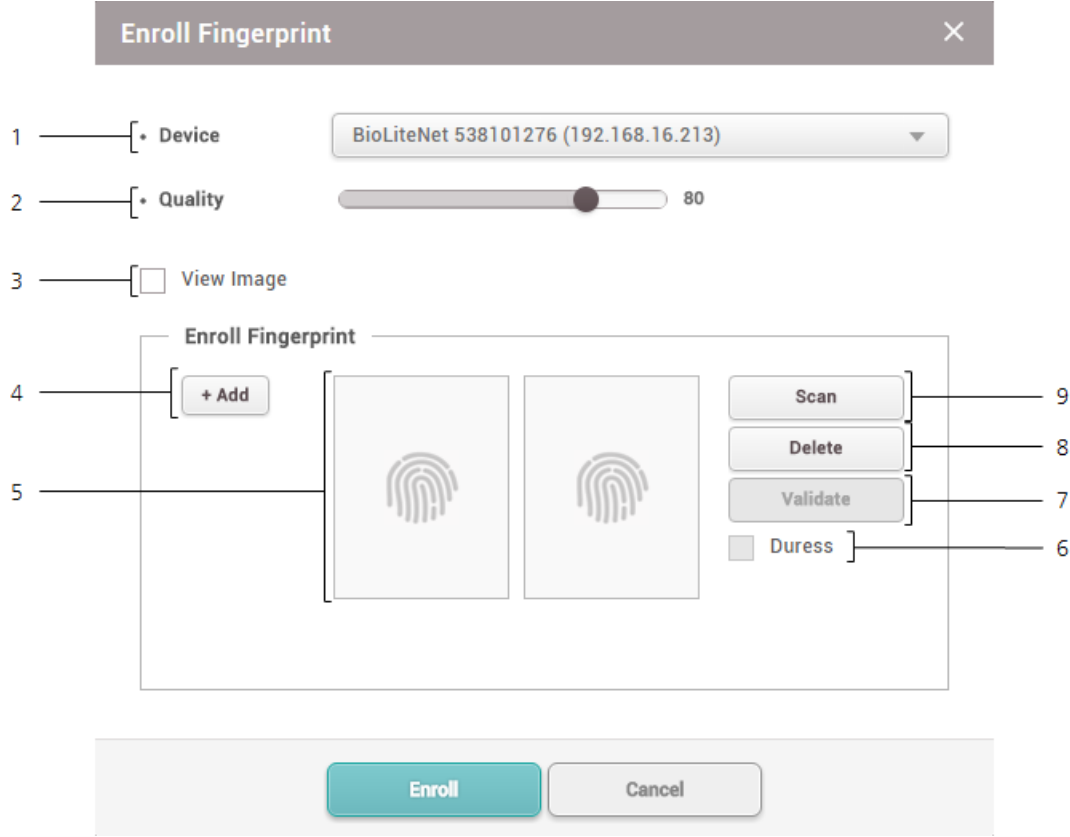
Enroll Fingerprint

You can add the user's fingerprints if the device supports fingerprint authentication. Fingerprints can be scanned using a finger scanner or at the installation location.

 Note

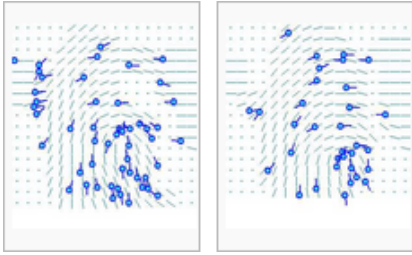
- Make sure that the user's finger is clean and dry.
- Do not add fingers with wounds or faint fingerprints.

1) Click + Fingerprint and configure the settings.



No.	Item	Description
1	Device	Select a device to enroll the fingerprint with.
2	Quality	Select a fingerprint enrollment quality level. Any fingerprint which does not meet the quality requirement will not be enrolled.
3	View Image	Select this option to view the original image when a fingerprint is scanned.
4	Enroll Fingerprint	Click + Add to add a fingerprint. Up to 10 fingerprints can be added.

10 Users

No.	Item	Description
5	Fingerprint Image	This section shows the analysis of the fingerprint enrolled. 
6	Duress	Select this option to add the fingerprint as a duress fingerprint. When threatened by someone to open the door, the user can authenticate using this fingerprint to send an alarm signal to BioStar 2.
7	Validate	It is possible to check if the fingerprint has been enrolled already or not when using the server matching.
8	Delete	Deletes the selected fingerprint.
9	Scan	Click Scan and then place a finger on the fingerprint scanner or the device sensor.

- 2) Click Enroll to enroll the fingerprint.
- 3) Set the 1:1 Security Level and click Apply.

Note

- Fingerprints used for regular access should not be registered as duress fingerprints.
- The View Image option shows the fingerprint image but does not store it on BioStar.
- If the fingerprint authentication rate is low, delete the existing fingerprint information and add a new fingerprint.
- Use an adequate security level. If 1:1 Security Level is too high, the fingerprint authentication rate may be too low or the false rejection rate (FRR) may be too high.
- For best fingerprint scanning quality, make sure to cover the entire surface of the fingerprint sensor with the finger. We recommend using the index finger or the middle finger.



Enroll Face

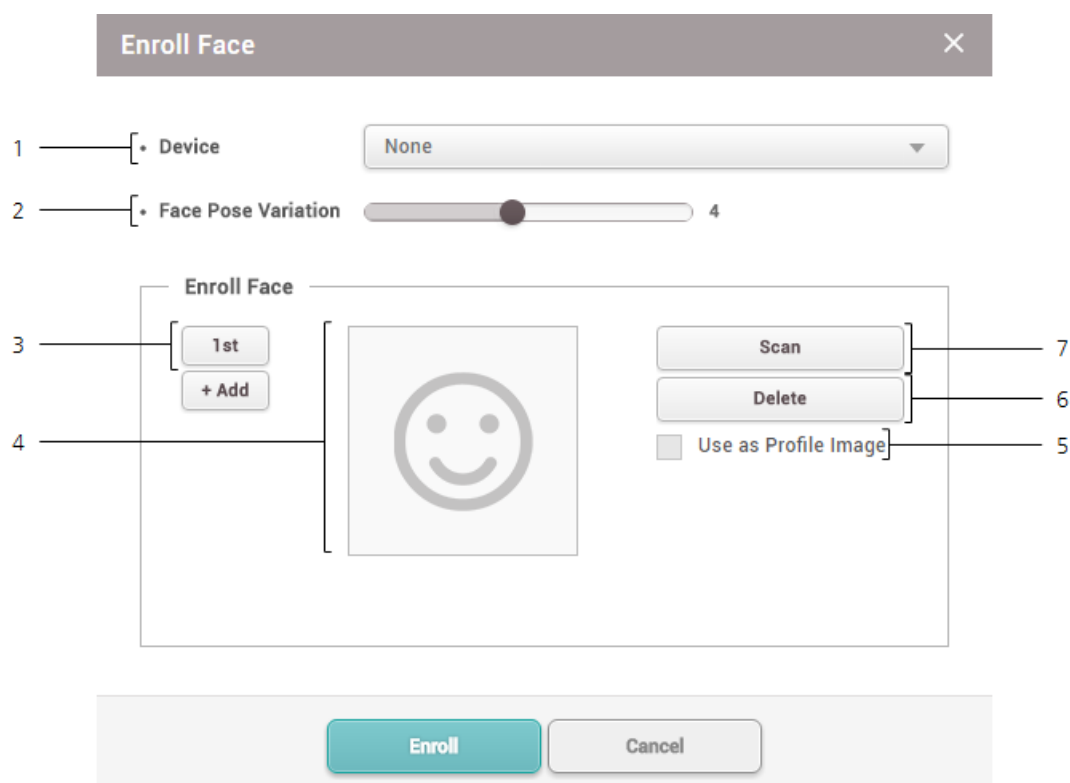
You can add the user's faces if the device supports face authentication.

10 Users

Note

- When registering a face, maintain a distance of 40cm to 80cm between the device and the face.
- Be careful not to change the facial expression. (smiling face, drawn face, wink, etc.)
- If you do not follow the instructions on the screen, the face registration may take longer or may fail.
- Be careful not to cover the eyes or eyebrows.
- Do not wear hats, masks, sunglasses or eyeglasses.
- Be careful not to display two faces on the screen. Register one person at a time.
- It is recommended for a user wearing glasses to register both faces with and without glasses.

1) Click + Face and configure the settings.



No.	Item	Description
1	Device	Select a device to enroll the face with.
2	Face Pose Variation	Set the sensitivity for the position, angle, and distance of a face when registering the face. Set the sensitivity high if you wish to obtain a detailed face template.
3	Enroll Face	Click + Add to add a face. Up to 5 faces can be added.
4	Face Image	View the registered face.
5	Use as	Select the registered face you wish to use as your profile image.

10 Users

No.	Item	Description
	Profile Image	
6	Delete	Deletes the selected face.
7	Scan	Click Scan and then follow the instructions on the device screen to scan.

- 2) Click Enroll to enroll the face.
- 3) Set the 1:1 Security Level and click Apply.

Note

- If the face authentication rate is low, delete the existing face information and add a new face.
- Use an adequate security level. If 1:1 Security Level is too high, the authentication rate may be too low or the false rejection rate (FRR) may be too high.

Enroll Visual Face

Visual Face is a credential that captures the user's face with a visual camera. It is different from face information captured with an infrared camera and is only available on devices that support Visual Face. Visual Face can also be registered non-face-to-face using a user's mobile device.

Note

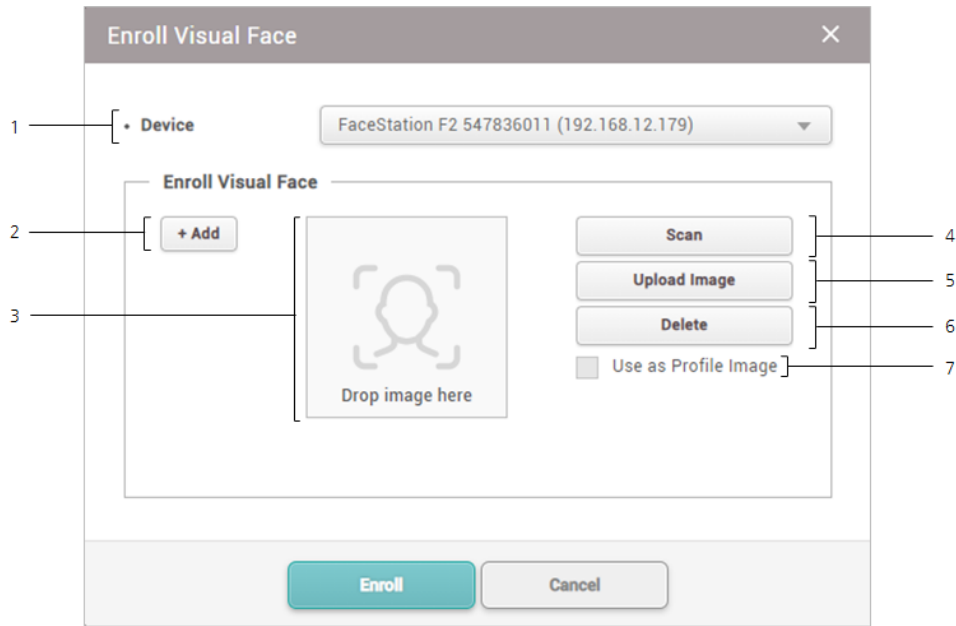
- The devices that can use Visual Face are as follows.
 - FaceStation F2, BioStation 3, BioEntry W3
- Cautions for enrolling a visual face
 - When enrolling a face on the device, maintain a distance of 60–100 cm between the device and the face.
 - When enrolling a face on the device, stand still and enroll the face by staring at the screen.
 - When enrolling a face on the device or the mobile device, if the user does not follow the instructions on the screen, the face enrollment may take longer or fail.
 - Do not change the user's face expression.
 - Do not enroll a face while the user is wearing masks, hats, or eye patches.
 - Do not enroll a face with the user raising their head or bowing.
 - Do not wear thick makeup.
 - Users should not enroll their faces with their eyes closed.
 - Make sure that both of user's shoulders correctly appear on the screen.
 - Be careful not to display two faces on the screen. Enroll one person at a time.

— Enroll by Device

10 Users

You can enroll a visual face by FaceStation F2, BioStation 3 and BioEntry W3.

1) Click + Visual Face and configure the settings.



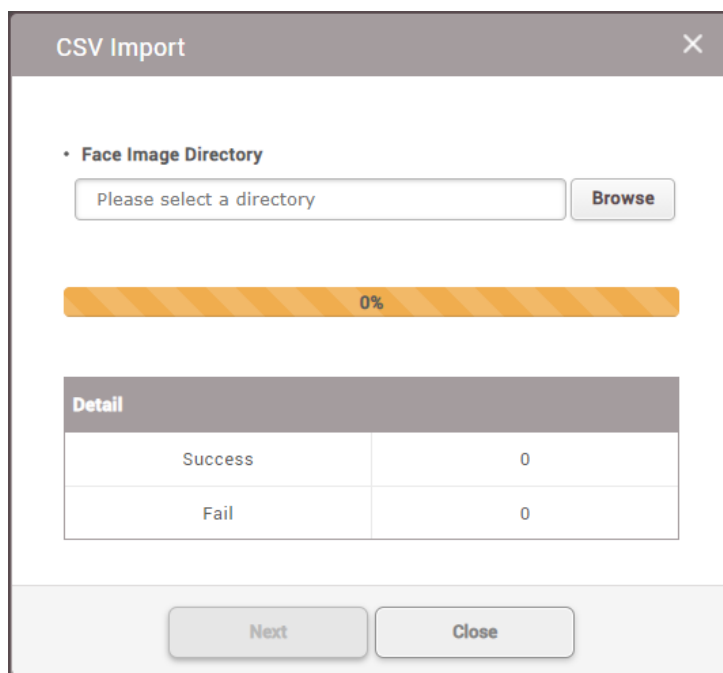
No.	Item	Description
1	Device	Select a device to enroll the visual face with.
2	Enroll Visual Face	Click + Add to add a visual face. Up to 2 visual faces can be added.
3	Visual Face Image	View the scanned or uploaded image. You can also upload image files by dragging and dropping.
4	Scan	Click Scan and then follow the instructions on the device screen to scan.
5	Upload Image	Upload the image to use as a visual face. ☒ Note - Supported image file size is up to 10MB. - Supported image file formats are JPG, JPEG and PNG.
6	Delete	Deletes the selected visual face.
7	Use as Profile Image	Select the registered face you wish to use as your profile image.

2) Click Enroll to enroll the visual face.

— Enroll by CSV Import

You can enroll user's visual face by importing CSV.

- 1) Click USER.
- 2) Select users from the user list you intend to enroll visual faces.
- 3) Export the selected list to a CSV file by referring to [CSV Export](#).
- 4) Enter the file name of visual face image, including the extension in visual face column (face_image_file1, face_image_file2) of CSV file, and then save it.
- 5) Import CSV file that added visual faces into BioStar 2 by referring to [Import CSV](#).
- 6) Click Browse, select the path where visual face images are stored, then click Upload.



Detail	
Success	0
Fail	0

Note

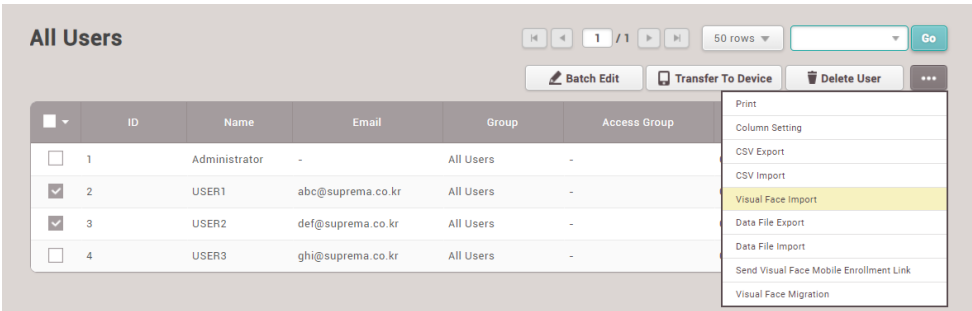
- It is recommended to use the same path for the CSV file and visual face image files to be loaded.
 - Supported image file size is up to 10MB.
 - Supported image file formats are JPG, JPEG and PNG.
- 7) Click Next to complete the CSV import. If an error occurs during the import of CSV file information, you can upload it again after checking only the erroneous CSV data.

— Enroll by Visual Face Import

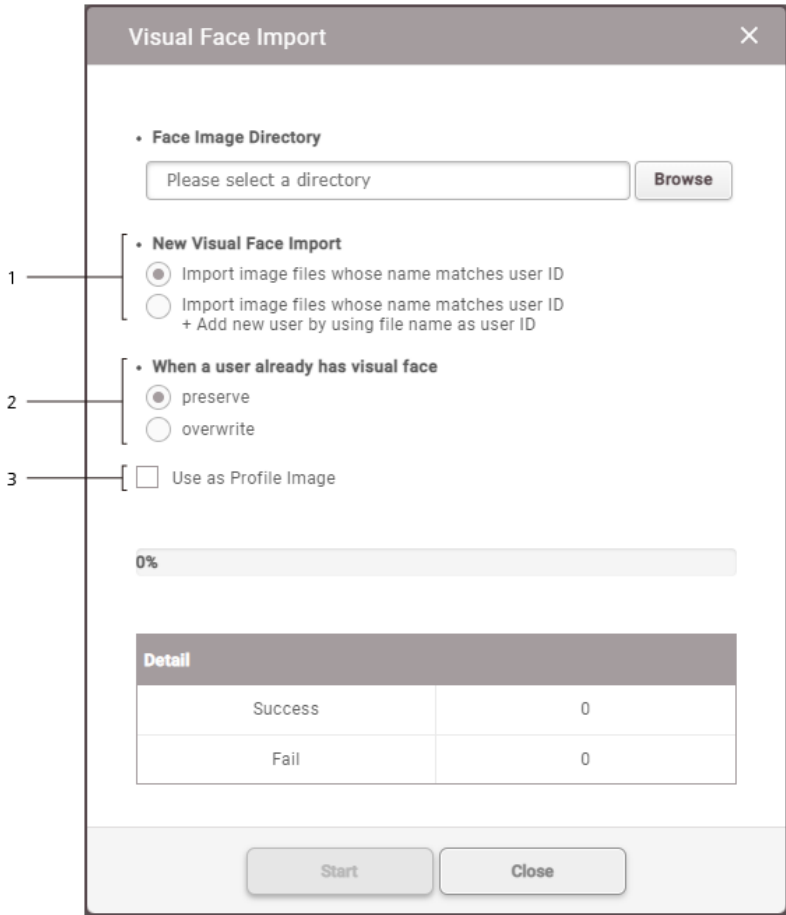
10 Users

You can enroll user's visual face by importing face image files that match user ID.

1) Click Visual Face Import.



2) Click Browse, select the directory where face image files are stored, then click Upload.



No.	Item	Description
1	New Visual Face Import	- Import image files whose name matches user ID: The image is imported only when the user ID registered in BioStar 2 and the file name match, and files that do not match are ignored. - Import image files whose name matches user ID +

10 Users

No.	Item	Description
		Add new user by using file name as user ID: If the file name matches the user ID registered in BioStar 2, the image is imported, and if there is a file name that does not match, a new user is added using the file name as the user ID and the Visual Face is enrolled.
2	When a user already has visual face	▪ preserve: Maintains the already enrolled users visual face. ▪ overwrite: Overwrites the newly imported visual face over the existing visual face.
3	Use as Profile Image	Check this option if you want to use an imported visual face as a user's profile image.

- 3) Click Start to complete the Visual Face Import. If an error occurs during image file import, BioStar 2 will return a list of image files failed to import, you can check which face image files are not suitable.

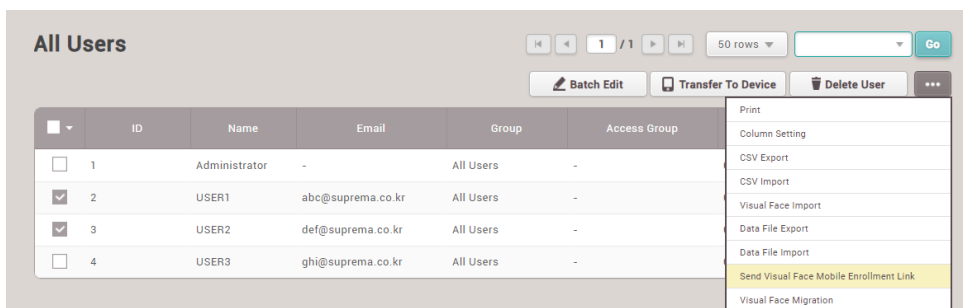
Note

- Supported image file size is up to 10MB.
- Supported image file formats are JPG, JPEG and PNG.
- Only one visual face can be imported per user ID.

— Enroll by Mobile Device

You can send the visible face mobile enrollment link to users via email. Users can access the link from their mobile device and enroll their visual face directly.

- 1) Select users from the user list you intend to enroll the visual face and click .



- 2) Select Send Visual Face Mobile Enrollment Link and then click Yes. The visual face enrollment link will be sent to the email of the selected user. When the user completes the upload, the visual face is enrolled in the user

information.

Note

- Complete the email settings including SMTP settings before using Visual Face Mobile Enrollment. Refer to the [Email Setting](#) for more information.
- You can check whether the email was successfully sent or not in the audit trail. See the [Audit Trail](#) for more information.
- If the user receiving the visual face mobile enrollment link uses an external email application, the language of the email application must be set to the language of their country. If the language does not support Unicode, the text in the email may be broken.
- When the user clicks on Visual Face Mobile Enrollment link, the Visual Face Enrollment Service is executed as follows.

Follow the instructions on the screen to enroll the visual face.

BioStar 2



Visual Face Registration

Register

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BioStar 2

Visual Face Registration

BioStar 2 Visual Face Registration is required to send limited personal data on individuals to facilitate the service being provided for the operator. This information is collected by each operator for the purpose of providing templates for biometric authentication to users. All data sent is required and managed by the operator collecting the data for this purpose and the manufacturer does not collect any data separately.

Personal information to be sent and managed by operator

- Photo taken from current webpage
- Photo selected by user

After your registration, this will be deemed as agreeing for collecting and using your personal information.

Cancel

Next

BioStar 2

Visual Face Registration

Please take a picture by following the guide below. ✕


Rolling head up


Smiling


Eyes closed


Thick makeup


Lowering head


Dark places


Wearing a mask


Wearing a hat

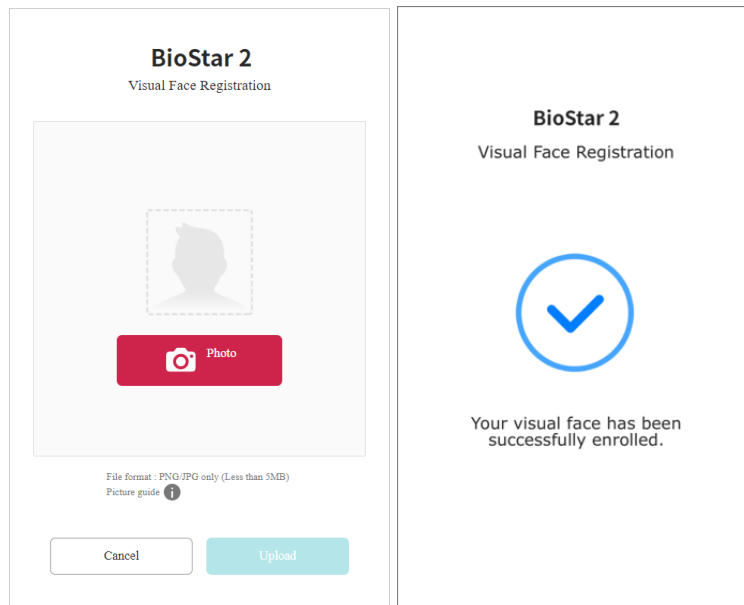
File format : PNG/JPG only (Less than 5MB)

Picture guide 

Cancel

Upload

10 Users



- Supported image file size is up to 10MB.
- Supported image file formats are JPG, JPEG and PNG.
- Visual Face Enrollment link sent will expire after 24 hours.
- Once the Visual Face Mobile Enrollment process is successful after uploading a face picture, an enrollment success message appears on the screen. If enrollment fails, a failure message and reason are displayed, and the user can retry the Visual Face Enrollment again using a different face picture.

— Enroll by Using a Webcam

You can send the visible face mobile enrollment link to users via email. Users can access the link from their mobile device and enroll their visual face directly.

See the [How to Enroll Profile Photo & Visual Face Using a Webcam](#) for more information.

Enroll Card

You can assign access cards to users or manage the existing cards.

For the types of card supported by the device, refer to the device manual.

[Registering CSN Card](#)

[Registering Wiegand Card](#)

10 Users

Registering Smart / Mobile Cards

[Card Enrollment using the USB Agent]

Card Type	CSN	Wiegand	Smart Card
EM	X	X	X
MIFARE	O	X	O
DESFire	O	X	O
FeliCa	O	X	X
HID Prox	X	X	X
HID iCLASS	X	X	X

Registering CSN Card

You can register the CSN cards.

- 1) Click + Card.
- 2) Select CSN for Card Type.

Enroll Card

• Card Type

CSN

• Registration Option

Register by Card Reader

• Device

BioStation 2 546832590 (192.168.16.108)

Information

• Card ID

Read Card

Enroll

Cancel

- 3) Select a desired Registration Option.

— Register by Card Reader

You can register a card by scanning the card information with the device connected to BioStar 2.

10 Users

- a) Select Register by Card Reader for Registration Option.
- b) Select the device to scan a card.
- c) Click Read Card and scan a card with the device.

— Assign Card

You can assign a registered card to a user.

- a) Select Assign Card for Registration Option.
- b) Click the card to be assigned from the list or search for the card.

— Enter Manually

You can register a card by entering a card number directly.

- a) Select Enter Manually for Registration Option.
- b) Click Use User ID or enter directly.

- 4) Click Enroll to register a card.

🕒 Related Information

[Card Usage Status](#)

[Card Format](#)

Registering Wiegand Card

You can register the Wiegand cards.

- 1) Click + Card.
- 2) Select Wiegand for Card Type.

10 Users

Enroll Card [X]

- Card Type: Wiegand
- Card Data Format: 26 bit SIA Standard-H10301
- Registration Option: Register by Card Reader
- Device: BioStation 2 546832590 (192.168.16.108)

Information

- Facility Code:
- Card ID 1:

- 3) Set a Card Data Format. If no desired card data format is available, see [Wiegand](#) to set a Wiegand format.
- 4) Select a desired Registration Option.

— Register by Card Reader

You can register a card by scanning the card information with the device connected to BioStar 2.

- a) Select Register by Card Reader for Registration Option.
- b) Select the device to scan a card. The available devices will be displayed on the top of device list, if no device is available, see CSN Card Format of [Authentication](#).
- c) Click Read Card and scan a card with the device.

— Assign Card

You can assign a registered card to a user.

- a) Select Assign Card for Registration Option.
- b) Select the card to be assigned from the list.

Note

- Only the cards with the set Card Data Format will be displayed on the list.

— Enter Manually

10 Users

You can register a card by entering a card number directly.

- a) Select Enter Manually for Registration Option.
- b) Enter the Facility Code or Card ID 1.

- 5) Click Enroll to register a card.

Related Information

[Card Usage Status](#)

[Card Format](#)

Registering Smart / Mobile Cards

It is possible to enroll the Access on card, Secure credential card or Custom smart card.

Note

- To set the mobile card, set Active for Mobile Card Enrollment on the User / Device Management tab of Setting > SERVER.
- To issue a smart card or a mobile card, the correct card type must be set. For detailed contents regarding the card type, refer to [Smart / Mobile Card](#).

- 1) Click + Card.

10 Users

The 'Enroll Card' dialog box is used to configure and enroll a smart card. It includes the following fields and options:

- Card Type:** Smart Card
- Card Layout Format:** Test
- Device:** BioStation 3 547838671 (192.16...)
- Smart Card Type:** Access On Card
- Information Section:**
 - Card ID:** 2
 - Access Group:** (empty)
 - Face Template:** Not Use
 - PIN:** (empty)
 - Period:** 2001-01-01 00:00~20...
 - Fingerprint:** 1st Finger, 2st Finger (each with a fingerprint icon and a 'Duress' checkbox)
- Private Auth Mode:** + Add

At the bottom of the dialog are three buttons: **Issue Mobile Card**, **Write Smart Card**, and **Cancel**.

- 2) Select Smart Card for Card Type.
- 3) Select a device where the smart card can be used. To set the smart card layout, refer to Card Type on [Authentication](#).
- 4) Set Card Layout Format. It is possible to set the card layout from [Smart Card](#).
- 5) Select Smart Card Type.
 - Access On Card: Allows you to save user information (Card ID, PIN, Access Group, Period, Fingerprint templates, Face templates, and Private Auth Mode) on the card.

Note

- To use Face Template, activate Use Face Template in the Layout tab when setting the smart card layout in Settings > CARD FORMAT. For detailed contents regarding the card type, refer to [Smart / Mobile Card](#).
- Secure Credential Card: Allows you to save user information (Card ID, PIN, Fingerprint templates, Face templates) on the card. To use user information stored in BioStar 2, server matching must be activated.

Note

- To use Face Template, activate Use Face Template in the Layout tab when setting the smart card layout in Settings > CARD FORMAT. For detailed contents regarding the card type, refer to [Smart / Mobile Card](#).
- Custom Smart Card: You can enroll smart cards issued by third parties. Proceed with registration based on the selected Registration Option.

Note

- The devices and the firmware versions that can use the Custom Smart Card are as follows.
 - XPass D2 FW 1.7.1 or later
 - BioEntry P2 FW 1.5.1 or later
 - BioEntry W2 FW 1.8.0 or later
 - BioStation 2a FW 1.1.0 or later
 - X-Station 2 FW 1.3.0 or later
 - BioStation 3 FW 1.3.0 or later
 - BioEntry W3 FW 1.0.0 or later
 - BioLite N2 FW 1.6.2 or later
 - BioStation 3 Max FW 1.0.0 or later
 - XPass Q2 FW 1.0.0 or later
 - To set a new smart card layout, refer to [Smart / Mobile Card](#).
- 6) Select the fingerprint template to be enrolled on the card.
- 7) Clicking Issue Mobile Card or Write Smart Card will enroll the card.

Note

- If a mobile card has been issued, it can be used only after the issued card is activated through the BioStar 2 Mobile app.
- It is possible to set card ID for the Secure credential card directly.
- The information stored in BioStar 2 is used for the user information to be stored in the smart card. If the new user information is not stored, incorrect user information may be stored in the smart card. Also, if the changed user information is not synchronized with the device, the device may not be able to carry out authentication.

Related Information

[Card Usage Status](#)

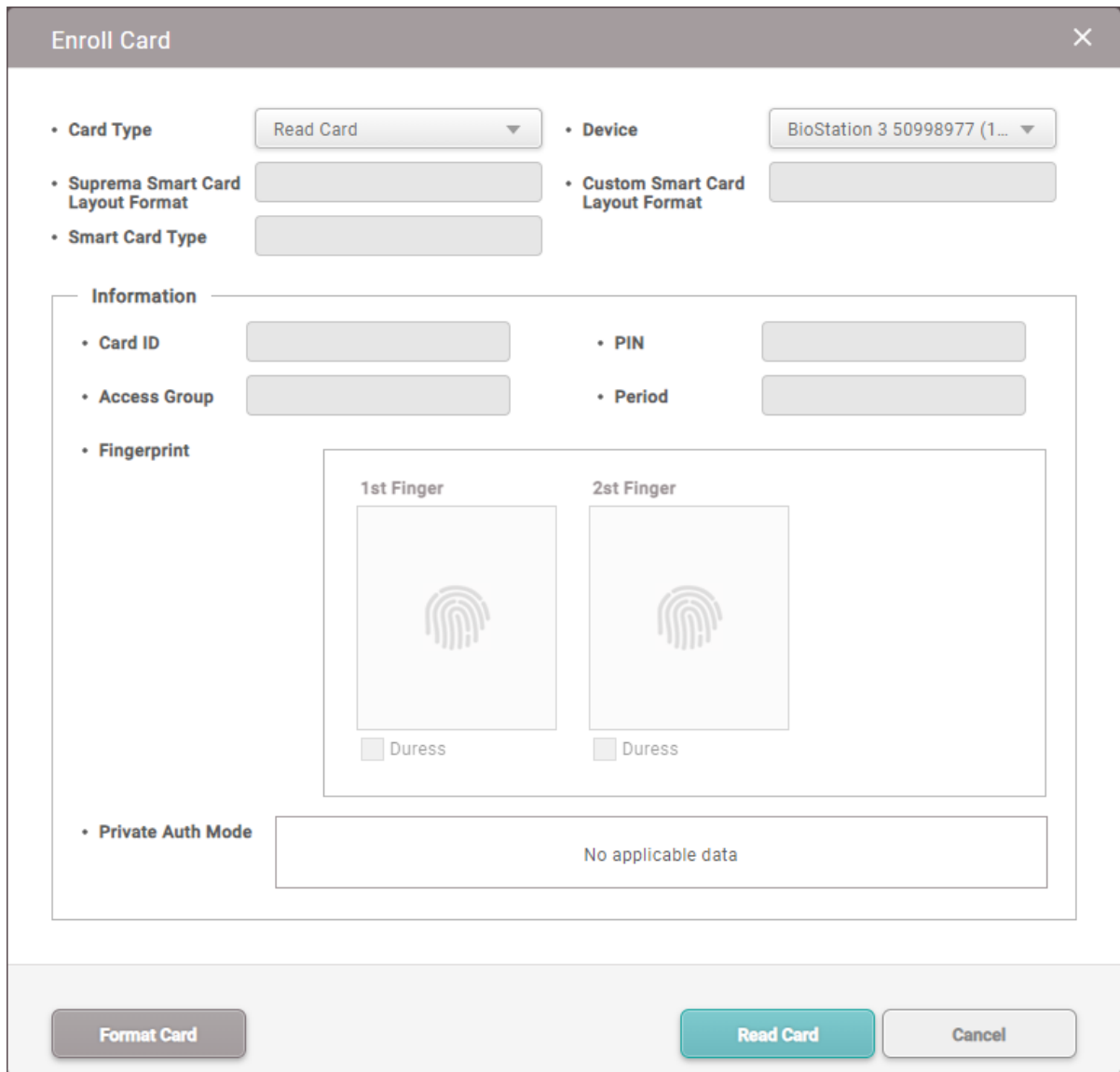
[Card Format](#)

10 Users

Read/Format Smart Cards

It is possible to format the smart card and record information again.

- 1) Click + Card.



The 'Enroll Card' dialog box is shown with a close button (X) in the top right corner. It contains the following fields and sections:

- Card Type:** A dropdown menu currently showing 'Read Card'.
- Device:** A dropdown menu showing 'BioStation 3 50998977 (1...'.
- Suprema Smart Card Layout Format:** An empty text input field.
- Custom Smart Card Layout Format:** An empty text input field.
- Smart Card Type:** An empty text input field.
- Information Section:**
 - Card ID:** An empty text input field.
 - Access Group:** An empty text input field.
 - Fingerprint:** A section containing two fingerprint capture areas labeled '1st Finger' and '2st Finger'. Each area has a fingerprint icon and a 'Duress' checkbox below it.
 - Private Auth Mode:** A text area containing the text 'No applicable data'.

At the bottom of the dialog, there are three buttons: 'Format Card' (grey), 'Read Card' (teal), and 'Cancel' (grey).

- 2) Select Read Card for Card Type.
- 3) Select a device which can read the smart card. The list of devices only appears when the smart card layout is set. For setting, refer to Card ID Format on [Authentication](#).
- 4) Select Smart Card Type.
- 5) Click Read Card.
- 6) Check the card information and click Format Card.

 Note

10 Users

- Custom Smart Card cannot use the Card Format feature.

Related Information

[Card Usage Status](#)

[Card Format](#)

Enroll Mobile Access Card

You can assign the mobile access to users when using the mobile access in conjunction with Suprema Airfob Portal.

Mobile Access Card supports registration either of each user individually or of multiple users at once via CSV Import.

Depending on the issuance method of Mobile Access Card set in the Airfob Portal, the user's email or phone number should be entered.

Note

- For more information about using Suprema Airfob Portal and Mobile Access, see [Mobile Access](#).

[Enroll CSN Mobile Card](#)

[Enroll Template on Mobile](#)

Enroll CSN Mobile Card

Issue CSN mobile access cards to users.

Note

- For more information about using Suprema Airfob Portal and Mobile Access, see [Mobile Access](#).

- 1) Click + Mobile.
- 2) Select the Card Type as CSN Mobile.
- 3) Select a desired Registration Option.

Assign Card

10 Users

Unassigned CSN Mobile cards registered in BioStar 2 can be assigned to users.

a) Select Assign Card for Registration Option.

Enroll Mobile Access Card

• Card Type CSN Mobile

• Registration Option Assign Card

Search: [] [Q] [1 / 1] [50 rows]

Card ID	Type	Status
9	CSN Mobile	Unassigned
22	CSN Mobile	Unassigned

Information

• Photo ☐ Not Use

• Department ☒ Marketing

• Title ☒ Manager

Period

• Expiry Period

• Period 2020/11/26 15:53 ~ 2020/11/27 15:53 [Calendar Icon]

b) Click the card to be assigned from the list or search for the card.

c) After setting Information and Period, click Enroll.

Note

- If the user's photo, department, and title are set in **User Information**, the corresponding information can be displayed on the user's mobile access card. Activate the items to be displayed on the mobile access card.
- The Expiry Period is only active when using the site type Dynamic. You can set the user's mobile access card expiry period and usage period.

— Enter Manually

CSN Mobile cards can be registered with a card ID entered manually or a random card ID.

a) Select Enter Manually for Registration Option.

Enroll Mobile Access Card

• Card Type

CSN Mobile

• Registration Option

Enter Manually

Card ID

• Card ID

160637360616950

Use User ID

• Input Type

☐ Use random card ID

Information

• Photo

☐ Not Use

• Department

☒ Marketing

• Title

☒ Manager

Period

• Expiry Period

+1 Day

+7 Days

+30 Days

+1 Year

• Period

2020/11/26

15:53

~

2020/11/27

15:53

Enroll

Cancel

- b) If Input Type is set as Use random card ID, a card ID is automatically generated. Click Use User ID to use the user ID as the card ID.
If Input Type is set at Enter manually, a card ID can be entered manually.
- c) After setting Information and Period, click Enroll.

Note

- It is recommended to set Input Type to Use random card ID to prevent duplicate card ID generation.
- If the user's photo, department, and title are set in **User Information**, the corresponding information can be displayed on the user's mobile access card. Activate the items to be displayed on the mobile access card.
- The Expiry Period is only active when using the site type Dynamic. You can set the user's mobile access card expiry period and usage period.

- 4) Click Enroll to register a mobile access card.

Note

- If the activation code sent to you via email or text message is lost or deleted, you can reissue

10 Users

the activation code by clicking Resend. However, Mobile Access Cards activated in the Airfob Portal cannot be reissued.

Type	Card Data Format	Summary	
CSN Mobile	Mobile Access Card	ID: 1231231244123	Resend Block 

🔗 Related Information

[Adding User Information](#)

[Mobile Access](#)

Enroll Template on Mobile

Template on Mobile is a Mobile Access card in which the user's biometric templates can be stored so you can still use biometric authentication although your biometric information is not stored in BioStar 2 server, Airfob Portal, or device.

Template on Mobile can be useful in an environment where you want to use biometrics as a credential, but can't store biometric information on servers or devices due to privacy concerns. Because the issuance of Templates on Mobile and the enrollment of biometric templates are separate processes, users can enroll visual faces directly from a Template on Mobile support device without facing an administrator.

📌 Note

- The devices and firmware versions that support Template on Mobile are as follows.
 - BioStation 3 FW 1.2.0 or later
 - BioEntry W3 FW 1.0.0 or later
 - FaceStation F2 FW 2.2.0 or later
 - X-Station 2 FW 1.3.1 or later
 - BioStation 3 Max FW 1.0.0 or later
- For more information about using Suprema Airfob Portal and Mobile Access, see [Mobile Access](#).
- Mobile access cards can only use either the CSN Mobile card or Template on Mobile.
- Only one Template on Mobile can be issued per user.

- 1) Click + Mobile.
- 2) Select the Card Type as Template on Mobile.

10 Users

Enroll Mobile Access Card

• Card Type: Template on Mobile

• Smart Card Type: Access On Card

Card Information

• Card ID: 1

• PIN:

• Access Group:

• Period: 2001-01-01 00:00...

• Private Auth Mode: + Add

Information

• Photo: ☐ Not Use

• Department: ☐ Not Use

• Title: ☐ Not Use

Period

• Expiry Period: +1 Day +7 Days +30 Days +1 Year

• Period: 2023/09/05 18:20 ~ 2023/09/06 18:20

Enroll **Cancel**

3) Select a desired Smart Card Type.

- Access On Card: Allows you to save user information (Card ID, PIN, Access Group, Period, Private Auth Mode) on the card.
- Secure Credential Card: Allows you to save user information (Card ID, PIN) on the card. To use user information stored in BioStar 2, server matching must be activated.

4) After setting Information and Period, click Enroll.

 Note

- If the user's photo, department, and title are set in **User Information**, the corresponding information can be displayed on the user's mobile access card. Activate the items to be displayed on the mobile access card.
- The Expiry Period is only active when using the site type Dynamic. You can set the user's mobile access card expiry period and usage period.
- An issuance mail will be sent to the enrolled user's mail. To use it, need to install the Airfob Pass application via the link in the mail, and then issue the Template on Mobile on the smartphone.

10 Users

- 5) Tag the issued smartphone to the device and follow the on-screen instructions to enroll visual face on Template on Mobile.

Note

- Template on Mobile authentication method
First, tag your smartphone to the device, then follow the instructions to authenticate your face.

Related Information

[Adding User Information](#)

[Mobile Access](#)

Enroll QR/Barcode

You can use QR/Barcodes as a means of authentication.

Note

- The devices that can use Use QR/Barcode through Scanner are as follows.
 - X-Station 2 (XS2-QDPB, XS2-QAPB)
- The devices that can use Use QR/Barcode through Camera are as follows.
 - X-Station 2 (XS2-ODPB, XS2-OAPB, XS2-DPB, XS2-APB) firmware 1.2.0 or higher
 - BioStation 3 (BS3-DB, BS3-APWB) firmware 1.1.0 or higher
 - Using Use QR/Barcode through Camera requires a separate device license. For more information, refer to [Device License](#).

- 1) Click + QR/Barcode.
- 2) Select the QR/Barcode Type.

BioStar 2 QR

You can directly issue a QR code that contains an encrypted PIN on BioStar 2.
A QR code will be sent via email registered in user information.

Note

- Complete the email settings including SMTP settings before using BioStar 2 QR. Refer to the [Email Setting](#) for more information.
- To issue a BioStar 2 QR, the user's email address must be registered in [user information](#).

a) Select BioStar 2 QR in the QR/Barcode Type.



Enroll QR/Barcode

• QR/Barcode Type: BioStar 2 QR

Information

• Card ID: 167462115154950

• Input Type: ☒ Use random card ID

* BioStar 2 QR includes a PIN which is encrypted.

Enroll **Cancel**

b) Set details of a card to be issued in Information section. When setting the Input Type option to Use random card ID, a card ID is automatically generated. When setting the Input Type option to Enter manually, you need to enter a user ID manually.

 Note

- It is recommended to set Input Type to Use random card ID to prevent duplicate card ID generation.

QR/Barcode

You can register users with QR/Barcodes issued from 3rd party systems.

a) Select QR/Barcode in the QR/Barcode Type.

10 Users



The image shows a dialog box titled "Enroll QR/Barcode" with a close button (X) in the top right corner. Inside the dialog, there are two dropdown menus: "QR/Barcode Type" set to "QR/Barcode" and "Registration Option" set to "Enter Manually". Below these is an "Information" section containing a "Card ID" label and an empty text input field. At the bottom of the dialog are two buttons: "Enroll" and "Cancel".

- b) Select Enter Manually in the Registration Option.
- c) Enter an existing QR/Barcode ID manually.

Note

- You can enter a card ID up to 32 characters including alphabets, numbers, or special characters.

- 3) Click Enroll to register a QR/Barcode.

1:1 Security Level

1:1 Security Level can set a separate security level for the user regardless of the biometric 1:N Security Level set in the device.

If there are users who frequently fail authentication because the device's 1:N Security Level is set too high, authentication failures can be mitigated by setting the 1:1 Security Level low.

- 1) Set the 1:1 Security Level.

• 1:1 Security Level  Device Default

- 2) Click Apply to save the settings.

Note

- If Auth Mode starts with biometric, 1:1 Security Level cannot be applied because the entered user is not known, and Auth Mode starts with Card or ID only 1:1 Security Level is applied because user identification is possible.

10 Users

- Use an adequate security level. If 1:1 Security Level is too high, the fingerprint authentication rate may be too low or the false rejection rate (FRR) may be too high.

Biometric Credential Sync

You can resend biometric credentials to devices.

Note

- If Automatic User Synchronization is set to Not Used in Setting > Server > User / Device Management, Sync is not available.

- 1) Click Sync.

Type	Card Data Format	Summary	
Visual Face	-	1	<button>Sync</button>  

Transferring User Information to Devices

You can transfer user information registered with BioStar 2 to devices.

- 1) Select a user to transfer and click Transfer to Device.

10 Users

Transfer To Device

Users (3)

• Device List

All Devices

16F

 BioLiteNet 538101276 (192.168.16.230)

Overwrite users with different information

Transfer

Cancel

- 2) Select the Overwrite users with different information option to overwrite duplicate user information.
- 3) Select devices to transfer the information to. Click  to search for a device.
- 4) Click Transfer to transfer the user information.

Related Information

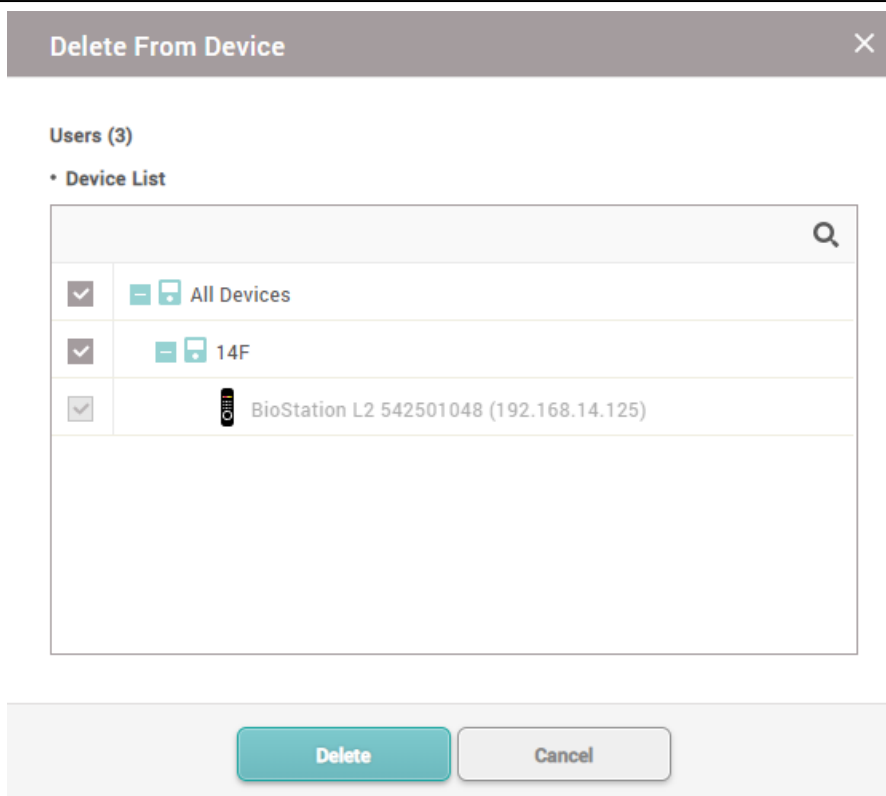
[Managing Users Registered with Devices](#)

Deleting User from Devices

You can delete users from each device registered in BioStar 2.

- 1) Select a user to delete from the device and click Delete From Device.

10 Users



Note

- The Delete From Device button is activated only when the Automatic User Synchronization is set as Not Used. You can refer to the [User/Device Management](#) for more detailed information on the Automatic User Synchronization.

- 2) Select devices to delete the users. Click to search for a device.
- 3) Click Delete to delete users.

Note

- When you delete a user, it is only deleted from the device and the user in BioStar 2 remains intact.

Editing User Information

You can edit an existing user or batch edit multiple users.

- 1) In the user list, click a user to edit.
- 2) Edit the details by referring to the instructions in [Adding User Information](#), [Adding User Credentials](#) and [Enroll Card](#).
- 3) To batch edit information of multiple users, select multiple users and click Batch Edit.

10 Users

Batch Edit

Users (19)

• Group

• Status

Active

• Period

2001/01/01

00:00

~

2030/12/31

23:59

• Access Group

• Operator Level

None

Ok

Cancel

- Click  of a field to edit its information.
- Click OK to save the changes.

Note

- You cannot modify the Operator Level of "Administrator".

Managing Long-term Idle Users

You can view, edit and delete the users who do not have access events for the recent months.
You can use a filter or combine filters to narrow down the result and export it as a CSV file.

- Click Status tab.
- Set the idle period. You can choose from one month to six months.
- You can narrow down the result by setting the filters on the headers of the result table.
- Click Delete User after selecting multiple users if you want to delete the multiple users.

Note

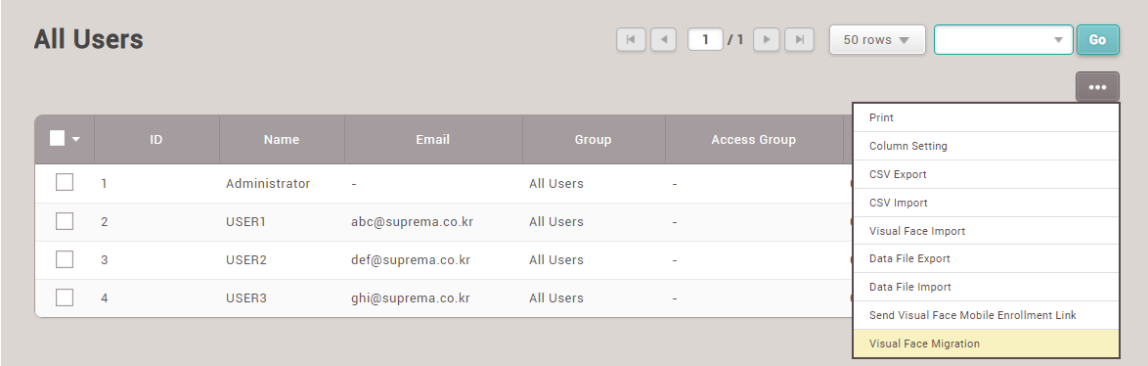
- Only users with the operator level of Administrator or User Operator can use the Delete User menu. You can refer to the [Adding User Information](#) for more detailed information on the operator level.

Visual Face Migration

Migrate all the visual faces from the previous version to the improved visual face algorithm.

10 Users

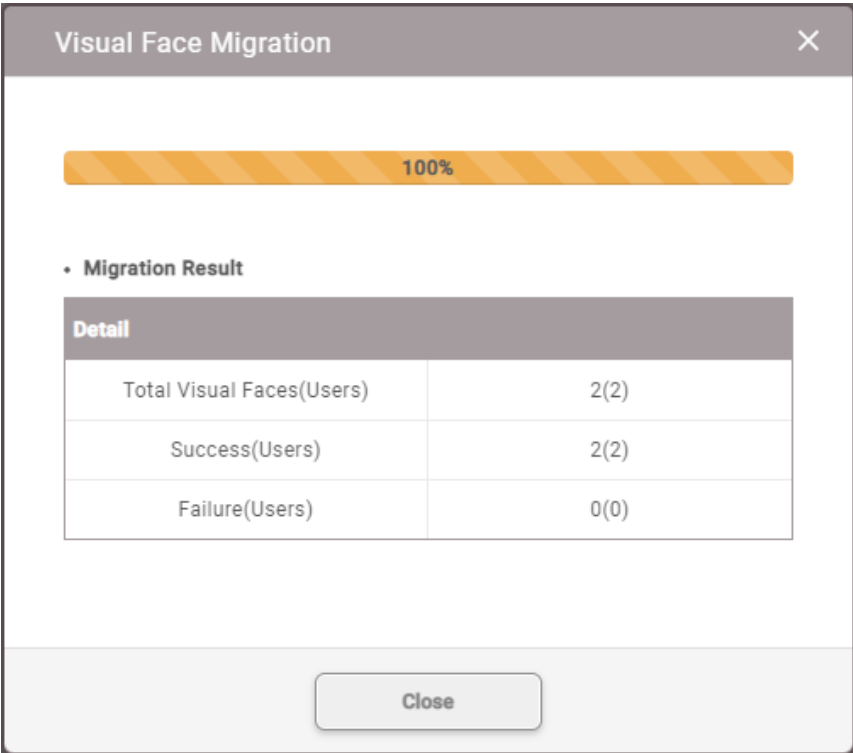
- 1) Click USER.
- 2) Click  and then select the Visual Face Migration.



The screenshot shows the 'All Users' management interface. At the top, there's a header 'All Users' and navigation controls including a search bar, a 'Go' button, and a '50 rows' dropdown. Below the header is a table with columns: ID, Name, Email, Group, and Access Group. The table contains four rows of user data. To the right of the table, a dropdown menu is open, listing various actions: Print, Column Setting, CSV Export, CSV Import, Visual Face Import, Data File Export, Data File Import, Send Visual Face Mobile Enrollment Link, and 'Visual Face Migration' (which is highlighted in yellow).

ID	Name	Email	Group	Access Group
1	Administrator	-	All Users	-
2	USER1	abc@suprema.co.kr	All Users	-
3	USER2	def@suprema.co.kr	All Users	-
4	USER3	ghi@suprema.co.kr	All Users	-

- 3) Click Continue after reading the warning pop-up message, Visual Face Migration process goes on.
- 4) When Visual Face Migration is complete, a result popup appears. You can check the total number of Visual Face enrolled in BioStar 2, and the number of migrations succeeded visual faces and the migration failed visual faces.



The screenshot shows a 'Visual Face Migration' result popup. At the top, there's a progress bar indicating 100% completion. Below the progress bar, the title 'Migration Result' is followed by a table with the following data:

Detail	
Total Visual Faces(Users)	2(2)
Success(Users)	2(2)
Failure(Users)	0(0)

At the bottom of the popup, there is a 'Close' button.

- 5) If a migration error case occurs, the list of users who have failed migration will be provided as a CSV file. You can delete the visual faces that have failed migration at once by clicking Delete.

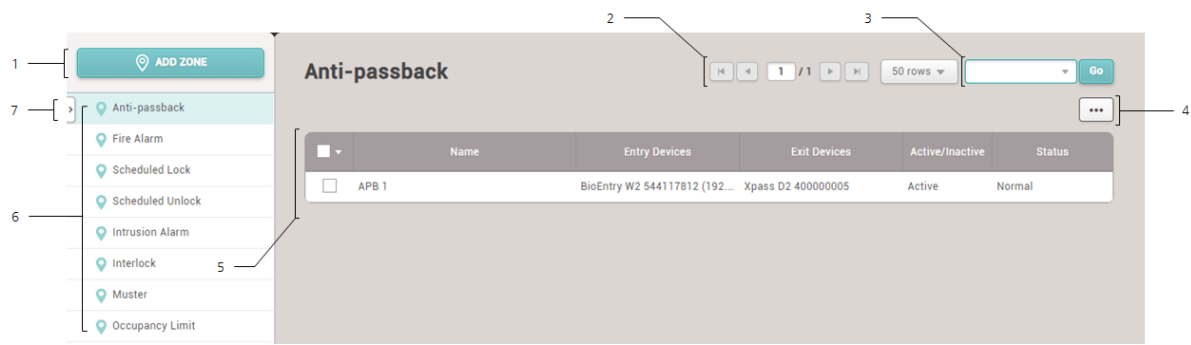
On the ZONE page, you can add anti-passback, fire alarm, schedule lock and schedule unlock zones, and configure the settings.

11 Zone

- Anti-passback Zone
- Fire Alarm Zone
- Schedule Lock Zone
- Scheduled Unlock Zone
- Intrusion Alarm Zone
- Interlock Zone
- Muster Zone
- Occupancy Limit Zone

 Note

- The ZONE menu will appear when the Advanced or higher license is activated.



1 Add Zone	5 Zone List
2 Page Navigation Buttons and Number of List Rows	6 Zone Type
3 Registered Zone Search	7 Expand Button
4 Function Button (Column Setting)	

Anti-passback Zone

Anti-passback zone provides an enhanced function than the door based anti-passback feature.

- Click ZONE and click ADD ZONE.
- Click Anti i-passback and click Apply.

11 Zone

The screenshot shows the configuration interface for an anti-passback zone. It is organized into four main sections:

- Information:** Contains fields for 'Name' (set to 'APB 1') and 'Type' (set to 'Anti-passback').
- Configuration:** Contains various settings:
 - Mode:** A toggle switch set to 'Global'.
 - Anti-passback Type:** A toggle switch set to 'Soft APB'.
 - Active/Inactive:** A toggle switch set to 'Active'.
 - Reset Time:** A text input set to '1440' minutes.
 - Entry Confirmed APB:** A dropdown menu set to 'Follows door configuration'.
 - Entry Devices:** A dropdown menu set to 'BioStation 2 546832506 (192.168.14.221)'.
 - Exit Devices:** A dropdown menu set to 'Xpass D2 400000005'.
 - Network Failure Action:** A dropdown menu set to 'Open by auth'.
- Alarm:** Contains an 'Action' field with a placeholder 'Action' and an '+ Add' button.
- APB Bypass:** Contains a 'Bypass Group' dropdown menu set to 'Not Use'.

No.	Item	Description
1	Information	Modify the information of the anti-passback zone. - Name: Enter an anti-passback name. - Type: View the zone type.
2	Configuration	Modify the zone settings of the anti-passback. - Mode: It is possible to set either Local or Global for the range of zone application. If Local is set, the zone can be set only with the entry devices and devices connected with RS-485, and if Global is set, the zone can be set with all devices enrolled in BioStar 2. - Active / Inactive: You can disable the anti-passback zone. Select Active to enable it. - Anti-passback Type: Select an Anti-passback type. - Reset Time: You can set a time period so that all anti-passback violations can be deleted. This allows the user to be granted access after the time period. The maximum possible duration is 7 days (10080 minutes). If set to 0, anti-passback violations will not be deleted and the users who have previously violated the anti-passback rule will not be granted access. - Entry Confirmed APB: You can set the range to apply the anti-passback. If Entry Confirmed APB is set to ON, the anti-passback is applied according to the actual operation of the door that the entry and exit device are configured. If this option is set to OFF, the rule is applied according to the user's authentication regardless of the door operation. When set to Follows door configuration, the anti-passback rule is applied according to the setting of the Use sensor when Entry Confirmed APB enabled option of the door. - Entry Devices: Select a device to use for entry. You can select a device

11 Zone

No.	Item	Description
		from the list of added devices. If no registered device is available, see Basic Search and Registration, Advanced Search and Registration, Wiegand Device Search and Registration, or Slave Device Search and Registration. ▪ Exit Devices: Select a device to use at exit. You can select a device from the list of added devices. If there is no registered slave device, see Basic Search and Registration, Advanced Search and Registration, Wiegand Device Search and Registration, or Slave Device Search and Registration. ▪ Network Failure Action: It is possible to set the door operation in case the communication between BioStar 2 and the device where anti-passback is set has been lost. Setting is available when Global is set for Mode. When Open by auth is set, the door opens when the user has been authenticated normally. When Open by auth & record APB log is set, an anti-passback violation alarm occurs and the door opens. When Door locked & record APB log is set, an anti-passback violation alarm occurs and the door does not open.
3	Alarm	Choose the operation to be triggered when an APB violation occurs.
4	APB Bypass	Select an access level. Users who have the access level will not be restricted by the anti-passback rule.

- 3) Click Apply to save the settings.

Related Information

[Anti-passback](#)

Fire Alarm Zone

Configure the fire alarm zone.

- 1) Click ZONE and click ADD ZONE.
- 2) Click Fire Alarm and click Apply.

11 Zone

The screenshot shows the configuration interface for a Fire Alarm Zone. It is organized into three main sections:

- Information:** Contains a 'Name' text input field and a 'Type' dropdown menu currently set to 'Fire Alarm'.
- Configuration:** Contains several settings:
 - 'Mode': A toggle switch between 'Local' and 'Global'.
 - 'Active/Inactive': A toggle switch currently set to 'Active'.
 - 'Door': A dropdown menu currently set to 'Door 1'.
 - 'Elevator': A dropdown menu.
 - 'Device / Input': A table with columns 'Device / Input', 'Switch', and 'Duration (ms)'. It shows one entry: 'Input Port 0 of BioStation 2 546832590 (192.168.16.196)' with a 'Normally Open' switch and a '100' ms duration. There is an '+ Add' button to the right.
- Alarm:** Contains an 'Action' dropdown menu and an '+ Add' button.

No.	Item	Description
1	Information	Modify the information of the fire alarm zone. ▪ Name: Enter a fire alarm zone name. ▪ Type: View the zone type.
2	Configuration	Modify the zone settings of the fire alarm zone. ▪ Mode: You can set fire alarm in two different modes. Local mode will allow the master device and slave devices that are connected via RS-485 to be selected. Global mode will allow selection of all devices added to BioStar 2. ▪ Active / Inactive: Disable the fire alarm zone. Select Active to enable it. ▪ Door: Select the door(s) to include in the fire alarm zone. ▪ Elevator: Select the elevators to include in the fire alarm zone. You can select multiple elevators. ▪ Device / Input: Click + Add and configure the device to set off the fire alarm signal.  Note ▪ When Local is set for Mode, either Door or Elevator can be set as the fire zone. ▪ When Global is set for Mode, both Door and Elevator can be set as the fire zone at the same time.
3	Alarm	Choose the operation to be triggered when a fire alarm signal occurs.

3) Click Apply to save the settings.

11 Zone

Scheduled Lock Zone

You can configure the scheduled lock zone. The scheduled lock zone keeps the door locked based on the schedule that has been set.

 Note

- The scheduled lock zone only supports local mode.

- 1) Click ZONE and click ADD ZONE.
- 2) Click Scheduled Lock and click Apply.

1

Information

Name

Type

Scheduled Lock

2

Configuration

Active/Inactive

Active

Door Lock Type

Exit Allowed

Door

Door 1

Schedule

3

Alarm

Action

Action

+ Add

4

Scheduled Lock Bypass

Bypass Group

Not Use

No.	Item	Description
1	Information	Modify the information of the scheduled lock zone. ▪ Name: Enter a scheduled lock zone name. ▪ Type: View the zone type.
2	Configuration	Modify the zone settings of the scheduled lock. ▪ Active / Inactive: Disable the scheduled lock zone. Select Active to enable it. ▪ Lock Type: You can configure the zone to lock only the entering device, or to lock both entering and exiting device. ▪ Door: Select the door(s) to include in the scheduled lock zone. ▪ Schedule: Select a schedule. If no desired schedule is available, click + Add Schedule to create it.

11 Zone

No.	Item	Description
		Note You can configure a scheduled lock zone by selecting multiple doors in local mode.

- 3) Click Apply to save the settings.

Scheduled Unlock Zone

You can configure the scheduled unlock zone. The scheduled unlock zone keeps the door open based on the schedule that has been set.

Note

- The scheduled unlock zone only supports local mode.

- 1) Click ZONE and click ADD ZONE.
- 2) Click Scheduled Unlock and click Apply.

1

Information

Name

Type

Scheduled Unlock

2

Configuration

Active/Inactive

Active

Door/Elevator

Door

Door

Started by User Authentication

Active

Schedule

3

Scheduled Unlock Authentication

Access Group

Not Use

No.	Item	Description
1	Information	Modify the information of the scheduled unlock zone. Name: Enter a scheduled unlock zone name. Type: View the zone type.
2	Configuration	Modify the zone settings of the scheduled unlock.

11 Zone

No.	Item	Description
		▪ Active / Inactive: Disable the scheduled unlock zone. Select Active to enable it. ▪ Started by User Authentication: When set as Active, the user who belongs to the access group must authenticate in the configured schedule to start a schedule unlock. ▪ Door / Elevator: You can set doors or elevators as schedule unlock zones. ▪ Schedule: Select a schedule. If no desired schedule is available, click + Add Schedule to create it. ▪ Door: If you select Door, the door list is activated. Select the door(s) to include in the scheduled unlock zone. ▪ Elevator: If you select Elevator, the elevator list is activated. Select the elevators to include in the scheduled unlock zone. You can select multiple elevators. ▪ Floor: You can select the floor of the selected elevator.  Note ▪ You can configure a scheduled unlock zone by selecting multiple doors in local mode. ▪ If you select an elevator that has already been configured with a different scheduled unlock zone, you cannot set the same floor.
3	Scheduled Unlock Authentication	You can select the access group where the user belongs who can start a scheduled unlock.

3) Click Apply to save the settings.

Intrusion Alarm Zone

When intrusion alarm zone is used, you can detect trespassing of an unauthorized user to a designated zone without permission.

- 1) Click ZONE and click ADD ZONE.
- 2) Click Intrusion Alarm and click Apply.

11 Zone

The screenshot shows a web interface for configuring an intrusion alarm zone. It is divided into five main sections, each indicated by a numbered callout:

- 1 Information:** Contains fields for 'Name' (a text input) and 'Type' (a dropdown menu currently showing 'Intrusion Alarm').
- 2 Configuration:** Contains 'Mode' (a toggle switch set to 'Local'), 'Active/Inactive' (a toggle switch set to 'Active'), and 'Door' (a dropdown menu showing '14F Door 01'). A note states: 'The sensor of this door can be used as detecting intrusion.'
- 3 Arm / Disarm Setting:** Contains 'Delay Time' for 'Arm' and 'Disarm' (both set to 0 seconds), 'Arm/Disarm Card' (a table with 'Card Type' and 'Card ID' columns and an '+ Add' button), 'Arm/Disarm Group' (a dropdown menu set to 'None'), and two tables for 'Arm/Disarm Setting (Device)' and 'Arm/Disarm Setting (Input)' with columns for 'Device', 'Door', 'Entry / Exit', 'Arm Type', 'Input Type', and 'Summary', each with an '+ Add' button.
- 4 Intrusion Setting:** Contains a table for 'Detect Intrusion' with columns for 'Device / Input' and 'Summary', and an '+ Add' button.
- 5 Alarm:** Contains a table for 'Configuration' with columns for 'Event' and 'Action', and an '+ Add' button.

No.	Item	Description
1	Information	Modify the information of the intrusion alarm zone. - Name: Enter an intrusion alarm zone name. - Type: View the zone type.
2	Configuration	You can change the general settings of an intrusion alarm zone. - Mode: You can check the application range of the zone. Only Local mode is supported for intrusion alarm zone, and the zone can be set only with devices connected to the entry device and RS-485. - Active/ Inactive: You can disable the intrusion alarm zone. Select Active to enable it. - Door: Select the doors to include in the intrusion alarm zone.
3	Arm / Disarm Setting	You can add an authentication setting for arm and disarm. - Delay Time: You can set the delay time to arm or disarm. Arm is the delay time from the authentication to the arm, and Disarm is the delay time from the intrusion detection to the alarm occurs. - Access Card: You can add a card with permission to arm or disarm. You can register up to 128 access cards. - Access Group: You can add an access group with permission to arm or disarm. You can register up to 128 access groups. - Arm/ Disarm Setting: You can set the arming and disarming by device or input signal. Click + Add and set each item. Add arming and disarming by device

11 Zone

No.	Item	Description
		Click Device to select a device to control the intrusion alarm zone among the entry and exit devices of the door, and select Arm Type. Card, Key, and Card or Key can be selected for the Input type. Only Card is available as the input type for a device with no LCD screen. Add Arm/Disarm Setting (Device) X • Device BioStation L2 542501048 (192.168.14.125) ▼ • Arm Type Arm / Disarm ▼ • Input Type Card or Key ▼ Apply Cancel Add arming and disarming by input signal Click Device to select the device that controls the intrusion alarm zone. Click Port and select an input port of the selected device. Select Arm Type and set the switch type and the signal duration.

11 Zone

No.	Item	Description
		Add Arm/Disarm Setting (Input) × Setting • Device BioStation L2 542501048 ... ▼ • Port Input Port 0 ▼ • Arm Type Arm / Disarm ▼ • Switch ☒ Normally Open • Duration(ms) 100 ▲▼ Apply Cancel 📌 Note ▪ It is activated only when Door is set from Configuration.
4	Intrusion Setting	You can set the intrusion detection signal. When you click + Add and set as shown in the screen below, the device recognizes the detection of intrusion if N/O sensor connected to input port 0 of BioStation L2 sends a signal for 100(ms).

11 Zone

No.	Item	Description
		Add Intrusion Setting Setting • Device BioStation L2 542501048 ... • Port Input Port 0 • Switch ☒ Normally Open • Duration(ms) 100 Apply Cancel ☑ Note It is activated only when Door is set from Configuration.
5	Alarm	Set the alarm action to carry out when a specific event occurs at the intrusion alarm zone. ☑ Note It is activated only when Door is set from Configuration.

3) Click Apply to save the settings.

Interlock Zone

Interlock zone monitors the status of two or more doors by door sensor and relay state to control that one door cannot be opened or close if other doors are open or unlocked. You can also disable access if a user stays within the zone.

11 Zone

 Note

- An interlock zone can be configured with up to 4 doors.
- An interlock zone can only set the doors with the devices connected to the CoreStation.
- A device set as an interlock zone cannot be set to another zone.
- A door set as an interlock zone cannot be set to another zone other than the fire alarm zone.

- 1) Click ZONE and click ADD ZONE.
- 2) Click Interlock and click Apply.
- 3) Edit the necessary items.

1

Information

Name

Type

Interlock

2

Configuration

Mode

Local

Active/inactive

Active

Door

Door 2

* Door sensor must be set to use.

3

Option

Action

Device / Input

Summary

+ Add

4

Alarm

Action

Event

Action

+ Add

No.	Item	Description
1	Information	Modify the information of the interlock zone. ▪ Name: Enter an interlock zone name. ▪ Type: View the zone type.
2	Configuration	You can change the general settings of an interlock zone. ▪ Mode: You can check the application range of the zone. Only Local mode is supported for interlock zone, and the zone can be set only with devices connected to the CoreStation and RS-485. ▪ Active / Inactive: You can disable the interlock zone. Select Active to enable it. ▪ Door: Select the doors to include in the interlock zone. You must select at least two doors that are the door sensor is connected.
3	Option	If a user stays in the zone, this option can prevent others from entering the zone.  Note

11 Zone

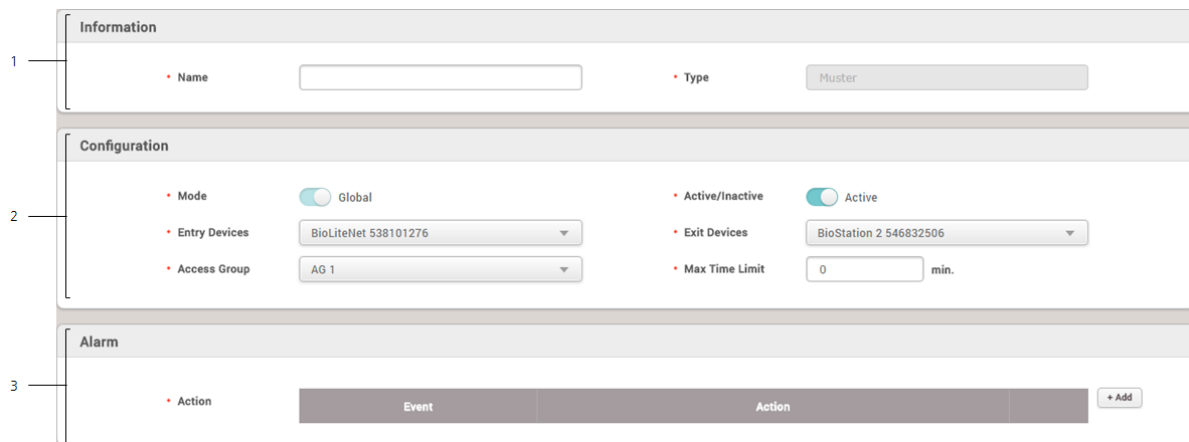
No.	Item	Description
		It is activated only when Door is set from Configuration.
4	Alarm	Set the alarm action to carry out when a specific event occurs at the interlock zone.  Note It is activated only when Door is set from Configuration.

- Click Apply to save the settings.

Muster Zone

The muster zone is used as a place where users gather when an emergency occurs. It can also be used for the purpose of monitoring the number of users and list of users in a specific area, or for notifying the manager of alarms and alerts when a user stays in a specific area for a long time.

- Click ZONE and click ADD ZONE.
- Click Muster and click Apply.
- Edit the necessary items.



No.	Item	Description
1	Information	Modify the information of the muster zone. - Name: Enter a muster zone name. - Type: View the zone type.
2	Configuration	You can change the general settings of a muster zone. - Mode: You can check the application range of the zone. Only Global mode is supported for muster zone, and the zone can be set with all devices added to BioStar 2. - Active / Inactive: You can disable the muster zone. Select Active to

11 Zone

No.	Item	Description
		enable it. ▪ Entry Devices: Select a device to use for entry. You can select a device from the list of added devices. If no registered device is available, see Basic Search and Registration, Advanced Search and Registration, Wiegand Device Search and Registration, or Slave Device Search and Registration. ▪ Exit Devices: Select a device to use at exit. You can select a device from the list of added devices. If there is no registered slave device, see Basic Search and Registration, Advanced Search and Registration, Wiegand Device Search and Registration, or Slave Device Search and Registration. ▪ Access Group: Set the access group to which the user who will be staying in the muster zone. Up to 16 access groups can be set. ▪ Max Time Limit: Set the maximum amount of time that user can stay in the zone. It can be set up to 4320 minutes, and an alarm occurs when the user stays in the muster zone exceeding the specified time.
3	Alarm	Set the alarm action to carry out when a specific event occurs at the muster zone.  Note ▪ It is activated only when Entry Devices and Exit Devices is set from Configuration.

4) Click Apply to save the settings.

Occupancy Limit Zone

You can manage and control the population density of certain areas with Occupancy Limit Zone to prevent overcrowding. You can also monitor the occupancy limit zone status or set an alert to get notified when the zone has reached capacity.

 Note

- Up to 100 occupancy limit zones can be added.
- Devices and firmware versions that are compatible with the occupancy limit zone features are as follows:
 - FaceStation F2 firmware version 1.1.0 or later
 - FaceStation 2 firmware version 1.5.0 or later
 - BioStation 3 Max firmware version 1.0.0 or later

- 1) Click ZONE and click ADD ZONE.
- 2) Click Occupancy Limit and click Apply.
- 3) Edit the necessary items.

11 Zone

The screenshot displays the 'Zone' configuration interface, divided into three main sections:

- Information:** Contains fields for 'Name' (set to 'OLZ 1') and 'Type' (set to 'Occupancy Limit').
- Configuration:** Contains various settings:
 - Mode:** A toggle switch set to 'Global'.
 - Active/Inactive:** A toggle switch set to 'Active'.
 - Entry Devices:** A dropdown menu showing 'FSF2-00B 547836011'.
 - Exit Devices:** A dropdown menu showing 'FaceStation 2 542189526 (192.168.12.169)'.
 - Limit:** A text input field set to '50'.
 - Auto Count Reset:** A toggle switch set to 'Not Use'.
 - Count Alert:** A toggle switch set to 'Use'. Below it, 'Alert 1' is set to '40' and 'Alert 2' is set to '45'.
 - Network Failure Action:** A toggle switch set to 'Allow Entry and Exit'.
- Count Bypass:** Contains a 'Bypass Group' dropdown menu set to 'Not Use'.

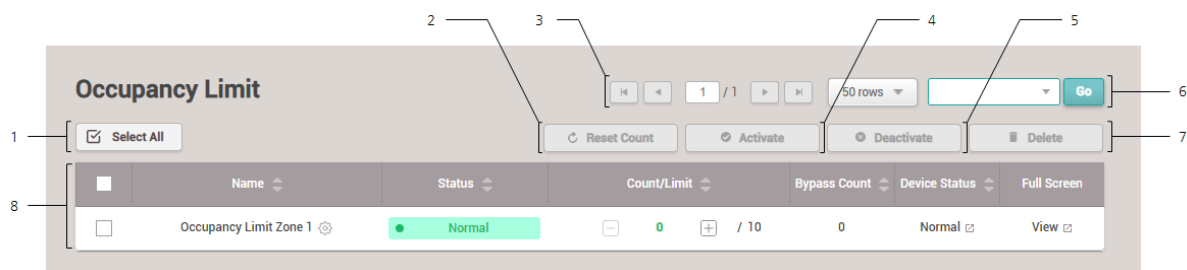
No.	Item	Description
1	Information	Modify the information of the occupancy limit zone. - Name: Enter an occupancy limit zone name. - Type: View the zone type. Note - Name can be up to 48 characters in length and cannot be set to the same name as other zones.
2	Configuration	Modify the settings of the occupancy limit zone. - Mode: Check the application range of the zone. It only supports Global mode for the occupancy limit zone. - Active/Inactive: Deactivate the occupancy limit zone. If the zone is deactivated, both Count that refers to the number of users in the zone and Count Bypass settings will be initialized. Select Active to enable it. - Entry Devices: Select a device to use for entry. You can select a device from the list of added devices. If no registered device is available, see Basic Search and Registration or Advanced Search and Registration. - Exit Devices: Select a device to use at exit. You can select a device from the list of added devices. If there is no registered slave device, see Basic Search and Registration or Advanced Search and Registration. - Limit: Enter the number of users who will be restricted from entering the zone. If the number of users in the zone reaches the limit, entry will be restricted. You can enter a number from 0 to 10,000, and if it is set to 0, people can enter the zone without limit. - Auto Count Reset: Set the time to automatically initialize Count. The Count will be initialized at the time you set every day. - Count Alert: Set an alert to an administrator or set to save event logs before Count reaches the occupancy limit. When Count Alert is activated, the input field for Alert 1 appears. Click the to set Alert 2. - Network Failure Action: Set whether to allow users to enter or leave when a network error occurs in the device set in the zone. If you set it to

11 Zone

No.	Item	Description
		Allow Entry and Exit, it stops entry restrictions when the device loses network connection, and people can enter the zone even if Count in the zone exceeds the occupancy limit.  Note - A device cannot be assigned to the entry device and exit device simultaneously. - You can set entry devices and exit devices up to 128 in total. - A device using Dual Authentication cannot be set as the entry or exit device. - Set the time of Auto Count Reset based on UTC in the country where the zone is located. For example, if the time is set to 00:00 in UTC+9, the count is automatically reset at 01:00 in UTC+10. - You can set up two alerts for Count Alert and only enter numbers smaller than the Limit value. The values of both alerts must be different.
3	Count Bypass	Set Count Bypass by selecting bypass groups to allow users in the group to enter the zone at any time without affecting the number of Count. The Bypass Count column displays the number of people from Count Bypass in the zone list.  Note - It is not able to use the Count Bypass feature when you set Thermal & Mask Check Mode as Check without authentication while using the device with a thermal camera. - Up to 16 bypass groups can be added.

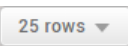
4) Click Apply to save the settings.

The list of the registered occupancy limit zones will be display and it shows the current status of zones.



No.	Item	Description
1	Select All	Select all occupancy limit zones in the list.

11 Zone

No.	Item	Description
2	Reset Count	Initialize both Count and Bypass Count settings. After initialization, user's entry and exit logs will be deleted, and Count may be inaccurate depending on the network status.
3	Page Navigation Buttons and Number of List Rows	You can move a page or set the number of list rows to be displayed on one page. ▪ : Go to the first page. ▪ : Go to the previous page. ▪  2 / 2: Enter the page number to move to. ▪ : Go to the next page. ▪ : Go to the last page. ▪  25 rows: Set the number of list rows to be displayed on one page.
4	Activate	Activate the deactivated zone.
5	Deactivate	Deactivate the occupancy limit zone. If the zone is deactivated, both Count and Bypass Count settings will be initialized.
6	Search	Search the registered zone.
7	Delete	Delete the zone.
8	Occupancy Limit Zone List	The list of the registered occupancy limit zones will be display and it shows the current status of zones. ▪ Name: View the zone name. ▪ Status: View the zone status. - Normal: The number of users in the zone has not reached either preset alerts or the occupancy limit, and more users can enter the zone. - Count Alert: The number of users in the zone has reached alert 1 or alert 2. - Full: The number of users in the zone has reached the occupancy limit, and further entry will be restricted. ▪ Count / Limit: View the number of users currently in the zone and the occupancy limit. An administrator can directly modify the Count by clicking the - or + buttons or by inputting a value after clicking the Count section. ▪ Bypass Count: View the number of users belonging to Count Bypass in the zone. ▪ Device Status: View the network status of devices set in the zone. - Normal: Networks work properly. - Network Failure: A network error occurs in one or more devices. ▪ Full Screen: View the current status of the occupancy limit zone on the full screen.  Note

11 Zone

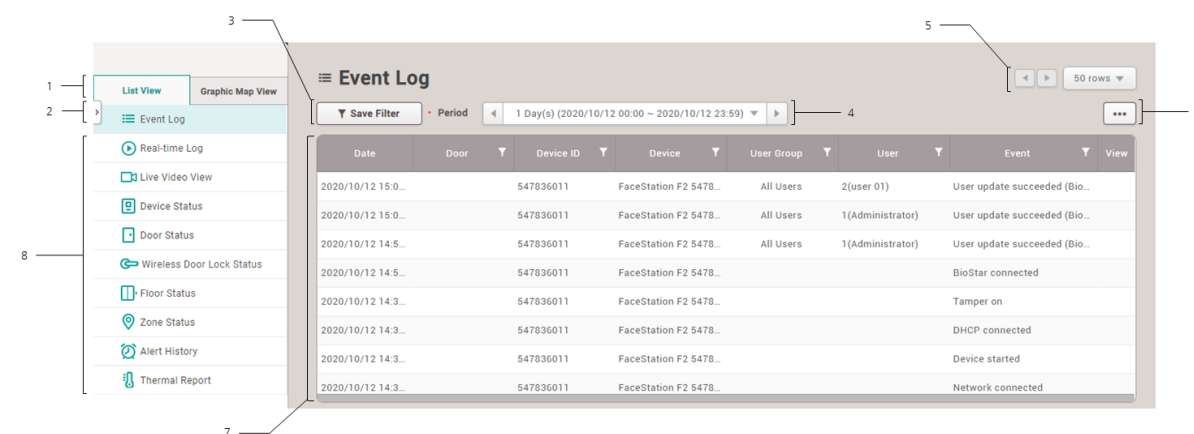
No.	Item	Description
		If you have set Limit, you can enter up to 50,000. If you have not set Limit, you can enter up to 999,999. (numeral character only) You cannot enter a number above the maximum input value. If the actual number of people in the zone is greater than the maximum input value, the value exceeded will not be saved in the database.

You can use the MONITORING menu to view lists of access control events, device and door status, zone status and the alert history.

You can see and control the status of the doors in real-time in the graphic if you add a graphic map.

List View

Graphic Map View



1 Tab buttons for List View and Graphic Map View

2 Expand Button

3 Save Filter Button

4 Search period of Event Log

5 Page Navigation Buttons and Number of List Rows

6 Function Button (Print, CSV Export, Data File Import, Column Setting)

7 List of Selected Monitoring Items

8 Monitoring Categories

Note

- The Floor Status, Zone Status and Graphic Map View will appear when the AC standard license is activated.

12 Monitoring

List View

You can see lists of access control events, device and door status, zone status and the alert history. You can also apply filters to the collected monitoring data and view specific types of monitoring information.

Event Log

Real-time Log

Device Status

Door Status

Wireless Door Lock Status

Floor Status

Zone Status

Alert History

Thermal Report

Note

- The Floor Status and Zone Status menu will appear when the AC standard license is activated.

Event Log

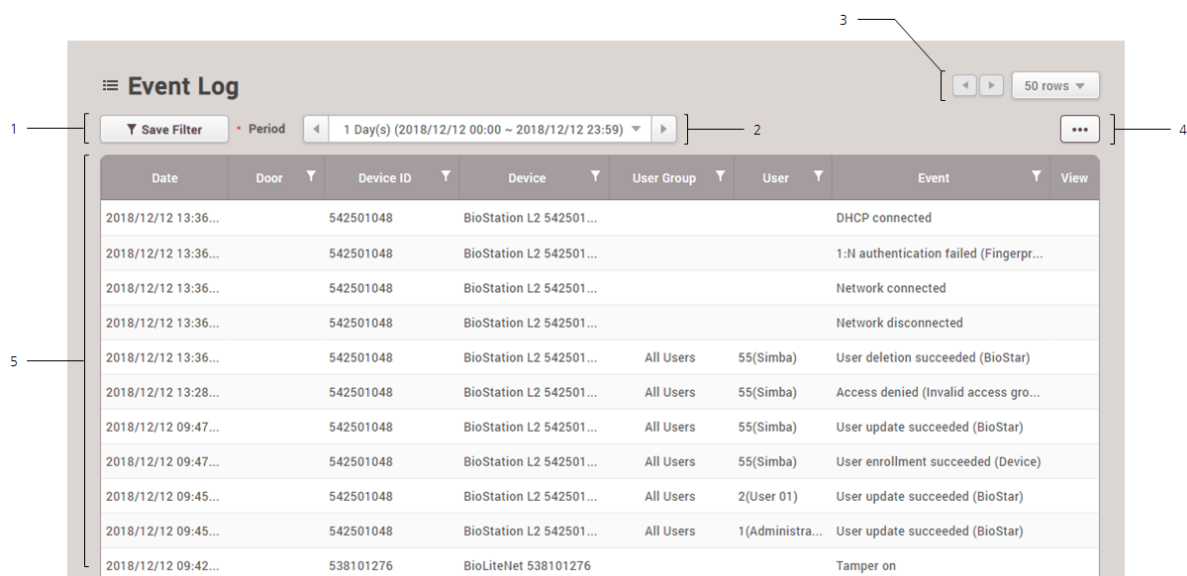
You can view all the logs of all past events. You can also apply various filters to sort the displayed data.

Note

- Make sure to check the time and date setting of the device. For more information on configuring device time, see [Information](#).
- When the image log is set, you can view or store a stored image in its actual size.

- 1) Click MONITORING > List View > Event Log.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.

12 Monitoring

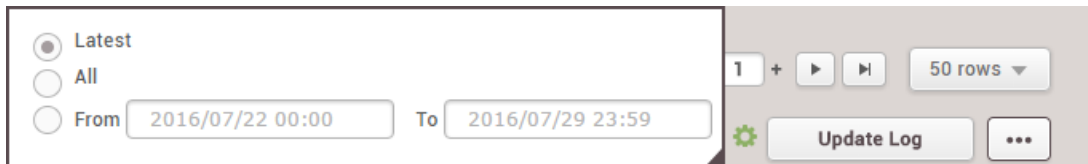


No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Period	You can set a desired period and sort event logs.
3	Page Navigation Buttons and Number of List Rows	You can move a page or set the number of list rows to be displayed on one page. : Go to the first page. : Go to the previous page. : Set the number of list rows to be displayed on one page.
4	Function Buttons (Print, CSV Export, Data File Import, Column Setting)	You can use the additional features with event logs. - Print the event log - Export to CSV file - Import the data file - Change the column setting Note - For more information about importing a data file, see Import Event Logs.
5	Event Log	Shows the event log. When an image log exists, it is displayed as and you can view or store a captured image in its actual size in PC.

Note

- When Log Upload is set to Manual, the user can import the log manually by clicking Update Log. For how to change log upload setting, refer to [Server](#).

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The screenshot shows a web interface for importing logs. On the left, there are three radio buttons: 'Latest' (selected), 'All', and 'From'. Below 'From' are two date input fields: 'From 2016/07/22 00:00' and 'To 2016/07/29 23:59'. To the right of these inputs are several buttons: a '1' button, a '+' button, a right arrow button, a '50 rows' dropdown menu, a green gear icon (settings), an 'Update Log' button, and a three-dot menu button.

If Latest is set, the log saved after the date of the log saved last in BioStar 2 will be imported from the device, and if All is set, all logs of the device will be imported to BioStar 2. You can also set a date range within which to import logs.

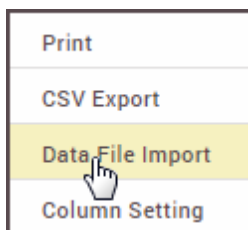
Import Event Logs

You can view all the logs of all past events. You can also apply various filters to sort the displayed data.

Note

- The exported data file from devices using older firmware version cannot be imported into BioStar 2. Make sure always use the latest version of firmware.
- Only data files exported from FacaStation F2, FaceStation 2, FaceLite, BioStation A2, BioStation 2, X-Station 2 and BioStation 3 can be imported.
- Some information of event log may appear as a blank if a door, elevator, or zone is not set by the BioStar 2.

- 1) Click  and then click Data File Import.



- 2) Select the desired file (*.tgz) and then click Open.
- 3) A success message will appear on the screen when import successfully.

Real-time Log

You can view a log of various events in real time.

Note

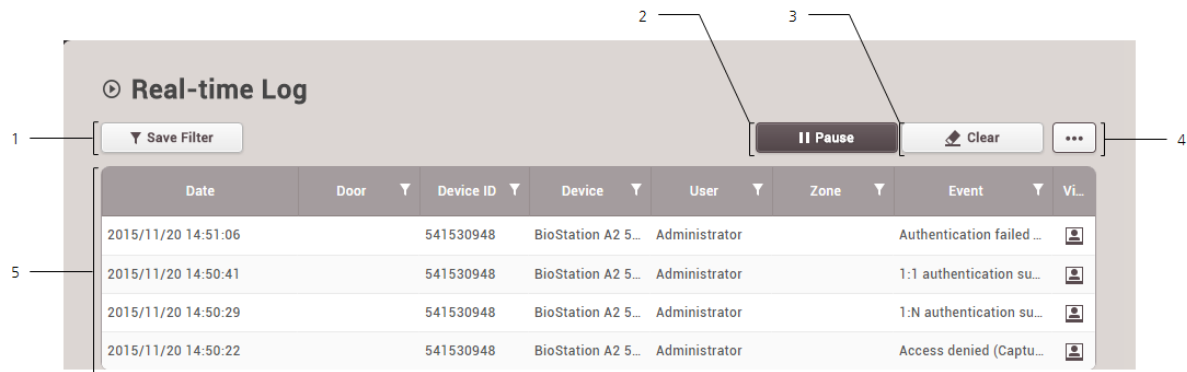
- Make sure to check the time and date setting of the device. For more information on configuring the device time, see [Information](#).
- The real-time log can only be viewed while the Real-time Log page is displayed. In other words, when the administrator is viewing another page for changing device settings, etc., the

12 Monitoring

real-time log cannot be viewed.

- If Log Upload is set to Manual in the **Server**, the real-time log cannot be viewed.
- When the image log is set, you can view or store a stored image in its actual size.

- 1) Click MONITORING > List View > Real-time Log.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.



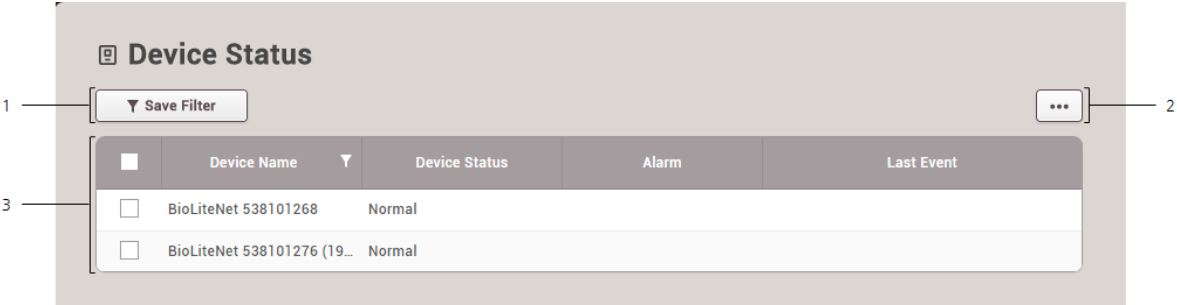
No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Start/Pause Button	Pauses or starts real-time log collection.
3	Clear Button	Clears the collected log information. To view the entire event log, see Event Log .
4	Function Buttons (Column Setting)	Changes the column setting of the log.
5	Event Log	Shows the event log. When an image log occurs, a notification will pop up on the left side of the browser screen and you can view a captured image in its actual size of store in PC. You can also press to check.

Device Status

You can view various device status information such as the device status, alarm and last event.

- 1) Click MONITORING > List View > Device Status.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.

12 Monitoring



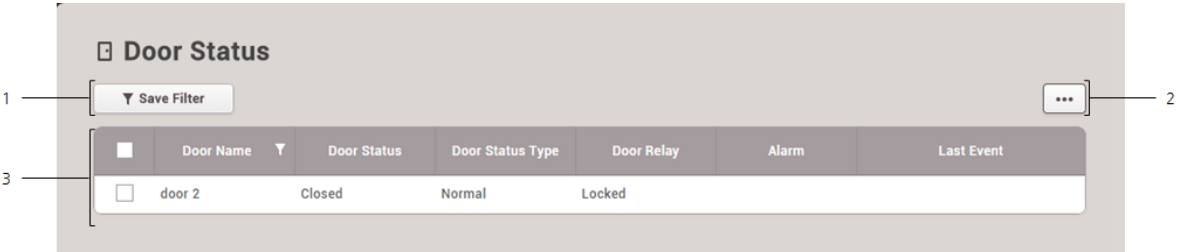
No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Function Buttons (Column Setting)	Changes the column setting of the log.
3	Status List	Shows the device status list. Select a device and click Clear Alarm to clear the alarm.

Door Status

You can view various door status information such as the door status, relay status, alarm and last event.

You can also apply various filters to sort the displayed data.

- 1) Click MONITORING > List View > Door Status.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.



No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Function Buttons (Column Setting)	Changes the column setting of the log.

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No.	Item	Description
3	Status List	Shows the door status list. The following operations are available for the selected door: ▪ Manual Lock: Click after selecting a door to lock the door manually. If you set Manual Lock, the door will have remained inaccessible even if a user authenticates. ▪ Manual Unlock: Click after selecting a door to unlock the door manually. If you set Manual Unlock, the door will have remained accessible even if a user does not authenticate. ▪ Release: Release the manual lock or manual unlock set by the administrator. ▪ Open: Click after selecting a door to open the door temporarily. ▪ Clear Alarm: Clear alarms of all doors. If an alarm is set in the Zone, the alarm may be continuously output even if the door alarm is released. Click Clear Alarm on Zone Status. ▪ Clear APB: Reset the anti-passback violation by selecting all or each user.

Note

Refer to below for the explanation on door events.

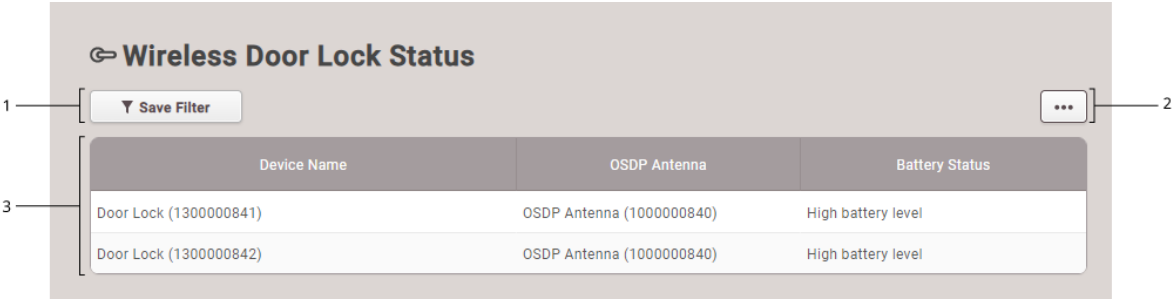
- Fire alarm unlocked: A state where the door designated as a fire alarm zone is unlocked because a fire has broken out.
- Manual Lock: A state where the door is locked because the administrator has locked it manually.
- Manual Unlock: A state where the door is unlocked and able to enter without an authentication because the administrator has unlocked it manually.
- Schedule Locked: A state where the door is locked by the schedule that has been set.
- Schedule Unlocked: A state where the door is unlocked by the schedule that has been set.
- Normal: A state where a user can enter the door after an authentication.

Wireless Door Lock Status

Check the battery status of the wireless door lock in use.

- 1) Click MONITORING > List View > Wireless Door Lock Status.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.

12 Monitoring



No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Function Buttons (Column Setting)	Changes the column setting of the log.
3	Status List	Check the battery status of the wireless door lock in use. - High battery level: The battery level is sufficient. - Low battery level / Critical battery level: The battery level is low, it is recommended to replace the battery for smooth operation. - Empty battery: The battery level is almost empty. Please replace the battery. ☒ Note - In the Settings > ALERT menu, you can set alarms to occur at Low battery level, Critical battery level, and Empty battery.

Floor Status

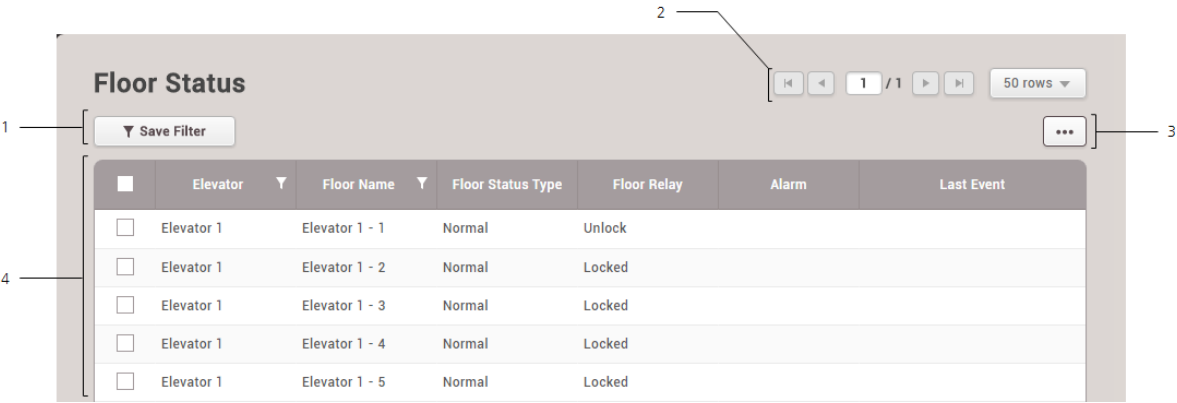
You can view various floor status information such as the floor status, relay status, alarm and last event.

☒ Note

- The Floor Status menu will appear when the Advance or higher license is activated.

- 1) Click MONITORING > List View > Floor Status.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.

12 Monitoring



No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Function Buttons (Column Setting)	Changes the column setting of the log.
3	Status List	Shows the floor status list. The following operations are available for the selected floor: ▪ Manual Lock: Click after selecting a floor to lock the floor manually. ▪ Manual Unlock: Click after selecting a floor to unlock the floor manually. ▪ Release: Release the manual lock. ▪ Open: Click after selecting a floor to open the floor temporarily. ▪ Clear Alarm: Clears alarms of all floors.

Zone Status

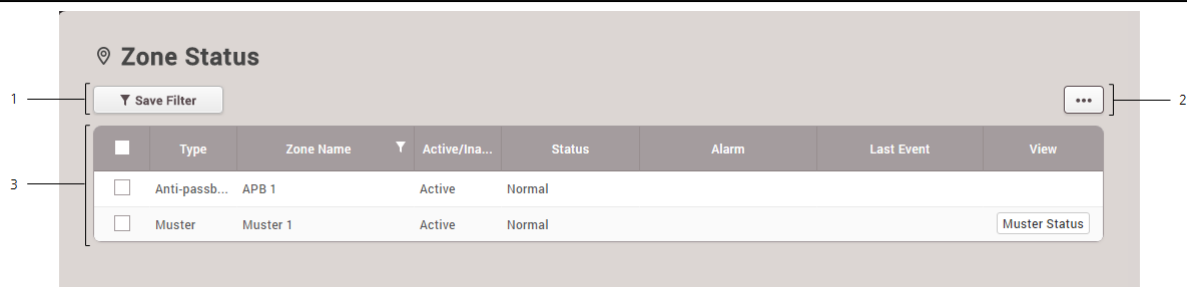
View zone status information such as the zone active status, alarm status, and the last event that has occurred.

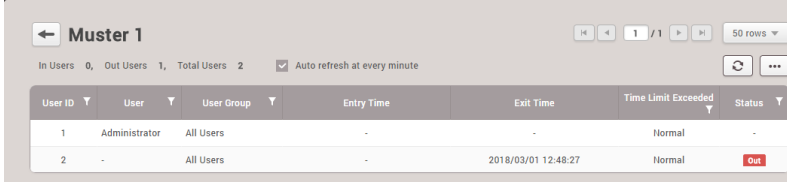
 Note

- The Zone Status menu will appear when the Standard or higher license is activated.
- To see the current status of Occupancy Limit Zone, click ZONE > Occupancy Limit.

- 1) Click MONITORING > List View > Zone Status.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.

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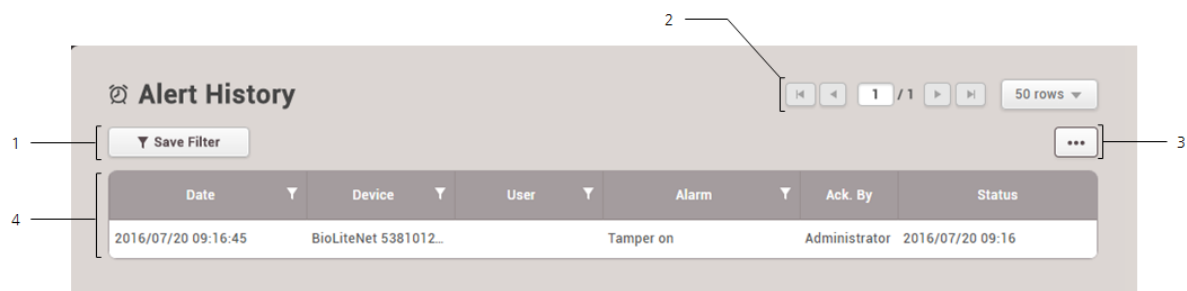
No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Function Button (Column Setting)	Changes the column setting of the log.
3	Status List	Shows the zone status list. The following operations are available for the selected zone: ■ Clear APB: Reset the anti-passback violation by selecting all or each user. This can be only used when selecting an anti-passback zone. ■ Clear Alarm: Release the anti-passback violation alarm when selecting an anti-passback zone, and closes the door relays that has been opened by the fire alarm when selecting a fire alarm zone.  Note ■ If a muster zone is set, you can check the user's status by clicking the Muster Status. 

Alert History

You can view the history and status of various alerts. You can also apply various filters to sort the displayed data.

- 1) Click MONITORING > List View > Alert History.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.

12 Monitoring

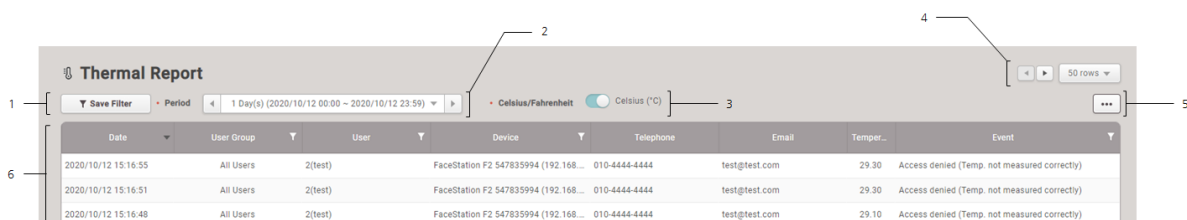


No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Page Indicator and Navigation Buttons	You can move a page or set the number of list rows to be displayed on one page. : Go to the first page. : Go to the previous page. : Enter the page number to move to. : Go to the next page. : Go to the last page. : Set the number of list rows to be displayed on one page.
3	Function Buttons (Print, Column Setting)	Prints the log or changes the column setting.
4	Alert History	Shows the alert list. Click to view the alert details.

Thermal Report

You can view the events including user's temperature information.

- 1) Click MONITORING > List View > Thermal Report.
- 2) To view log entries of a specific type only, click the ▼ of a column and apply a filter.



12 Monitoring

No.	Item	Description
1	Save Filter Button	Saves the set filter.
2	Period	You can set a desired period and sort thermal reports.
3	Celsius/ Fahrenheit	You can set the unit of temperature.
4	Page Navigation Buttons and Number of List Rows	You can move a page or set the number of list rows to be displayed on one page. ◀: Go to the first page. ◀: Go to the previous page. 25 rows ▼: Set the number of list rows to be displayed on one page.
5	Function Buttons (Print, CSV Export, Column Setting)	You can use the additional features with thermal reports. - Print the event log - Export to CSV file - Change the column setting
6	Reports	You can view the events including user's temperature information. 📌 Note You can sort the list in ascending or descending order by clicking on the Date column.

🔗 Related Information

Thermal & Mask

Graphic Map View

If you add a graphic map, you can see and control the status of the doors in real-time in the graphic. You can control the door and relay using the icons in the door status bar and see the alarm when an event occurs at the door.

Adding and Managing Graphic Map Groups

Adding and Managing Graphic Maps

📌 Note

- The Graphic Map View will appear when the AC standard license is activated.

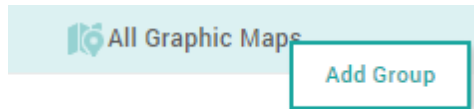
12 Monitoring

Adding and Managing Graphic Map Groups

You can register graphic map groups for easy management of multiple devices. Name your graphic map groups according to door locations or office names for greater convenience.

— Adding Graphic Map Groups

- 1) Click MONITORING > Graphic Map View.
- 2) Right-click on All Graphic Maps and click Add Group.



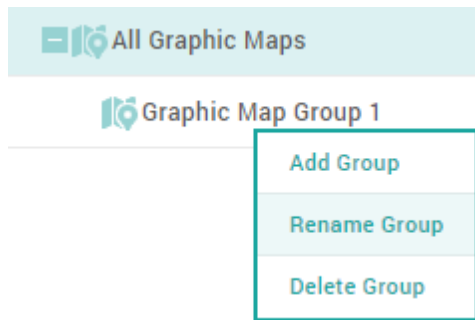
- 3) Enter a group name.

Note

- Graphic map groups may be created in up to 8 levels.
- Up to 48 characters may be entered for a graphic map group name.

Renaming Graphic Map Groups

- 1) Click MONITORING > Graphic Map View.
- 2) Right-click on the name of a group you wish to rename and click Rename Group.



- 3) Enter a group name.

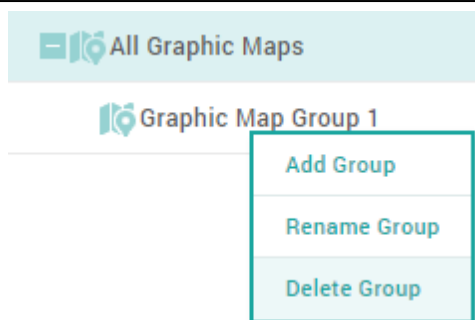
Note

- Up to 48 characters may be entered for a graphic map group name.

Deleting Graphic Map Groups

- 1) Click MONITORING > Graphic Map View.
- 2) Right-click on the name of a group you wish to delete and click Delete Group.

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Note

- You cannot delete a group if it contains a graphic map. To delete a group, you must delete all graphic maps belonging to the group.

Adding and Managing Graphic Maps

If you add a graphic map, you can see and control the status of the doors in real-time in the graphic.

Adding Graphic Map

- 1) Click MONITORING > Graphic Map View.
- 2) Click ADD GRAPHIC MAP.

A screenshot of a 'Configuration' form. It has a title bar 'Configuration' with a close button. The form contains four fields: 'Name' (text input), 'Group' (dropdown menu with 'All Graphic Maps' selected), 'Background' (with an 'Upload' button), and 'Door' (dropdown menu). There is also a 'Zone' dropdown menu on the right side of the form.

- 3) Set the name and group of the graphic map.
- 4) Click Upload and select the background you want to use as the graphic map.

Note

- The max size of the images that can be used as a background is 5MB.
 - Supported image file formats are BMP, GIF, JPG, JPEG, PNG.
 - If you back up the BioStar 2 database, the image file registered in the graphic map may be deleted. If you want to continue using images registered as a background even after database backup, back up the image files.
- 5) Select the door you want to display on the graphic map from the Door. The door status bar appears.

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N o.	Item	Description
1	Graphic Map	The uploaded background image appears.
2	Door Status	You can see the door status and temporarily open the door.
3	Door Relay	You can lock or unlock the door manually.
4	Alarm	You can see or clear the alarm that has occurred on the door.

6) Select the zone you want to display on the graphic map from the Zone. The Zone status bar appears.

N o.	Item	Description
1	Zone	You can see the type of zone. ☒ Note The zones can be selected up to 100.
2	Alarm	You can see or clear the alarm that has occurred on the zone.

7) Drag the door and zone status bar to the location of the door and zone in the

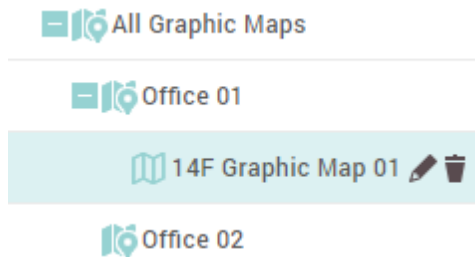
12 Monitoring

graphic map.

- 8) When setting is finished, click Apply.

Editing Graphic Map

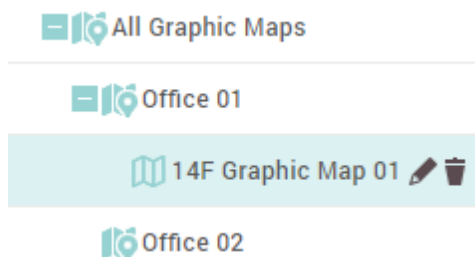
- 1) Click MONITORING > Graphic Map View.
- 2) Click  in the graphic map that you want to edit.



- 3) After editing the information you want, click Apply.

Deleting Graphic Map

- 1) Click MONITORING > Graphic Map View.
- 2) Click  in the graphic map that you want to delete.



- 3) Click Yes to delete the selected graphic map.

You can set the time code, shift, and schedule and/or view time card or report by using the TIME ATTENDANCE menu.

Shift

Schedule

Report

Setting

Set according to the following order when registering the schedule for the first time.

13 Time & Attendance

Step 1. Time code setting

You can set the attendance and leave time code, overtime time code, and the go out/outside work/vacation time code. You can also set the time rate and assign and display a color to make it easily recognizable.

➤ Related information

Time code

Step 2. Shift setting

You can set the service rule on a daily basis (24 hours). The shift includes the time code setting, the start time of day setting and the rounding rule.

➤ Related information

Shift

Step 3. Schedule template setting

You can set the schedule template with the shift on a daily basis. You can also set the weekly and daily schedule template.

➤ Related information

Schedule template

Step 4. Overtime rule setting

This can be used conveniently when the overtime time code has not been added to the shift. Overtime set in the service rule has a start time and an end time, but Overtime rule calculates the total time exceeding the range of regular service time. Overtime rule can be used conveniently for managing total daily, weekly and monthly overtime hours, and when Overtime rule is set, it applies instead of the overtime time code added to the shift.

➤ Related information

Overtime Rule

Step 5. Schedule setting

13 Time & Attendance

You can set the period, user, overtime rule, and vacation schedule to apply to the schedule template set in the previous step.

 Related information

Schedule

Shift

You can set the time code, time segment for time code, schedule template, and overtime rule. These are the main components of T&A management.

Time Code

Shift

Schedule Template

Overtime Rule

Time Code

You can set the time code to be used for worktime calculation. It can be set for T&A records, time code for overtime, and time code for vacation management.
You can assign and use a different time rate for each time code.

- 1) Click TIME ATTENDANCE > Shift > Time Code.
- 2) Click ADD TIME CODE and set each item.

1

Name

2

Description

3

Type

☒ Attendance management

☐ Overtime management

☐ Leave management

4

Time Rate

1

5

Color

No.	Item	Description
1	Name	Enter the desired time code name.
2	Description	Enter a brief description of the time code.
3	Type	Set the time code type.

13 Time & Attendance

No.	Item	Description
		▪ Attendance management: You can set the time code to be used for the T&A record. ▪ Overtime management: You can set the time code to be used for overtime. ▪ Leave management: You can set the time code to be used for go out, outside work, business trip and vacation.  Note ▪ If the time code currently used by shift, Type cannot be changed. ▪ If Type is set to Leave management, Time Rate cannot be set.
4	Time Rate	Set the time rate according to the time code. 1 is the default time rate. If 2 is set, it is calculated with twice the hourly pay when the set time code is applied.
5	Color	Set a color to distinguish the time code.

- 3) To save settings, click Apply. To add a shift, click Apply & Next. To save the settings and add another time code, click Apply & Add New.

Related information

Shift

Shift

You can create a shift by applying a different time code for each hour based on a 24 hour cycle. You can select either a fixed working shift , flexible working shift or floating working shift and you can set the start time of day and rounding rule.

- 1) Click TIME ATTENDANCE > Shift > Shift.
- 2) Click ADD SHIFT and set each item.

13 Time & Attendance

1

Name

2

Description

3

Type

☒ Fixed
 ☐ Flexible
 ☐ Floating

4

Day start time

05

00

☐ Allowed a day before/after time

5

First check-in & Last check-out

☐ No

6

Time segment

Current day

Next day

0

3

6

9

12

15

18

21

24

Time code	Start time	End time	Min. Duration	Action
Attendance man...	09 00	18 00	04 00	

Grace

☐ Use

Add

7

Rounding

☐ Punch in
 ☐ Punch out

8

Meal deduction 1

By Punch

8

Meal deduction 2

☐ Use

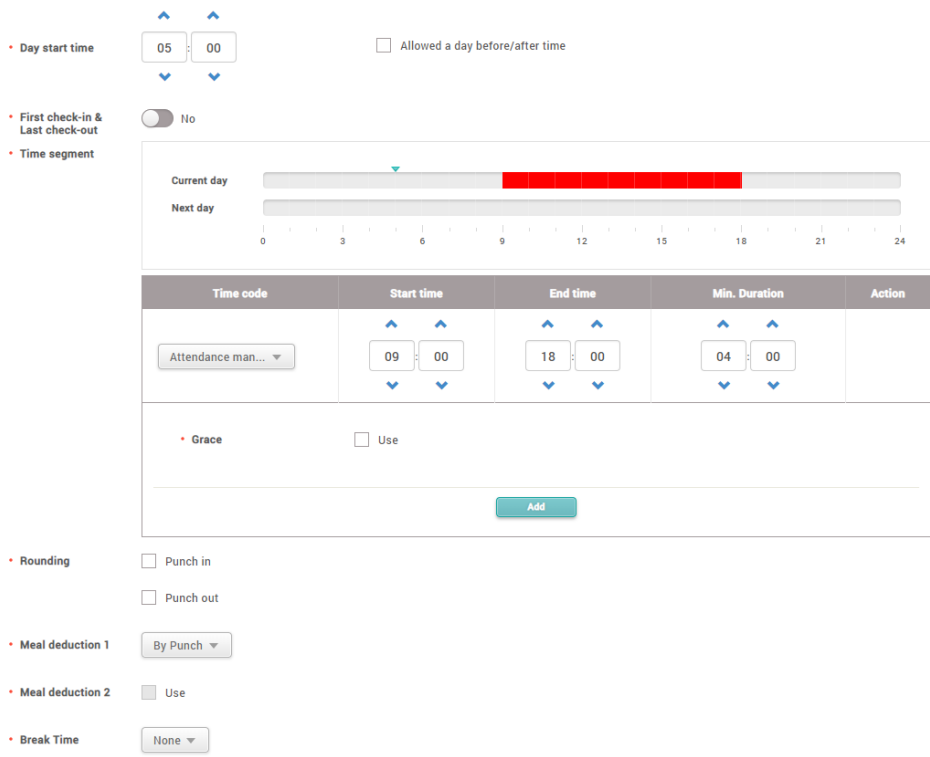
9

Break Time

None

No.	Item	Description
1	Name	Enter the desired shift name.
2	Description	Enter a brief description of the shift.
3	Type	Set the shift type. The detailed setting varies according to the shift type. - Fixed: You can set the fixed service to attend and leave at a fixed time. - Flexible: You can set the flexible service with no fixed attendance and leave times. - Floating: You can set the floating service with no fixed attendance and leave times. In this shift type, the shift is automatically applied according to the attendance time.
4	Day Start Time	Set the start time of day. If you use Allowed a day before / after time, you can set Shift for work hours exceeding 24 hours based on the Day start time set.

13 Time & Attendance

No.	Item	Description
		 Note Allowed a day before / after time is activated only when you set the type of Shift to Fixed.
5	First check-in & Last check-out	When Yes is set, the first user authentication time is recorded as check-in time, and the last user authentication time is recorded as check-out time.  Note If the First check-in & Last check-out is set to Yes, Break by Punch should be set for recording the user's break time.
6	Time segment	<u>When Fixed is selected for Type,</u>  Select the salary code set as T&A record and then set Start time, End time and Min. Duration. You can also set Grace, Rounding, Meal deduction and Break Time. When setting is finished, click Add.  Note - The Allowed a day The before / after time can be set up to 6 hours. - You can only add one time code set as Attendance management to the shift. - For the time code set as Overtime management, you can only set Start

13 Time & Attendance

No.	Item	Description
		time, End time, Min. Duration, Rounding . When Flexible is selected for Type, Working hours per day 08 00 Options Time code Attendance man... ▾ Punch in Time Limit ☐ Use Punch out Time Limit ☐ Use Meal deduction 1 By Punch ▾ Meal deduction 2 ☐ Use Rounding ☐ Punch in ☐ Punch out Break Time None ▾ Set the working hours per day, and then select the time code. You can also set Punch in Time limit, Punch out Time Limit, Meal deduction, Rounding, Break Time. ☒ Note If Flexible is selected for Type, the time code for overtime cannot be added. When Floating is selected for Type,

13 Time & Attendance

No.	Item	Description
		attendance event is registered earlier/later than the set start time. ▪ Punch out: You can set the rounding rule to process the registered time when a leave event is registered earlier/later than the set end time.  Note ▪ Rounding applies in preference to Grace.
8	Meal deduction 1, 2	You can set to deduct meal time from the shift. ▪ By Punch: You can set it to be deducted according to the record registered in the device, without a fixed meal deduction time. ▪ Auto: You can set the meal deduction by setting Deduction time and Minimal hours before deduction. ▪ Fixed: You can set the fixed meal deduction by setting Start time and End time.  Note ▪ You can deduct two meal times from the shift if you use Meal deduction 2. ▪ When using the meal deduction type as Auto or Fixed, Meal deduction 1 and Meal deduction 2 can be set only for the same type.
9	Break Time	You can set the break time. ▪ By Punch: You can set it to be confirmed according to the record registered in the device, without a fixed break time. If you select By Punch, you can set Max. allowed break time. ▪ Fixed: You can set the fixed break time by setting Start time and End time.

- 3) To save settings, click Apply. To add a schedule template, click Apply & Next. To save the settings and add another shift, click Apply & Add New.

Related information

[Schedule Template](#)

Schedule Template

You can create a weekly and daily schedule by using the set shift.

13 Time & Attendance

- 1) Click TIME ATTENDANCE > Shift > Schedule Template.
- 2) Click ADD SCHEDULE TEMPLATE and set each item.

1

Name

2

Description

3

Type

☒ Weekly
 ☐ Daily

4

Weekend days

MON

TUE

WED

THU

FRI

SAT

SUN

*Please select one or consecutive two days.

5

Shift	Type	Time	Day start time
Daily	Fixed	09:00~18:00	05:00
Flexible	Flexible	8hr 0min	05:00

6

MON

TUE

WED

THU

FRI

SAT

SUN

No.	Item	Description
1	Name	Enter the desired schedule template name.
2	Description	Enter a brief description of the schedule template.
3	Type	You can set either Weekly or Daily for the schedule template, and when Daily is selected, you can set the period to be used repeatedly.
4	Weekend days	You can set the days of the week that you want to use as the weekend.
5	Shift	You can view the list of set service rules.
6	Schedule	Set drag & drop for the set service rule. To apply all at once, click Copy All. Note To apply a shift that setting the Allowed a day before / after time, Allowed a day before / after time cannot be set 24 hours before Day start time on Shift the day before.

- 3) To save settings, click Apply. To add a schedule, click Apply & Next. To save the settings and add another schedule template, click Apply & Add New.

13 Time & Attendance

🕒 Related information

Overtime Rule

Rule

This can be used conveniently when the overtime time code has not been added to the shift. Overtime set in the shift has a start time and an end time, but Rule calculates the total time exceeding the range of regular working time. Rule can be used conveniently for managing total daily, weekly and monthly overtime hours, and when Rule is set, it applies instead of the overtime time code added to the shift.

- 1) Click TIME ATTENDANCE > Shift > Rule.
- 2) Click ADD RULE and set each item.

1

Name

2

Description

3

Overtime

☒ Not Use

☐ Daily overtime

☐ Weekly overtime

☐ Monthly overtime

☐ Weekend overtime

Time Code

None

Day start time

0500

☐ First check-in & Last check-out

☐ Holiday overtime

Time Code

None

Day start time

0500

☐ First check-in & Last check-out

No.	Item	Description
1	Name	Enter the desired overtime rule name.
2	Description	Enter a brief description of the overtime rule.
3	Overtime	Set the overtime rule. Daily overtime, Weekly overtime, Monthly overtime rules can set the overtime time code to be applied after the regular working time, and a different overtime time code can be applied after a certain time. You can

13 Time & Attendance

No.	Item	Description
		also limit the overtime hours for an employee by setting the maximum overtime hours. When you set as follows, the 'Overtime management' time code applies from 5 PM to 11 PM if the normal working time is from 8 AM to 5 PM, and the 'Overtime management' time code applies from 11 PM to 2 AM. Also, the maximum overtime hours for an employee for one day is limited to 9 hours, and the daily payroll is calculated only using the record of providing work until 2 AM. ☐ Not Use ☒ Daily overtime Apply Overtime manag... after 8 hour(s) 0 minute(s) Apply Overtime manag... after 6 hour(s) 0 minute(s) of [Overtime management] Max overtime 9 hour(s) ☐ Weekly overtime ☐ Monthly overtime  Note Total working time does not include break time or meal time. For Weekend overtime and Holiday overtime rules, Time code and Day start time can be set, and only First check-in & Last check-out can be set. ☒ Weekend overtime Time Code None Day start time 05 : 00 ☐ First check-in & Last check-out ☒ Holiday overtime Time Code None Day start time 05 : 00 ☐ First check-in & Last check-out

- 3) To save settings, click Apply. To add a schedule, click Apply & Next. To save the settings and add another rule, click Apply & Add New.

13 Time & Attendance

🕒 Related information

Schedule

Schedule

You can create a service schedule by assigning the set schedule template, overtime rule, period, and holiday to a user.

You can also add a temporary schedule or personal vacation to the created service schedule.

📌 Note

- Before creating a schedule, check if the **Time Code**, **Shift**, **Schedule Template**, and **Holiday** which you will use have been created correctly.

— Adding & deleting a schedule

You can create a service schedule for a registered user.

- Click TIME ATTENDANCE > Schedule.
- Click Add and set each item.

1

Name

2

Description

3

Rule

None

4

Schedule template

None

5

Period

2017-03-17 ~ 2017-03-17

6

Holiday

None

7

User

User group

All Users (30)

15F USER (0)

16F USER (0)

17F USER (0)

User in group(30)

Go

(2)

Administrator (1)

kyle (200)

User 000 (3)

User 001 (10)

User 002 (11)

User 003 (12)

User 004 (13)

User 005 (14)

User 006 (15)

Add selected user

Added users(0)

Go

Delete all users

No.	Item	Description
1	Name	Enter the desired schedule name.

13 Time & Attendance

No.	Item	Description
2	Description	Enter a brief description of the schedule.
3	Rule	Select the set overtime rule. When the overtime rule is set, the overtime service salary code set to the service rule will not apply. If you do not wish use it, set None.  Note ▪ If there is no desired overtime rule, set one by referring to the Overtime Rule.
4	Schedule Template	Select the set schedule template.  Note ▪ If there is no desired schedule template, set one by referring to the Schedule Template. ▪ Once schedule template is set, it cannot be changed.
5	Period	Set the period to collect T&A events.  Note ▪ Once the start date is set, it cannot be changed. The end date can be changed, and when it is changed to a date which is earlier than the set date, leave events for the changed period will be deleted.
6	Holiday	Select the set vacation schedule. If you do not wish use it, set None.  Note ▪ If there is no desired vacation schedule, add a vacation schedule by referring to the Schedule.
7	User	Add a user to apply the rule.

3) To save settings, click Apply.

4) To delete a schedule, select the schedule you wish to delete from the list, and then click Delete schedule.

 Note

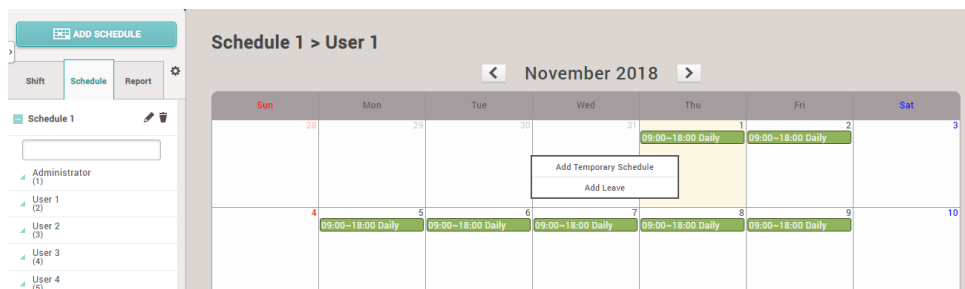
- The number of users included in the entire schedule cannot exceed the maximum number of users for the T&A license you chose. To learn more about the maximum number of users per license, refer to [License](#).

13 Time & Attendance

— Adding & deleting a temporary schedule

If you have already registered schedule. you can set a different service rule to a user temporarily.

- 1) Select a user assigned to the schedule from the list and click a date on the calendar.



- 2) Select Add Temporary Schedule and set each item. To apply it to other users equally, add a user by clicking .

The screenshot shows a form titled '[kyle] Temporary Schedule'. It has the following fields: 'Name' (text input), 'Shift' (dropdown menu showing 'regular shift'), 'Period' (two date inputs separated by a tilde, showing '2016-12-01' and '2016-12-01'), and 'Apply to Other User(s)' (text input with a magnifying glass icon). At the bottom, there are 'Apply' and 'Cancel' buttons.

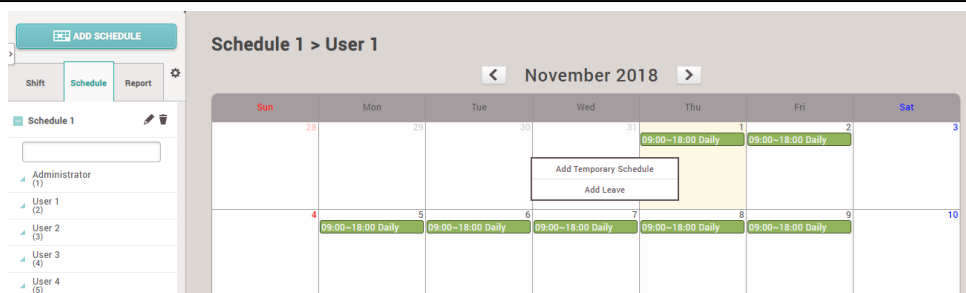
- 3) When you click Apply, the shift for the set period will be changed.
- 4) To delete a temporary schedule, click the service schedule of the set temporary schedule, and then click Yes.

— Adding & deleting a leave

You can add a user's personal leave schedule.

- 1) Select a user assigned to the schedule from the list and click a date on the calendar.

13 Time & Attendance



- 2) Select Add Leave and set each item. To apply it to other users equally, add a user by clicking .

Edit Leave

User 1(2)

Date	2018-11-01(Thu)		
Leave	Leave management		
Use Time	☐		
Start Date	2018-11-01	End Date	2018-11-01
Leave Hours	1day(s)		
Apply to Other User(s)			
Approver Comments			

Ok

Cancel

- 3) When you click OK, the leave will be registered on the set period.
4) To delete a leave, click the registered leave and click Yes.

Note

- If there is no desired leave management Time code, add one by referring to the **Time Code**.

Report

You can create a T&A report with T&A events of a user collected through the system, and edit or export time records as a CSV file or a PDF file.

7 preset report filters can be used conveniently, or the administrator can set the filter manually.

Before Using the Multilingual Report

BioStar 2 supports Korean and English language. To use multilingual report, please check the following.

13 Time & Attendance

Font Setting

1. Go to [C:\Program Files\BioStar 2(x64)\ta\dist\setup\report_fonts].
2. Create a folder with the language name you want to use. Refer to the ISO 639-1 standard for language name. For example, to use Spanish, create a folder named "es".
3. Copy and paste the font file into the folder you created. Only one TrueType Font is supported.

PDF View Setting

1. Click the link to install the PDF viewer on Google Chrome.
<https://chrome.google.com/webstore/detail/pdf-viewer/oemmndcbldboiebfnladdacbdfmadadm>

— Before Updating the Report

BioStar 2 uses MariaDB as the default database. If you are using MS SQL database, please check the following.

When using BioStar 2 with MS SQL database, your PC's memory usage will accumulate each time you update the report if there are a large number of registered users. Reset Max Server Memory for the MS SQL database.

1. Run Microsoft SQL Server Management Studio.
2. Right-click BioStar 2 database in Object Explorer and click Property.
3. Click Memory and then decrease the value of Max Server Memory.

Note

- For more information on MariaDB and MS SQL Server settings, see [Installing BioStar 2](#).

- 1) Click TIME ATTENDANCE > Report.
- 2) To use a preset filter list, select a desired filter type, set either User Group or User and click Update Report.
- 3) To register a new filter, click ADD FILTER and set each item.

13 Time & Attendance

The screenshot displays the 'Search Conditions' and 'Daily Report' sections of the Time & Attendance system. The 'Search Conditions' section includes fields for Name (Daily Report), Report Type (Daily), User Group (All Users), and a User search field. Below these is the 'Report Period' section with a dropdown menu set to 'Monthly (2018-11-01 ~ 2018-11-30)'. At the bottom of the search section are buttons for 'Update Report', 'CSV Export', and 'PDF Export'. The 'Daily Report' section shows a table with columns: Date, Name, User ID, Department, Shift, Leave, In, Out, Exception, Regular hours, Overtime hours, and Total Work Ho... The table contains three rows of data for the dates 2018/11/01, 2018/11/01, and 2018/11/01, all showing 'Absence' and zero hours.

No.	Item	Description
1	Filter Conditions	Set a new T&A report. - Name: Enter the desired report name. - Report Type: Select the desired report type. Daily, Daily Summary, Individual, Individual Summary, Leave, Exception, Edit History, Working alarm time reports are available. - Column Setting: Change or hide the order of columns in the report table. - Filter: This function is enabled only when Leave or Exception is set for Report Type, and detailed conditions for leave or exception records can be selected. - User Group / User: Select a user group or a user to create a report. - Save Filter: Save the set T&A report as the filter.
2	Report Period	Set the period of report. - Period: Set the period for creating a report to Daily, Weekly, Monthly, or Custom. - In/Out Only: Select to output only the check-in and check-out logs of the user to the report. - All Punches: Select to output all punches of the user to the report.  Note - In/Out Only and All Punches are enabled only in Individual Report. - Update Report: Update the report table to the most recent information. - CSV Export: Save the created report as a CSV file. - PDF Export: Save the created report as a PDF file.
3	Report	View the created report.

13 Time & Attendance

Adding the Working alarm time report

You can update the report for users who have reached their specified working hours, or notify the administrator by email.

You can update the Working alarm time report weekly.

- 1) Click TIME ATTENDANCE > Report > Working alarm time Report.
- 2) Set each item in Filter Conditions and Report Period and then click Update Report.
- 3) Set Automated Email if you want to send an email notification to the administrator for users who have reached their specified working hours.

The screenshot shows a 'Search Conditions' form with three main sections. Section 1, 'Filter Conditions', contains fields for Name (Working alarm time Report), Report Type (Working alarm time), Column Setting, Working alarm time (40), and User Group / User. Section 2, 'Report Period', contains a Period dropdown (Weekly (2018-10-29 ~ 2018-11-04)). Section 3, 'Automated Email', contains a checkbox for Email, Day of Week (THU), Time (5:00), and Recipient (1). Buttons for Save Filter, Update Report, CSV Export, and PDF Export are also visible.

No.	Item	Description
1	Filter Conditions	Set a new T&A report. ▪ Name: Enter the desired report name. ▪ Report Type: Select the desired report type. ▪ Column Setting: Change or hide the order of columns in the report table. ▪ Working alarm time: Set the time to generate Working alarm time report. ▪ User Group / User: Select a user group or a user to create a report. ▪ Save Filter: Save the set T&A report as the filter.
2	Report Period	Set the period of report. ▪ Period: Set the period for creating a report. ▪ Update Report: Update the report table to the most recent information.

13 Time & Attendance

No	Item	Description
		▪ CSV Export: Save the created report as a CSV file. ▪ PDF Export: Save the created report as a PDF file.
3	Automated Email	You can notify about users who have reached their specified working hours for the administrator by email. ▪ Email: Click to send an email to an administrator automatically. ▪ Day of Week: You can set the days of the week to send an email to administrators. ▪ Time: You can set the time to send an email to administrators. ▪ Recipient: You can add an administrator's email address that receives the email.  Note ▪ You need to configure Filter Conditions and then save the filter in order to set up Automated Email. ▪ You can set the sender information for automatically sent emails in 

Editing T&A Records

You can modify T&A records by clicking the created report table.

Note

- In order to modify T&A records, a report must be created first. For details about the creation of a report, refer to [Report](#).
- The attendance and leave record of a user whose T&A schedule has not been registered cannot be modified.

- 1) Click a row to modify the record from the created report table.
- 2) Modify a T&A record or add a leave according to the desired method.

— Modifying in the List

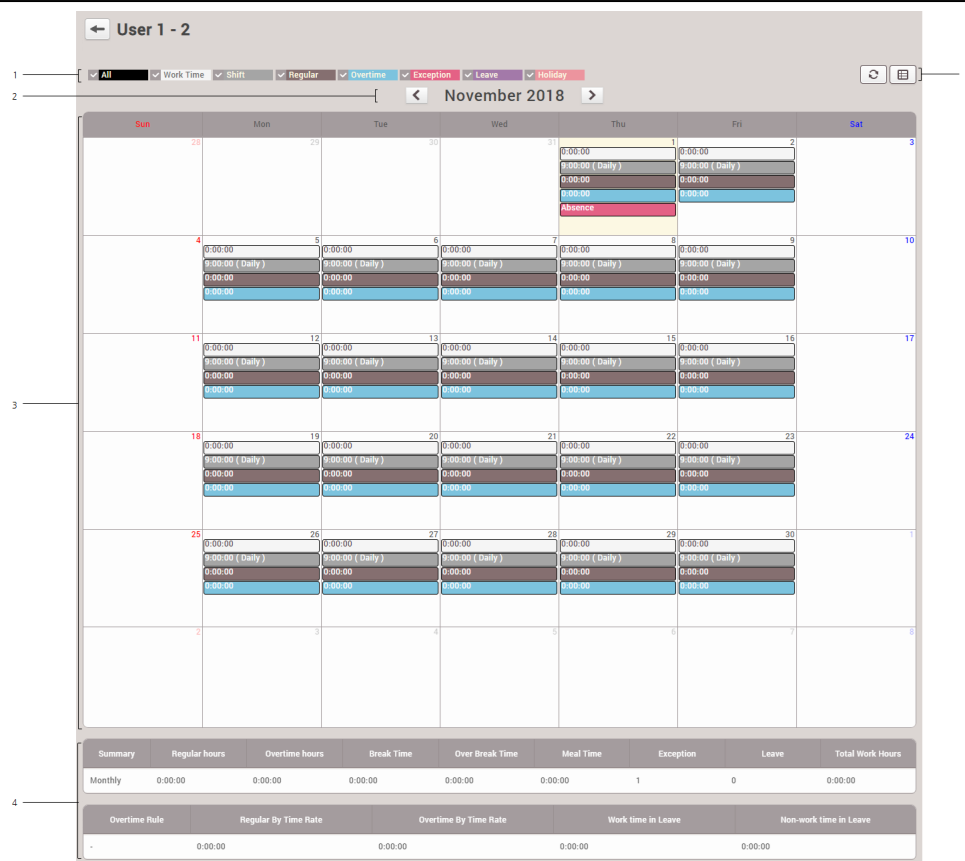
13 Time & Attendance

The screenshot shows the 'User 1 - 2' interface for Time & Attendance. It includes a date range selector (1) set to 'Daily (2018-11-01 ~ 2018-11-01)'. Below this is a table of daily T&A records (2) with columns for Date, Shift, Time code, In, Out, Exception, Regular, and Overtime. A summary table (3) is also visible, showing Regular hours, Overtime hours, Break Time, Over Break Time, Meal Time, Exception, Leave, and Total Work Hours. Buttons for refresh and calendar view (4) are located in the top right corner.

No.	Item	Description
1	Period	You can set the period for the T&A record to be displayed as a list.
2	Daily T&A record	You can view the daily T&A record.  Note - You can add, modify or delete a T&A record by clicking In/Out time. Click  after clicking In/Out time to modify the registered T&A record. When you click OK, changes will be saved. - You can add a leave by clicking . To add a leave, the Time Code set as Leave management is necessary. You can click  of the added leave to delete it.
3	T&A record summary	You can view T&A records according to the set period.
4	Refresh / View in calendar button	You can Refresh T&A records or view T&A records in a calendar.

— Modifying in the calendar

13 Time & Attendance



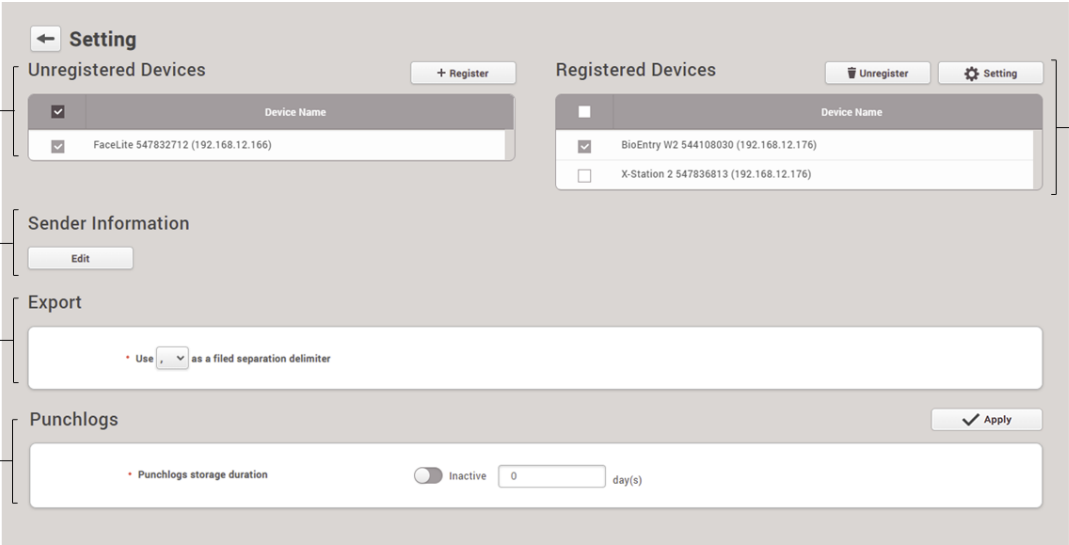
No.	Item	Description
1	Event Type	You can click each event type to display or hide on the calendar.
2	Month	You can move to the previous or next month by clicking < or >.
3	Daily T&A record	You can view the daily T&A record. Note - You can add, modify or delete a T&A record by clicking the work time (white). You can modify the registered T&A record by clicking , and when you click OK, changes will be saved. - You can add a leave by clicking the shift (gray). To add a leave, the Time Code set as Leave management is necessary. You can click of the added leave to delete it.
4	T&A record summary	You can view monthly the T&A record.
5	Refresh / View in list button	You can Refresh T&A records or view T&A records in a list.

13 Time & Attendance

Setting

You can register a device used for T&A management or set the user list synchronization option.

- 1) Click TIME ATTENDANCE > .
- 2) Set each item.



The screenshot shows the 'Setting' screen with the following components:

- Unregistered Devices:** A list of devices with a '+ Register' button. Callout 1 points to this list.
- Registered Devices:** A list of devices with 'Unregister' and 'Setting' buttons. Callout 2 points to this list.
- Sender Information:** A section with an 'Edit' button. Callout 3 points to this button.
- Export:** A section with a dropdown menu. Callout 4 points to this dropdown.
- Punchlogs:** A section with an 'Apply' button and a toggle for 'Inactive' and a duration input. Callout 5 points to this section.

No.	Item	Description
1	Unregistered Devices	This is the list of devices for which T&A management is available. Select the desired device and click + Register to register the selected device as a T&A management device.
2	Registered Devices	This is the list of T&A management devices being used currently. To cancel registration, select the desired device and click Unregister. You can also change the T&A setting of a registered device by clicking Setting. For details, refer to the device's T&A. T&A type is a setting to map the T&A Event Key and T&A event type(Check In, Check Out, Break Start, Break End, Meal Time Start, Meal Time End).

13 Time & Attendance

No.	Item	Description															
		Setting T&A Mode By User T&A Required No T&A Event <table><thead><tr><th>T&A Event Key</th><th>Label</th><th>T&A type</th></tr></thead><tbody><tr><td>Code 1</td><td></td><td>None</td></tr><tr><td>Code 2</td><td></td><td>None</td></tr><tr><td>Code 3</td><td></td><td>None</td></tr><tr><td>Code 4</td><td></td><td>None</td></tr></tbody></table> Apply Cancel Note It is possible to edit the device's T&A settings only while the device is connected.	T&A Event Key	Label	T&A type	Code 1		None	Code 2		None	Code 3		None	Code 4		None
T&A Event Key	Label	T&A type															
Code 1		None															
Code 2		None															
Code 3		None															
Code 4		None															
3	Sender Information	You can set the sender information to use when sending out notification emails.															
4	Export	You can select the delimiter of the document when exporting T&A report to CSV export.															
5	Punchlogs storage duration	You can set the period for storing the punch logs.															

Note

- When a registered device is deleted in DEVICE menu, the registered T&A management device will be also deleted automatically.

You can manage the access of visitors by using the VISITOR menu.

You can also set up a PC where visitors can apply for a visit.

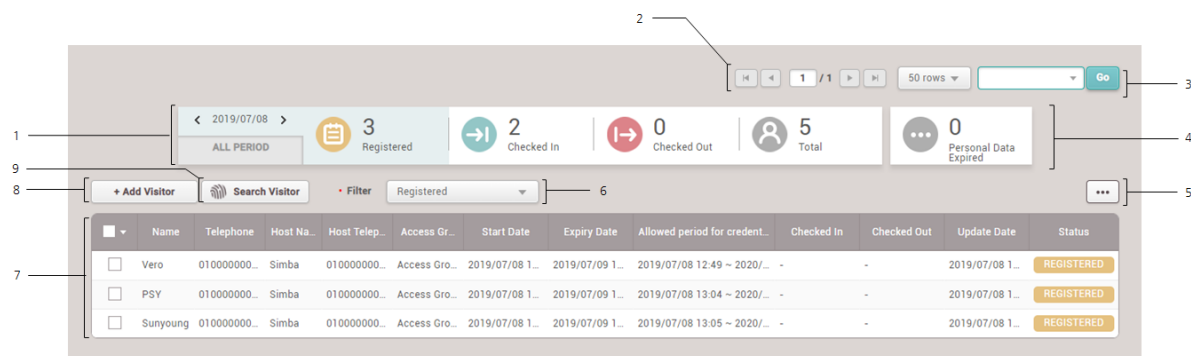
Applying to Visit

Managing Visitors

Note

- The VISITOR menu will appear when the Visitor license is activated.

14 Visitor



- | | |
|---|--------------------------------|
| 1 Period and Number of Visitors by Status | 6 Filter of Visitors by Status |
| 2 Page Navigation Buttons and Number of List Rows | 7 List of Visitors by Status |
| 3 Search for Visitors in List of Selected | 8 Add Visitor Button |
| 4 List of Visitors Expired the Personal Data | 9 Search Visitor Button |
| 5 Function Button (Column Setting) | |

Applying to Visit

Visitors can view and accept the terms and conditions or the privacy policy for access.

Visitors with a visit record can also apply for a visit by reusing previously registered information, such as their name, telephone number, and fingerprint.

Applying to First Visit

Applying to Visit Using Existing Info

Note

- You can access the visit application page on the visiting PC. If there is not the shortcut of the visit application page on the visiting PC, create the shortcut by referring to [Visit PC Settings](#).

Applying to First Visit

If you are visiting for the first time, apply for a visit on the visit application page.

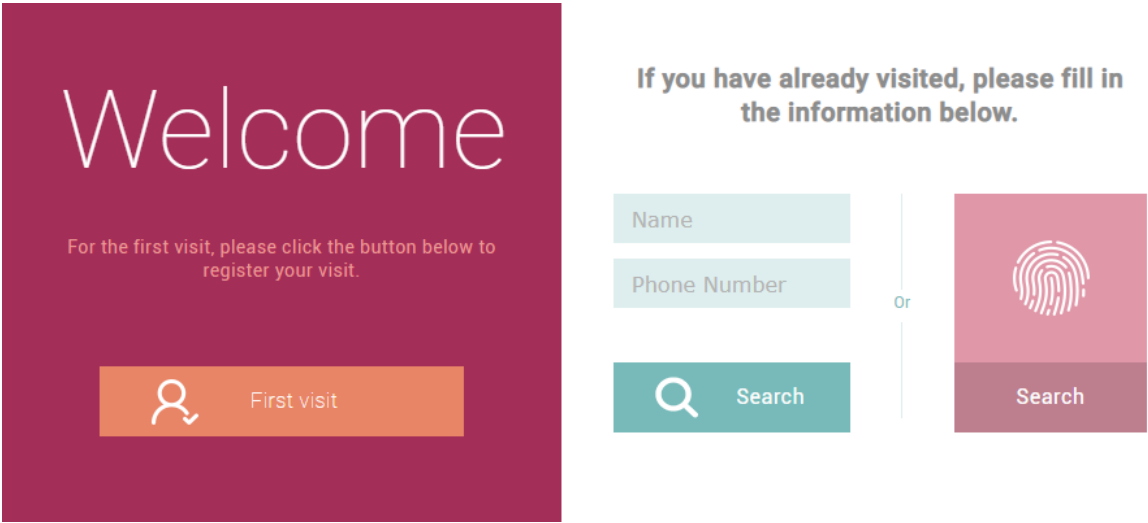
Note

- You can access the visit application page on the visiting PC. If there is not the shortcut of the visit application page on the visiting PC, create the shortcut by referring to [Visit PC Settings](#).

14 Visitor

If you visit the site for the first time, apply to visit on the visit application page.

- 1) Run the visit application page on the visiting PC.



- 2) Click First visit.
- 3) Check and accept the terms and conditions or the privacy policy for access and then click Next.
- 4) Enter or select the necessary fields.

The 'Registration Information' form is divided into three sections. The 'Visitor' section (labeled 1) has 'Name' and 'Telephone' fields. The 'Host' section (labeled 2) also has 'Name' and 'Telephone' fields. The 'Entry Information' section (labeled 3) has a 'Zone' dropdown menu and a 'Period' field with date and time pickers (e.g., 2019/06/04 14:42 ~ 2019/06/05 14:42).

No.	Item	Description
1	Visitor	Enter the visitor's information. ▪ Name: Enter the name. ▪ Telephone: Enter the telephone number. ☒ Note ▪ If the Custom Visitor Field is set in the VISITOR setting, that fields are activated. ▪ Up to 48 characters may be entered for a name.
2	Host	Enter the host's information. ▪ Name: Enter the name.

14 Visitor

No.	Item	Description
		▪ Telephone: Enter the telephone number.  Note ▪ Up to 48 characters may be entered for a name.
3	Entry Information	Set the zone and period to visit. ▪ Zone: Set the access group. ▪ Period: Set the period for visit.  Note ▪ Only access groups of sites assigned to visiting PC in VISITOR setting are displayed.

5) Click Next.

6) Set the credentials.

1 — [☒ Fingerprint  + Fingerprint 

2 — [☐ Card ☐ No request

No.	Item	Description
1	Fingerprint	Click + Fingerprint to use the fingerprint authentication. And enroll the fingerprint.
2	Card	Set the card to Request to use the card authentication. And get a card from the visitor operator.

7) Click Next.

8) To apply for a visit, click Register.

Related Information

[Visitor](#)

[Applying to Visit Using Existing Info](#)

Applying to Visit Using Existing Info

Visitors with a visit record can also apply for a visit by reusing previously registered information, such as their name, telephone number, and fingerprint.

14 Visitor

— Search by name and telephone number

If you have visited the site, you can use your existing visit information again to request a visit.

- 1) Run the visit application page on the visiting PC.

Welcome

For the first visit, please click the button below to register your visit.

First visit

If you have already visited, please fill in the information below.

Name

Phone Number

Or

Search

Search

- 2) Enter the name and telephone number and then click Search.
- 3) Check and accept the terms and conditions or the privacy policy for access and then click Next.
- 4) Check the Registration Information. If there are items that need to be modified, modify each item by referring to [Applying to first visit](#) and click Next.
- 5) Check the Credential. If there are items that need to be modified, modify each item by referring to [Applying to first visit](#) and click Next.
- 6) To apply for a visit, click Register.

Search by fingerprint

If you have a fingerprint registered in the site of visit, you can search the fingerprint and apply for a visit using the existing visit information.

- 1) Run the visit application page on the visiting PC.

Welcome

For the first visit, please click the button below to register your visit.

First visit

If you have already visited, please fill in the information below.

Name

Phone Number

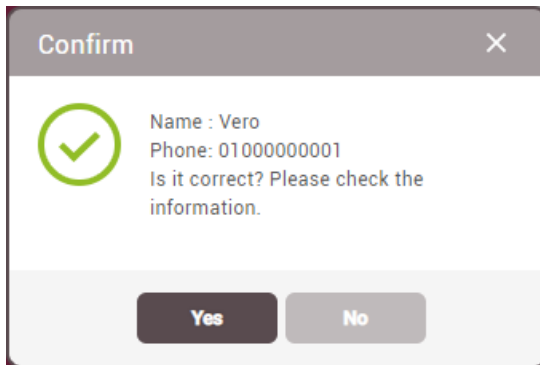
Or

Search

Search

14 Visitor

- 2) Click Search at the bottom of the fingerprint icon.
- 3) Scan your fingerprint to search the registered visitor.
- 4) If the visitor information is correct, click Yes.



- 5) Check and accept the terms and conditions or the privacy policy for access and then click Next.
- 6) Check the Registration Information. If there are items that need to be modified, modify each item by referring to [Applying to first visit](#) and click Next.
- 7) Check the Credential. If there are items that need to be modified, modify each item by referring to [Applying to first visit](#) and click Next.
- 8) To apply for a visit, click Register.

Related Information

[Visitor](#)

[Applying to First Visit](#)

Managing Visitors

You can check the list of visitors and manage the check in and check out of them. You can also add, delete, or modify visitor information.

[Managing Registered Visitors](#)

[Managing Check In Visitors](#)

[Managing Checked Out Visitors](#)

[Managing All Visitors](#)

[Deleting Personal Data Expired](#)

Note

- The VISITOR menu will appear when the Visitor license is activated.

14 Visitor

Managing Registered Visitors

You can approve a visit or edit the registration information. You can also add or delete visitors.

— Approve the Visit

You can approve a visit.

- 1) Click VISITOR.
- 2) Click a visitor in the Registered.
- 3) Check the information of the visitor and then click Check in.

The screenshot shows a web form for managing visitors. It is divided into four main sections: Visitor, Host, Entry Information, and Credential. At the bottom are three buttons: Edit, Check in, and Cancel.

Visitor

- Name: Shannon
- Telephone: 01000000003

Host

- Name: Simba
- Telephone: 01000000000

Name	Telephone	Choose
Simba	01000000000	<button>Choose</button>

Entry Information

- Access Group: Access Group
- Period: 2019/06/04 10:00 ~ 2019/06/05 10:00

Credential

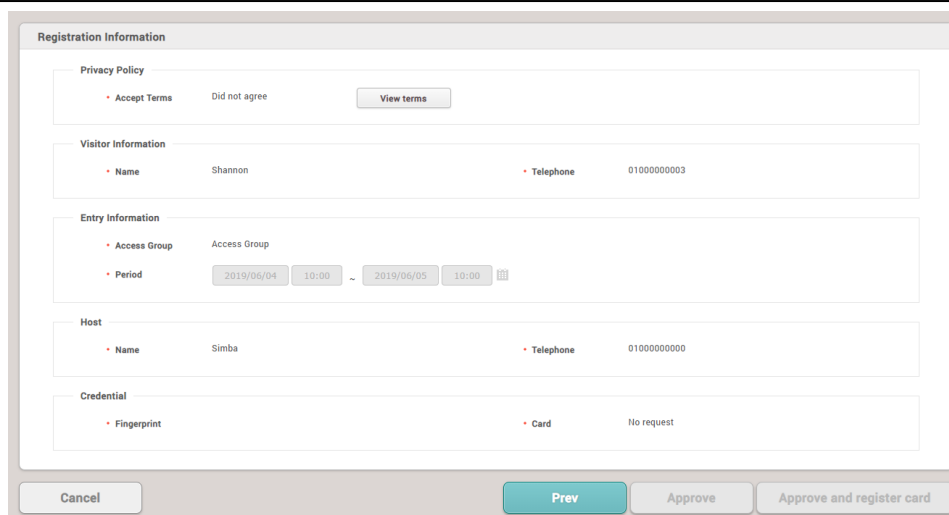
- Card: ☐ No request
- Credential: + Fingerprint

Buttons: Edit, Check in, Cancel

📌 Note

- If there are items that need to be modified, modify each item and click Edit.
- 4) Check the Registration Information and then click Approve to approve the visit.

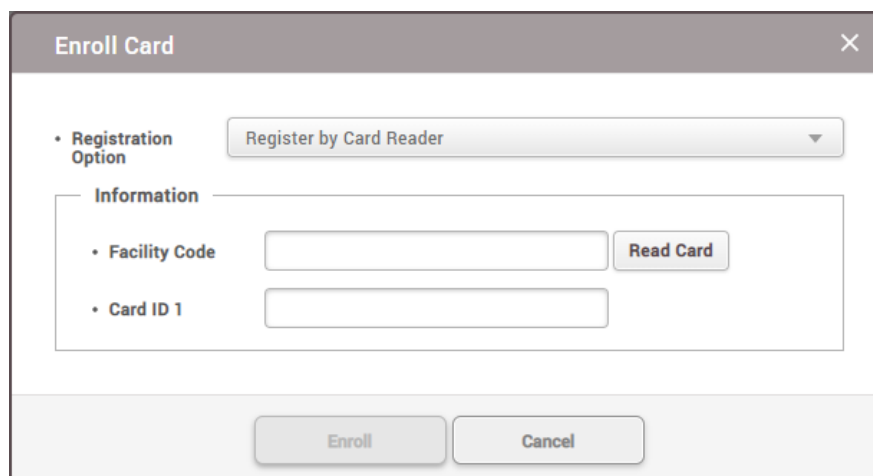
14 Visitor



The 'Registration Information' form is divided into several sections. The 'Privacy Policy' section shows 'Accept Terms' as selected, with 'Did not agree' and a 'View terms' button. The 'Visitor Information' section contains fields for Name (Shannon) and Telephone (01000000003). The 'Entry Information' section includes 'Access Group' (Access Group) and 'Period' (2019/06/04 10:00 to 2019/06/05 10:00). The 'Host' section shows Name (Simba) and Telephone (01000000000). The 'Credential' section shows 'Fingerprint' and 'Card' (No request). At the bottom are buttons for 'Cancel', 'Prev', 'Approve', and 'Approve and register card'.

Note

- The Approve button is deactivated for visitors who did not agree to the terms and conditions when applying for a visit. Click View terms to provide the visitor with the terms and conditions and request the agreement. If a visitor does not accept the terms and conditions, the visitor will be restricted from visiting.
- If a card device is set on the visiting PC, the Approve and register card button is activated. Click Approve and register card to approve the visit and issue an access card.



The 'Enroll Card' dialog has a title bar with a close button. It features a 'Registration Option' dropdown menu set to 'Register by Card Reader'. Below this is an 'Information' section with fields for 'Facility Code' and 'Card ID 1', and a 'Read Card' button. At the bottom are 'Enroll' and 'Cancel' buttons.

a) Select a desired Registration Option.

Register by Card Reader

You can register a card by scanning the card information with the device connected to the visiting PC.

- Select Register by Card Reader for Registration Option.
- Click Read Card and scan a card with the device.

Enter Manually

- You can register a card by entering a card number directly.
- a) Select Enter Manually for Registration Option.
 - b) Enter the Facility Code or Card ID 1.

b) Click **Enroll** to register a card.

Add Visitors

- You can add visitors.
- 1) Click VISITOR.
 - 2) Click + Add Visitor.

The screenshot shows a multi-section form for adding a visitor. Callout 1 points to the 'Visitor' section with fields for Name and Telephone. Callout 2 points to the 'Host' section, which includes fields for Name and Telephone, a table with headers 'Name', 'Telephone', and 'Choose', and a 'Not found' message. Callout 3 points to the 'Entry Information' section with a dropdown for 'Access Group' and a date/time range for 'Period'. Callout 4 points to the 'Credential' section with a 'Card' toggle set to 'No request' and a '+ Fingerprint' button. At the bottom right are 'Register' and 'Cancel' buttons.

No	Item	Description
1	Visitor	Enter the visitor's information. ▪ Name: Enter the name. ▪ Telephone: Enter the telephone number. ☒ Note ▪ If the Custom Visitor Field is set in the VISITOR setting, that fields are activated. ▪ Up to 48 characters may be entered for a name.

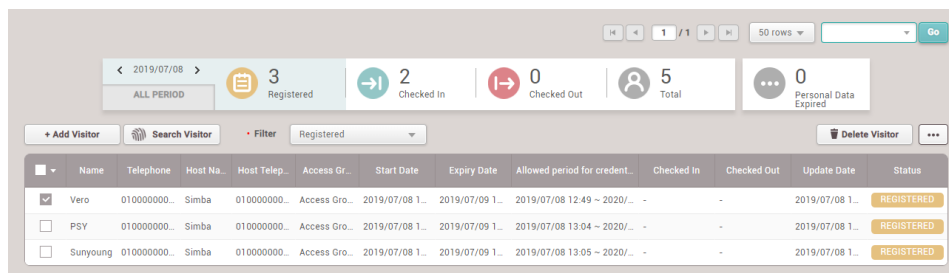
14 Visitor

No	Item	Description
2	Host	Enter the host's information. - Name: Enter the name. - Telephone: Enter the telephone number.  Note - Up to 48 characters may be entered for a name. - When you enter the name or telephone number, a list of users with information that matches is displayed. Click Choose to set a user of that list to the host.
3	Entry Information	Set the zone and period to visit. - Zone: Set the access group. - Period: Set the period for visit.  Note - Only access groups of sites assigned to visiting PC in VISITOR setting are displayed.
4	Credential	Set the credentials. - Card: Set the card to Request to use the card authentication. - Credential: Click + Fingerprint to use the fingerprint authentication. And enroll the fingerprint.

- Click Register to complete adding visitors.

Delete Visitors

- Click Visitor.
- Click a visitor to delete in the Registered.



	Name	Telephone	Host Na...	Host Telep...	Access Gr...	Start Date	Expiry Date	Allowed period for creden...	Checked In	Checked Out	Update Date	Status
☒	Vero	0100000000...	Simba	0100000000...	Access Gro...	2019/07/08 1...	2019/07/09 1...	2019/07/08 12:49 ~ 2020/...	-	-	2019/07/08 1...	REGISTERED
☐	PSY	0100000000...	Simba	0100000000...	Access Gro...	2019/07/08 1...	2019/07/09 1...	2019/07/08 13:04 ~ 2020/...	-	-	2019/07/08 1...	REGISTERED
☐	Sunyoung	0100000000...	Simba	0100000000...	Access Gro...	2019/07/08 1...	2019/07/09 1...	2019/07/08 13:05 ~ 2020/...	-	-	2019/07/08 1...	REGISTERED

- Click Delete Visitor and then click Yes.

14 Visitor

Note

- The Delete Visitor button is activated if you click ☐ (check box).
- You can delete visitors only in the Registered.

Related Information

[Applying to Visit](#)

[Managing Check In Visitors](#)

[Managing Check Out Visitors](#)

[Visitor](#)

Managing Check In Visitors

You can check which visitors have been checked in and edit the registration information of them. And you can also let the visitors check out.

- 1) Click VISITOR.
- 2) Click a visitor in the Checked In.
- 3) Check the information of the visitor and then click Check Out.

 **Jacey**

Visitor

• Name

Jacey

• Telephone

01000000002

Host

• Name

Simba

• Telephone

01000000000

Name	Telephone	Choose
Simba	01000000000	Choose

Entry Information

• Access Group

Access Group

• Period

2019/06/04 10:00 ~ 2019/06/05 10:00

Credential

• Credential

+ Fingerprint

+ Card

Edit

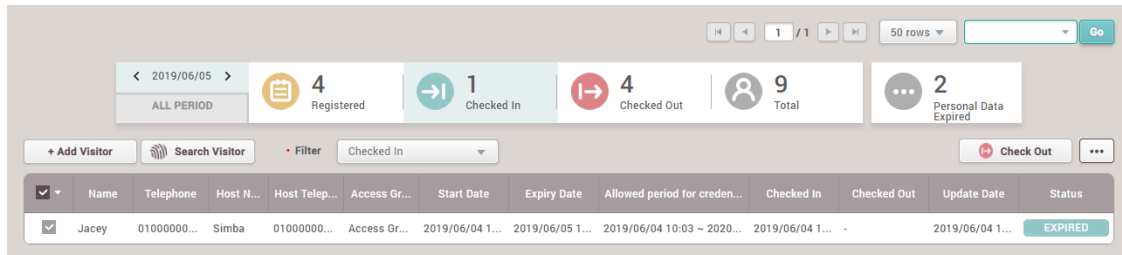
Check Out

Cancel

14 Visitor

Note

- If there are items that need to be modified, modify each item and click Edit.
- You can let the visitors check out in the list. The Check Out button is activated if you click ☐ (check box).



The screenshot shows a web interface for visitor management. At the top, there are summary statistics: 4 Registered, 1 Checked In, 4 Checked Out, 9 Total, and 2 Personal Data Expired. Below this is a table of visitors. The first row shows a visitor named Jacey with a status of EXPIRED.

	Name	Telephone	Host N...	Host Telep...	Access Gr...	Start Date	Expiry Date	Allowed period for creden...	Checked In	Checked Out	Update Date	Status
☒	Jacey	01000000...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/04 10:03 ~ 2020...	2019/06/04 1...	-	2019/06/04 1...	EXPIRED

Managing Check Out Visitors

You can check which visitors have been checked out and register the visit again using that visitor's registration information.

- 1) Click VISITOR.
- 2) In the Checked Out list, click the visitor to re-register.
- 3) Click Edit.

14 Visitor

Visitor

Name

vero

Telephone

01000000001

Host

Name

Simba

Telephone

01000000000

Name	Telephone	Choose
Simba	01000000000	Choose

Entry Information

Access Group

Access Group

Period

2019/06/04 16:53 ~ 2019/06/05 16:53

Credential

Card

No request

Credential

+ Fingerprint

Type	Card Data Format	Summary	
Fingerprint	-	1	

Register

Cancel

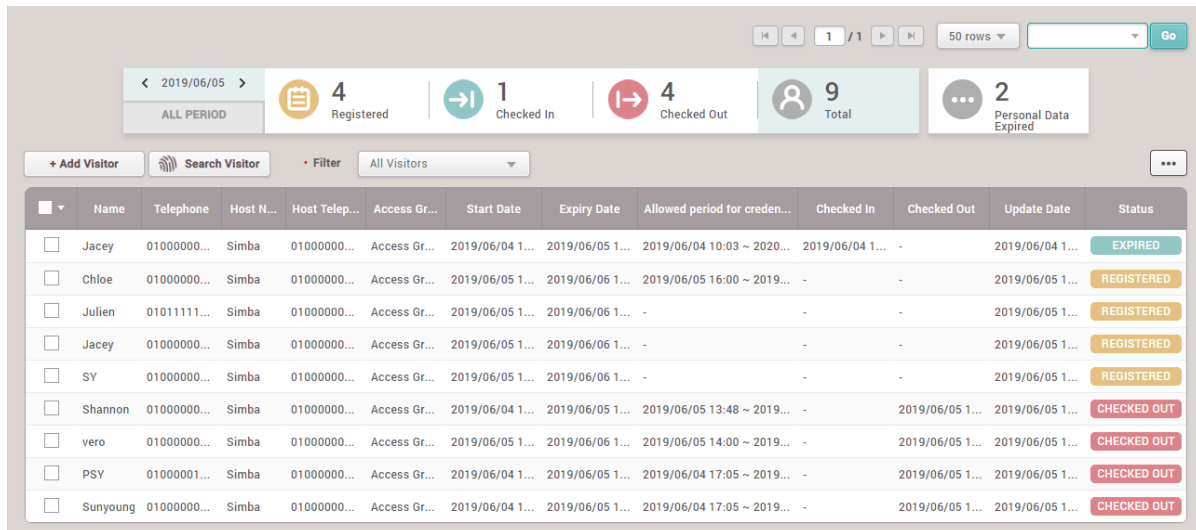
- 4) If there are items that need to be modified, modify each item and click Register.

Managing All Visitors

You can view all visitors that have been registered, checked in, and checked out for the set period. You can also add visitors.

- 1) Click VISITOR.
- 2) Click Total.

14 Visitor



	Name	Telephone	Host N...	Host Telep...	Access Gr...	Start Date	Expiry Date	Allowed period for creden...	Checked In	Checked Out	Update Date	Status
☐	Jacey	01000000...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/04 10:03 ~ 2020...	2019/06/04 1...	-	2019/06/04 1...	EXPIRED
☐	Chloe	01000000...	Simba	01000000...	Access Gr...	2019/06/05 1...	2019/06/06 1...	2019/06/05 16:00 ~ 2019...	-	-	2019/06/05 1...	REGISTERED
☐	Julien	01011111...	Simba	01000000...	Access Gr...	2019/06/05 1...	2019/06/06 1...	-	-	-	2019/06/05 1...	REGISTERED
☐	Jacey	01000000...	Simba	01000000...	Access Gr...	2019/06/05 1...	2019/06/06 1...	-	-	-	2019/06/05 1...	REGISTERED
☐	SY	01000000...	Simba	01000000...	Access Gr...	2019/06/05 1...	2019/06/06 1...	-	-	-	2019/06/05 1...	REGISTERED
☐	Shannon	01000000...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/05 13:48 ~ 2019...	-	2019/06/05 1...	2019/06/05 1...	CHECKED OUT
☐	vero	01000000...	Simba	01000000...	Access Gr...	2019/06/05 1...	2019/06/06 1...	2019/06/05 14:00 ~ 2019...	-	2019/06/05 1...	2019/06/05 1...	CHECKED OUT
☐	PSY	01000001...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/04 17:05 ~ 2019...	-	2019/06/05 1...	2019/06/05 1...	CHECKED OUT
☐	Sunyoung	01000000...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/04 17:05 ~ 2019...	-	2019/06/05 1...	2019/06/05 1...	CHECKED OUT

Note

- You can approve the visit and add visitors in Total. For more details, refer to [Managing Registered Visitors](#).
- You can manage the checked in or checked out visitors in Total. For more details, refer to [Managing Check In Visitors](#) or [Managing Check Out Visitors](#).

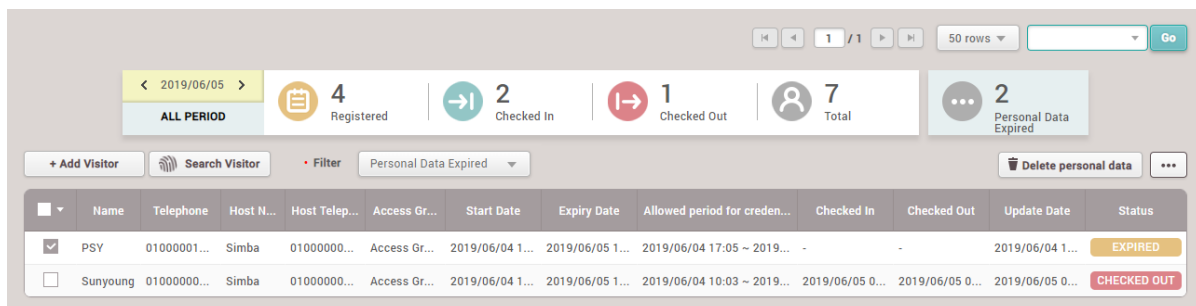
Deleting Personal Data Expired

You can delete the visitors that have the personal data expired.

Note

- Only users with the operator level of Administrator can view the list of visitors who have expired. You can refer to the [Adding User Information](#) for more detailed information on the operator level.

- Click VISITOR.
- Click Personal Data Expired. The visitors that have personal data expired is displayed.



	Name	Telephone	Host N...	Host Telep...	Access Gr...	Start Date	Expiry Date	Allowed period for creden...	Checked In	Checked Out	Update Date	Status
☒	PSY	01000001...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/04 17:05 ~ 2019...	-	-	2019/06/04 1...	EXPIRED
☐	Sunyoung	01000000...	Simba	01000000...	Access Gr...	2019/06/04 1...	2019/06/05 1...	2019/06/04 10:03 ~ 2019...	2019/06/05 0...	2019/06/05 0...	2019/06/05 0...	CHECKED OUT

Note

14 Visitor

- For more information on configuring the period for the credential, see [Terms & Visitor Settings](#).

- 3) Click ☐ (check box) to select the visitors you want to delete.
- 4) Click Delete personal data and then click Yes.

In the REPORT menu, create and save user information or various events in BioStar 2 in the desired format.

Automatically generate the desired reports periodically, and the generated reports can be exported or printed as CSV or PDF.

[Generate Report](#)

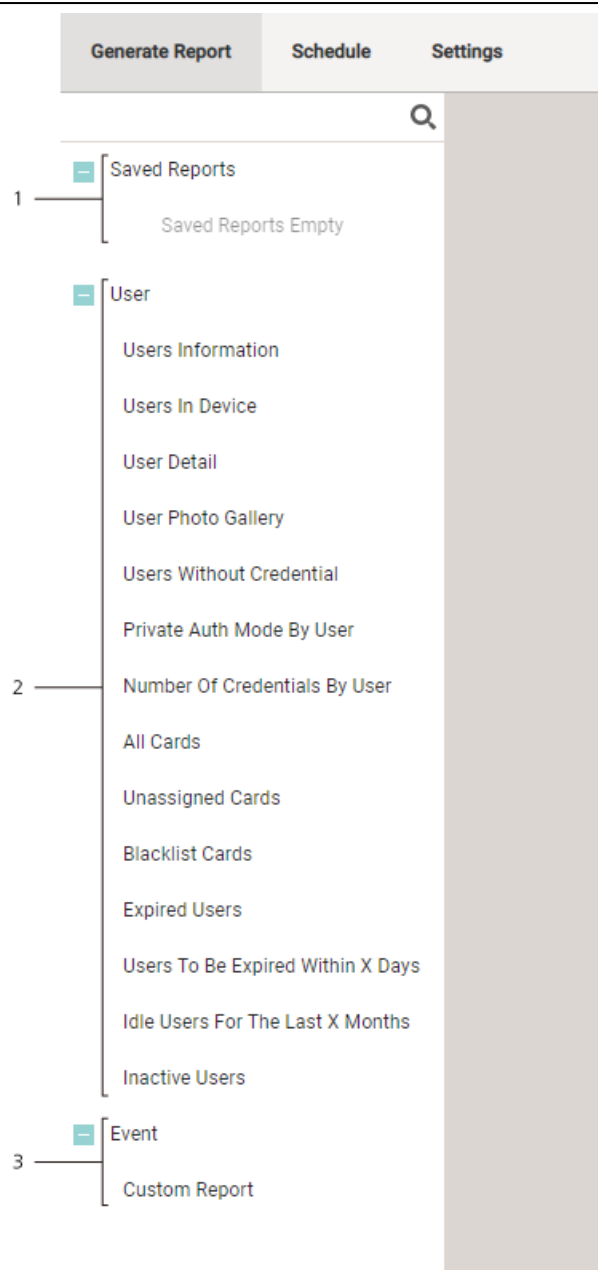
[Automatic Report Schedule](#)

[Settings](#)

Generate Report

Reports are created in the desired format.

15 Report



No.	Item	Description
1	Saved Reports	Click Save Report in the created report, it will be saved as a template below this. This is useful when you need to create a report with the same conditions in the future.
2	User	Create a report by selecting a template relevant to the user.
3	Event	Custom Report: Create a report by selecting desired Events, Periods, and Filters (USERS, DOORS, DEVICES).

Automatic Report Schedule

Set a schedule to automatically generate custom reports created by setting the DYNAMIC period.

15 Report

Biostar 2 Admin Login is required to use Automatic Report Schedule. For more information, refer to [Biostar 2 Admin Login](#).

- 1) Click Add Schedule.
- 2) Edit the necessary items.

Add Automatic Report Schedule

Information

• Schedule Name

Report & Schedule

• Report

None

i

• Frequency

None

• Generate Time

00

:

00

Report Format

• Output Type

None

• Report Title

☐

Show Title On Every Page

☐

Show Header

☐ On Every Page

• Header

☐

Show Header

☐ On Every Page

• Footer

☐

Page Number

• File Format

None

APPLY

CANCEL

No.	Item	Description
1	Information	Set basic information of Automatic Report Schedule. ▪ Schedule Name: Enter the schedule name.
2	Report & Schedule	Set the schedule to be automatically generated for each report. ▪ Report: Select a custom report to automatically generate. Only custom reports set to DYNAMIC period will appear. ▪ Frequency: Set the frequency to automatically generate reports. ▪ Generate Time: Set the time to automatically generate reports.
3	Report Format	Set the format for each report. ▪ Output Type: Set the automatically generate method of reports. ▪ Report Title: Select Show Title On Every Page to display the report name as the title on every page. ▪ Header: If Show Header is selected, the header is displayed when the report is created. Select On Every Page to display the header on every page.

15 Report

No.	Item	Description
		Note The header may vary depending on the reports. Footer: Set whether to display page numbers.

File Format: Set the file format for exporting reports.

- 3) Click APPLY to save the settings.

Settings

- 1) Click REPORT > Settings.
- 2) Edit the necessary items.

The screenshot shows a settings window with two main sections. The first section, titled 'Report', contains a single setting: 'Export report path' with an empty text input field and a blue information icon. The second section, titled 'Biostar 2 Admin Login', contains two settings: 'Biostar 2 Admin User ID' with a text input field containing 'admin', and 'Password' with a masked text input field. At the bottom right of the window are two buttons: 'APPLY' (highlighted in teal) and 'CANCEL' (grey).

No.	Item	Description
1	Report	Export report path: Export the report to the saved path. If not entered, it is created in "Documents\BioStar2" of the user's PC.
2	Biostar 2 Admin Login	Enter the login ID and password of the administrator account. Automatic Report Schedule can be used after entering the administrator account information. Biostar 2 Admin User ID: Enter the login ID of the administrator account. Password: Enter the password of the administrator account.

- 3) Click APPLY to save the settings.

You can use the Setting menu to configure user privileges, language, time, date, access card management, server connection, doors, etc.

The modifiable items may differ depending on the user permission.

Account

16 BioStar 2 Settings

Preferences

Card

Card Format

Server

Trigger & Action

Schedules

Alert

HTTPS

Remote Access

Image Log

USB Agent

Face Group Matching

Audit Trail

Daylight Saving Time

Security

Directory Integration

Visitor

Mobile Access

Email Setting

License

Card Printer

System Backup

Account

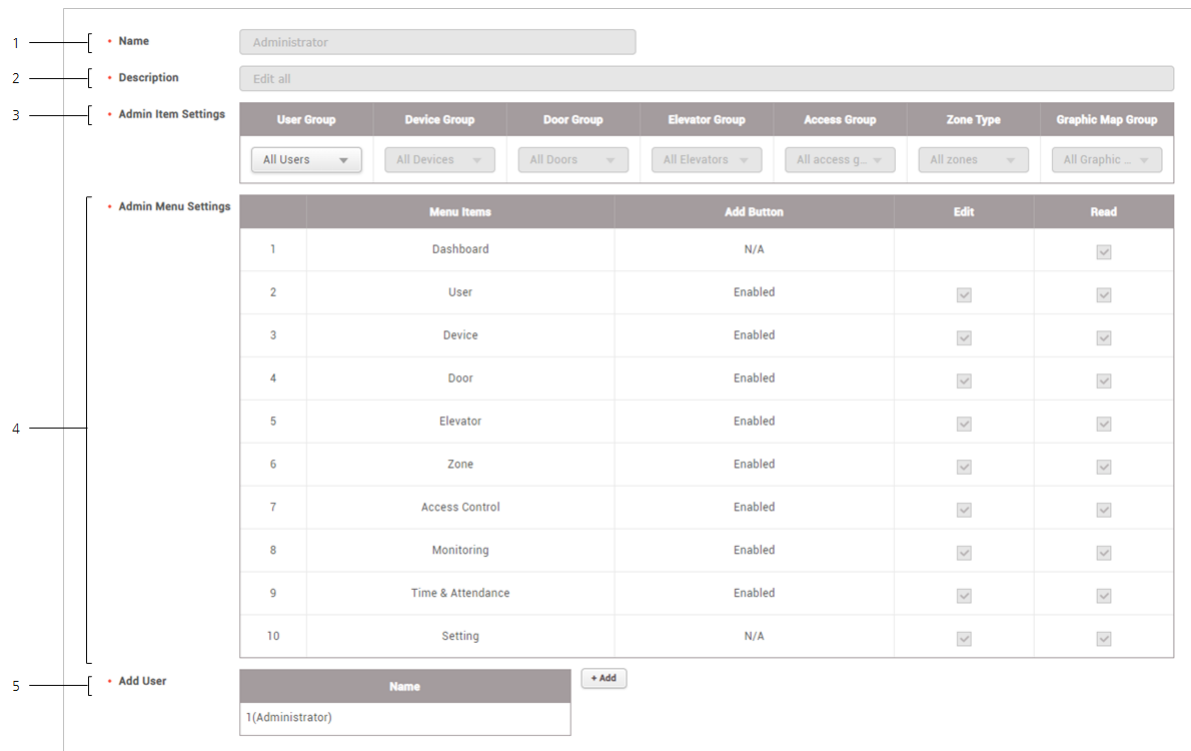
You can assign BioStar 2 operator account levels to registered users.

- 1) Click Settings > ACCOUNT.
- 2) Click an account type. Depending on the type of license activated, the account type may vary.
 - Administrator: The user can use all menus.
 - User Operator: The user can only use the USER and PREFERENCE menus.
 - Monitoring Operator: The user can use the MONITORING and PREFERENCE menus and only view the DASHBOARD, USER, DEVICE, DOOR, ZONE and ACCESS CONTROL menus.
 - T&A Operator: The user can only use the TIME ATTENDANCE menu and only view the USER menu.
 - User: The user can only view own information and T&A records.

16 BioStar 2 Settings

- Visitor Operator: The user can only use the VISITOR menu.

3) Click + Add and select a user or click  to search for a user.



1 — [• Name

2 — [• Description

3 — [• Admin Item Settings

4 — [• Admin Menu Settings

5 — [• Add User

User Group	Device Group	Door Group	Elevator Group	Access Group	Zone Type	Graphic Map Group
All Users	All Devices	All Doors	All Elevators	All access g...	All zones	All Graphic ...

Menu Items	Add Button	Edit	Read
1 Dashboard	N/A		☒
2 User	Enabled	☒	☒
3 Device	Enabled	☒	☒
4 Door	Enabled	☒	☒
5 Elevator	Enabled	☒	☒
6 Zone	Enabled	☒	☒
7 Access Control	Enabled	☒	☒
8 Monitoring	Enabled	☒	☒
9 Time & Attendance	Enabled	☒	☒
10 Setting	N/A	☒	☒

Name

+ Add

T(Administrator)

No.	Item	Description
1	Name	Shows the account level name.
2	Description	Show a brief description of the account level.
3	Admin Item Settings	Show the group assigned the permission.
4	Admin Menu Settings	Shows the assigned privileges.
5	Add User	Shows the list of users assigned with the privileges. Click + Add to add a user. ▪ Click  to delete the registered users.

4) Click Apply to save the settings.

Note

- If privileges have already been assigned while adding or editing users, the assigned users are shown on the list.
- Unless a user with the privilege for Edit saves settings after changing the detailed settings of each menu, the user with a Read privilege only can see the previous information yet to be modified.

16 BioStar 2 Settings

➤ Related Information

Editing User Information

Adding Custom Account Level

Adding Custom Account Level

You can assign BioStar 2 operator privilege levels to registered users.

📌 Note

- The Admin Menu Settings may vary depending on the type of license that is activated.

- 1) Click Settings > ACCOUNT.
- 2) Click ADD CUSTOM LEVEL.
- 3) Enter or select the necessary items. Depending on the type of license activated, the account type may vary.

1

Name

2

Description

3

Admin Item Settings

User Group	Device Group	Door Group	Elevator Group	Access Group	Zone Type	Graphic Map Group
All Users ▾	All Devices ▾	All Doors ▾	All Elevators ▾	All access g... ▾	All zones ▾	All Graphic ... ▾

4

Admin Menu Settings

	Menu Items	Add Button	Edit	Read
1	Dashboard	N/A		☐
2	User	Disabled	☐	☐
3	Device	Disabled	☐	☐
4	Door	Disabled	☐	☐
5	Elevator	Disabled	☐	☐
6	Zone	Disabled	☐	☐
7	Access Control	Disabled	☐	☐
8	Monitoring	Disabled	☐	☐
9	Time & Attendance	Disabled	☐	☐
10	Setting	N/A	☐	☐

5

Add User

Name

+ Add

No.	Item	Description
1	Name	Enter the desired account level name.
2	Description	Enter a brief description of the account level.
3	Admin Item Settings	Set the detailed permission for each item. You can select groups to assign the edit and read permissions for each menu.

16 BioStar 2 Settings

No.	Item	Description
		Admin Item Settings can be set for User Group, Device Group, Door Group, Elevator Group, Access Group, Zone Type, Graphic Map Group and it can be set based on the already created group information. If there is no group you want, add a new group to that menu. For details about the creation of a group, refer to Adding and Managing User Groups, Adding and Managing Device Groups, Adding and Managing Door Groups, Adding and Managing Elevator Groups, Adding and Managing Access Groups, Adding and Managing Graphic Map Groups.
4	Admin Menu Settings	Set the edit and read permissions for the menu. A different permission can be set according to each menu. - Edit: The permission to add, edit, and delete the items of the menu. - Read: The permission to read the items of the menu.  Note - If you assign the edit permission to each menu, Add Button will be enabled. However, there is no Add Button in Dashboard and Setting menu, so it is displayed as N/A. And Add button in Access Control menu is only enabled when Access Group is set as All access groups in Admin Item Settings and the edit permission is assigned.
5	Add User	You can add or view the users assigned with the privilege. If you want to add a user, click + Add to add a user. Click  to delete the registered users.

4) Click Apply to save the settings.

Note

- Refer to the following example for configuring Admin Item Settings and Admin Menu Settings.

User Group	Device Group	Door Group	Elevator Group	Access Group	Zone Type	Graphic Map Group
User Group 01 ▼	Device Grou... ▼	Door Group ... ▼	All Elevators ▼	AC Group ▼	All zones ▼	All Graphic ... ▼

16 BioStar 2 Settings

2	User	Disabled	☐	☒
3	Device	Disabled	☐	☒
4	Door	Enabled	☒	☒
5	Elevator	Disabled	☐	☒
6	Zone	Disabled	☐	☐
7	Access Control	Disabled	☒	☒
8	Monitoring	Disabled	☐	☒

- User: You can see the user information in the 'User Group 01'. However, you cannot add a new user or edit existing users.
 - Device: You can see the device information in the 'Device Group 01'. However, you cannot add a new device or edit existing devices.
 - Door: The setting of doors included in the 'Door Group 01' can be edited or deleted. You can edit the device of the door included in 'Door Group 01'. You can also add a new door to 'Door Group 01'.
 - Elevator: You can see the setting of all the elevators. However, you cannot add a new elevator or edit existing elevators.
 - Zone: You do not have permission.
 - Access Control: The setting of access groups included in the 'AC Group' can be deleted. You can add or delete users and user groups to 'AC Group'.
 - Monitoring: You can see the access control events of the devices included in 'Device Group 01'. And you can see the device and door status zone status and the alert history. You can also see a graphic map of 'All Graphic Maps'. However, you cannot control each status.
- If the configuring for Admin Item Settings and Admin Menu Settings do not match, the permission will not be assigned for that item. If you select the item of the menu by the account to which this custom permission was assigned, the 'Permission Denied' message is displayed.
 - You can add an unlimited number of custom account levels.

Preference

You can change language, time zone, time/date format, and upload a sound file to be used as an alert.

- 1) Click Settings > PREFERENCE.
- 2) Edit the necessary fields.

16 BioStar 2 Settings

The screenshot shows the BioStar 2 Settings interface with three main sections:

- Language / Time Zone:** Contains three dropdown menus: Language (set to English), Time Zone (set to (UTC+9:00) Seoul, Tokyo, Osaka, Sapporo, Y...), and Daylight Saving Time.
- Date/Time:** Contains two dropdown menus: Date Format (set to yyyy/mm/dd) and Time Format (set to hh:mm).
- Sound:** Contains an Alert section with a table showing no sound files. The table has columns for Sound Name, File Size, File Format, and Play. A '+ Add' button is visible.

No.	Item	Description
1	Language / Time Zone	You can configure the BioStar 2 language and time zone settings. - Language: Select a language to use. - Time Zone: Select a time zone to use. - Daylight Saving Time: Select the daylight saving time to apply to BioStar 2 server. If no registered daylight saving time, see Daylight Saving Time.
2	Date/Time Format	You can configure the date and time format to use in BioStar 2. - Date Format: Changes the date format. - Time Format: Changes the time format.
3	Sound	You can upload a sound file to use in BioStar 2. a) Click + Add. b) Click Browse to select a file. c) Select .wav file or .mp3 file and then click Open. d) Click Add to upload Note Sound files must be .wav or .mp3 format.

16 BioStar 2 Settings

No.	Item	Description
		▪ A maximum file size is 10MB.

- 3) Click Apply to save the settings.

🔗 Related Information

Alert

Card

You can view the card status, assigned users, blacklist, etc.

- 1) Click Setting > CARD. The list of registered cards is shown.

Card Type	Card ID	Status	User ID	User Name
CSN	1225051669057584	Assigned	2	User 1
CSN	4276710323	Unassigned	-	-
CSN	989777499	Unassigned	-	-
CSN	1217252008448048	Unassigned	-	-
CSN	1234938686282624	Unassigned	-	-
CSN	308871143	Unassigned	-	-

- 2) Click Unassigned Card, Assigned Card or Blacklist Card to view the list of corresponding cards.

📌 Note

- If a card is blocked, the card information will appear in Blacklist Card list. To unblock the card, select a card and click Unblock.

Changing Wiegand Card Data Format

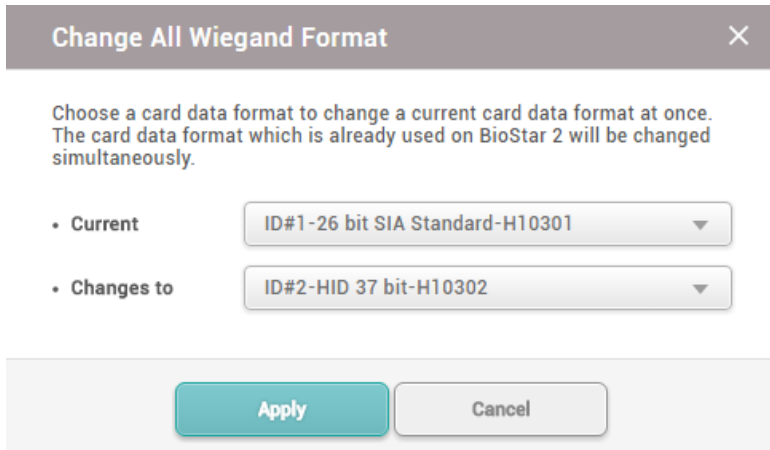
You can change the Wiegand card data formats in use simultaneously.

📌 Note

- The data format of the card already assigned to the user will be changed.

16 BioStar 2 Settings

- 1) Click Settings > CARD.
- 2) Click  and then select Change All Wiegand Format.
- 3) Select a card data format to be changed from the list of Current and select a desired card data format from the list of Changes to.



Change All Wiegand Format ✕

Choose a card data format to change a current card data format at once. The card data format which is already used on BioStar 2 will be changed simultaneously.

• Current ID#1-26 bit SIA Standard-H10301 ▼

• Changes to ID#2-HID 37 bit-H10302 ▼

Apply Cancel

- 4) Click Apply to change the card data format.

Card Format

It is possible to set the Wiegand type of the card or the website key and layout of the smart / mobile card.

- 1) Click Settings > CARD FORMAT.
- 2) Configuring the settings by referring to information, [Wiegand](#) and [Smart / Mobile Card](#).

Wiegand

You can configure the format for reading card data. The card data is processed in the set Wiegand format.

Note

- The data format of the card already assigned to the user will be changed.

- 1) Click Settings > CARD FORMAT.
- 2) Click Wiegand.
- 3) Click  from the list and then configure the settings.

16 BioStar 2 Settings

Information

1

• Name

2

• Description

3

• Total Bits

32

4

• Facility Code Field

☐

5

• ID Field

	Start Bit	End Bit	Size	
ID 0			0	

+ Add

6

• Parity Bits

Position	Type	Start Bit	End Bit	Size	
	Odd			0	

+ Add

No.	Item	Description
1	Name	Enter a Wiegand format name.
2	Description	Enter a short description.
3	Total Bits	Enter the total bit count.
4	Facility Code Field	You can set whether or not to use a facility code. If you want to use a facility code, click ☐ (check box) and enter a start bit and end bit.
5	ID Field	Enter a start bit and end bit of the ID to use. Click + Add to add an ID field.
6	Parity Bits	Click + Add to add a parity bit. Enter the position of the parity bit to use and the start and end bit. ☒ Note You must enter the total bit to add a parity bit.

4) Click Apply to add the Wiegand format.

☒ Note

- Pre-defined formats cannot be edited or deleted.

Smart / Mobile Card

It is possible to set the layout of smart cards such as MIFARE, iCLASS, DESFire, iCLASS Seos and mobile.

☒ Note

- To set the mobile card, set Active for Mobile Card Enrollment on the User / Device Management tab of Setting > SERVER.

16 BioStar 2 Settings

- 1) Click Settings > CARD FORMAT.
- 2) Click ADD SMART CARD and configure the setting.

No.	Item	Description
1	Smart Card Type	Turn on the option to set up a custom smart card layout.
2	Name	Enter the name of the smart card.
3	Secondary Key	It is possible to set whether or not to use the secondary website key. If Active is set, you can set Secondary Key. When a secondary site key is set, authentication is carried out using the secondary website key when the basic site key of the card does not match.
4	Smart Card Setting	It is possible to set the structure of smart cards such as MIFARE, iCLASS, DESFire, iCLASS Seos and mobile. Note - Custom smart cards only support MIFARE, DESFire and FeliCa*. * FeliCa is only supported on BioStation 3 firmware 1.3.0 or later. The primary site key and the secondary site key support only HEX values. In the field on the right side of the screen, enter the key value and click Convert to HEX. Use the converted value as your site key. Note - The Convert to HEX button can only be used when the Smart

16 BioStar 2 Settings

No.	Item	Description
		Card Type is Suprema Smart Card. - DESFire Advanced: You can use a DESFire card issued by a third-party. Setting is available only for DESFire.  Note - To use DESFire Advanced, enter the information for App Master Key, App Master Key Index, File Read Access Key, File Read Access Key Index, File Write Access Key, File Write Access Key Index, App ID, File ID, and Encryption Type correctly. - Security Level: Supports high security settings using AES-128 encryption in Security Level 3 (SL3) mode for Mifare Plus EV1 cards. It also ensures stable operation in mixed SL1/SL3 environments, meeting diverse security requirements. - Primary Key: Key which encrypts the communication between the smart key and the card reader. - Secondary Key: When a secondary key is set, authentication is carried out using the secondary key when the primary key of the card does not match. The Secondary Key can only be entered by activating the Secondary Key at the top. - Start Block Index / Block Index: Select the start block where each template will be saved. This block is the index of block where user information will be saved. If the user already has the smart key, set available block for saving. Setting is available only for MIFARE and iCLASS. - App ID: Set the application ID. This plays a role of directory which includes file ID. Setting is available only for DESFire. - File ID: Set the file ID. Setting is available only for DESFire. - Encryption Type: It is possible to set the encryption type to DES/3DES or AES. Setting is available only for DESFire. - ADF Address Value: ADF address where digital credential is stored and only the iCLASS Seos card is available. - Skip Bytes: You can set the starting point for reading the card number. Setting is available only for MIFARE, DESFire and FeliCa in Custom Smart Card mode. - Data Size: (When the set Primary Key and Secondary Key are the same as the set value of the card) You can set the data size of the card to be read. Setting is available only for MIFARE, DESFire and FeliCa in Custom Smart Card mode. - System Code: Please enter the system code for reading FeliCa cards in hexadecimal, up to 4 digits. Setting is available only for FeliCa in Custom Smart Card mode. - Service Code: Please enter the service code for reading FeliCa cards in

16 BioStar 2 Settings

No.	Item	Description
		hexadecimal, up to 4 digits. Setting is available only for FeliCa in Custom Smart Card mode. ▪ ID Field: Set the card to read specific sectors. Press + Add to configure up to 8 blocks you want to read. Setting is available only for FeliCa in Custom Smart Card mode. - Block Number: Set the blocks to read from the card. (0 ~ 150)
5	Layout	It is possible to change the layout where user information and fingerprint information are recorded. ▪ Template Count: Set the number of fingerprint templates to be included in the layout. ▪ Template Size: Set the number of bytes used by the fingerprint template. ▪ Use Face Template: Select whether to use the face template. ▪ Face Template Size: Set the number of bytes used by the face template.  Note ▪ Face templates are only available on FaceStation F2, BioStation 3 and BioEntry W3.

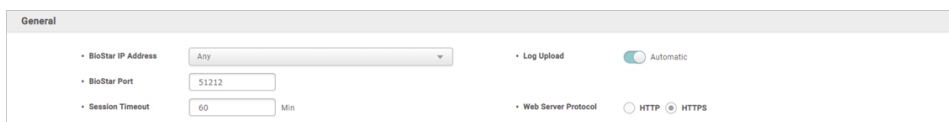
3) Click Apply to enroll a smart card setting.

Server

You can configure the BioStar 2 server information, user management, device management and automatic upgrade settings.

1) Click Settings > SERVER and configure the settings.

General



Item	Description
General	You can configure the general information on BioStar 2. ▪ BioStar IP Address: Set the server IP address. Change the

16 BioStar 2 Settings

Item	Description
	setting to use a specific IP address. ▪ BioStar Port: Set the server port. ▪ Session Timeout: Set a session timeout period. If there is no activity on BioStar 2 for the set time after logging in, the session is logged out automatically. ▪ Log Upload: Select an event log upload method. If real-time communication with the server is difficult, set this to Manual. ▪ Web Server Protocol: Set a server communication protocol.

User/Device Management

The screenshot shows the 'User/Device Management' settings page. It features several configuration options:

- Automatic User Synchronization:** Includes dropdowns for 'All Devices' and 'Suprema'.
- Fingerprint Template Format:** A dropdown menu.
- Enrollment Device:** A section for device management.
- Mobile Card Enrollment:** A toggle switch set to 'Inactive'.
- User ID Type:** A dropdown menu set to 'Number'.
- Custom User Field:** A table with columns 'Order', 'Name', 'Type', and 'Data'. The table is currently empty with a 'Not found' message.
- Delete personal & credential data when issuing an AoC:** A toggle switch set to 'Inactive'.
- AC event log storage duration:** A toggle switch set to 'Inactive' with a value of '900' days.
- Hide Face Credential Preview Image:** A toggle switch set to 'Inactive'.

Item	Description
User/ Device Manage ment	You can configure the user synchronization and fingerprint template format settings. ▪ Automatic User Synchronization: Change the user information synchronization method. - Select All Devices to have the user information automatically synchronized with the server. - When set to All Devices(Including user update from device), user information on the server is synchronized with all devices registered on the server. However, user information modified on the device is not synchronized to the server, and only user information added on the device is synchronized to the server. - Select Specific Devices(Only devices belonging to the access group) to automatically synchronize only the devices belonging to the access group with the changes. ▪ Mobile Card Enrollment: Set to Enabled to use the mobile card. ▪ Fingerprint Template Format: Set the fingerprint template

16 BioStar 2 Settings

Item	Description
	format. Available options include SUPREMA, ISO and ANSI378. If there are still user fingerprint template remaining in the device, selecting a different format is not possible. ▪ User ID Type: Use of Number or Alphanumeric can be set for user ID. When Alphanumeric is set for User ID Type, BioLite Net, BioEntry Plus and BioEntry W cannot be used. In addition, all users saved in XPass and XPass S2 will be deleted and all settings except for the network will be initialized. ▪ Enrollment Device: You can designate certain devices that you frequently use for fingerprint and card enrollment as an enrollment device. Click the + Add and choose the devices. ▪ Custom User Field: You can add custom user fields for extra user information and these fields appear on the User page. There are three types of custom user fields: Number Input Box, Text Input Box and Combo Box. If you choose the Combo Box for a custom user field, you can add up to 20 items with 32 characters each, and each item is separated by a semicolon (;). ▪ Delete personal & credential data when issuing an AoC: If you issue an AoC card which stores user's credentials on the smart card, you can set BioStar 2 to delete user's data and credential information automatically. ▪ AC event log storage duration: You can set the period for storing the access control event logs. ▪ Hide Face Credential Preview Image: To protect users' privacy, preview images can be hidden when enrolling face credentials. If you enable this option, a preview will not be provided when enrolling the user's face or visual face.  Note ▪ If you select Automatic User Synchronization as Specific Devices(Only devices belonging to the access group), users stored in the device that do not belong to the access group cannot be managed by the server. If you use this option, go to DEVICE menu and click Delete Data & Sync Device for each device to proceed with the synchronization. ▪ Even if you select Automatic User Synchronization as Specific Devices(Only devices belonging to the access group), Access groups set up for special purposes, such as the following, will be synchronized regardless of the device's access group. - Dual authentication access group set up in the Devices and Elevators

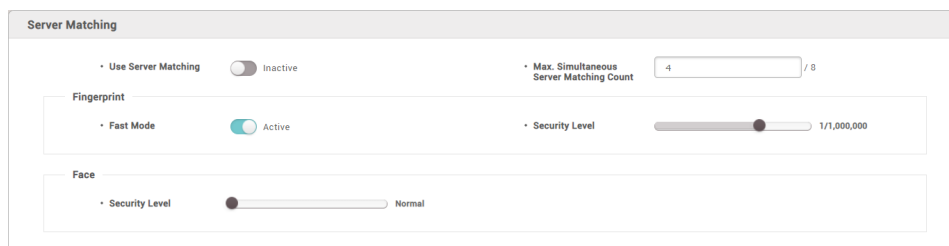
16 BioStar 2 Settings

Item	Description
	- Bypass Group in the Anti-passback Zone - Bypass Group in the Scheduled Lock Zone - Scheduled Unlock Authentication Group in the Scheduled Unlock Zone - Arm/Disarm Group in the Intrusion Alarm Zone ▪ Even if you select Automatic User Synchronization as Specific Devices(Only devices belonging to the access group), Users set to device administrator will be synchronized regardless of the access group. ▪ NFC card is supported with the below conditions. - Mobile device OS: Android 5.0 Lollipop or later, Android 10 or earlier - BioStar 2 Mobile 2.4.1 or later - XPass S2: XPS2M-V2 FW 2.4 or later - BioStation 2: BS2-OMPW, BS2-OIPW FW 1.4 or later, FW 1.8 or earlier - BioStation A2: BSA2-OMPW, BSA2-OIPW FW 1.3 or later, FW 1.7.1 or earlier - BioStation L2: BSL2-OM FW 1.2 or later - BioEntry W2: BEW2-OAP, BEW2-ODP FW 1.1 or later, FW 1.5 or earlier - FaceStation 2: FS2-D, FS2-AWB FW 1.3.1 or earlier - BioLite N2: BLN2-ODB, BLN2-OAB, BLN2-PAB FW 1.2 or earlier - XPass D2: XPD2-MDB, XPD2-GDB, XPD2-GKDB FW 1.3 or earlier - FaceLite: FL-DB FW 1.1 or earlier - XPass 2: XP2-MDPB, XP2-GDPB, XP2-GKDPB, XP2-MAPB FW 1.0 or later - BioEntry P2: BEP2-OD, BEP2-OA FW 1.0 or later - BioEntry R2: BER2-OD FW v1.1.0 or later ▪ BLE card is supported with the below conditions. - Mobile device OS: Android 5.0 Lollipop or later, Android 10 or earlier / iOS 9.0 or later - BioStar 2 Mobile 2.4.1 or later - FaceStation 2: FS2-AWB FW 1.3.1 or earlier - BioLite N2: BLN2-ODB, BLN2-OAB, BLN2-PAB FW 1.2 or earlier - XPass D2: XPD2-MDB, XPD2-GDB, XPD2-GKDB FW 1.3 or earlier - FaceLite: FL-DB FW 1.1 or earlier - XPass 2: XP2-MDPB, XP2-GDPB, XP2-GKDPB, XP2-MAPB FW 1.0 or later ▪ You can use either Mobile card or Mobile Access. The firmware does not support Mobile card or Mobile Access

16 BioStar 2 Settings

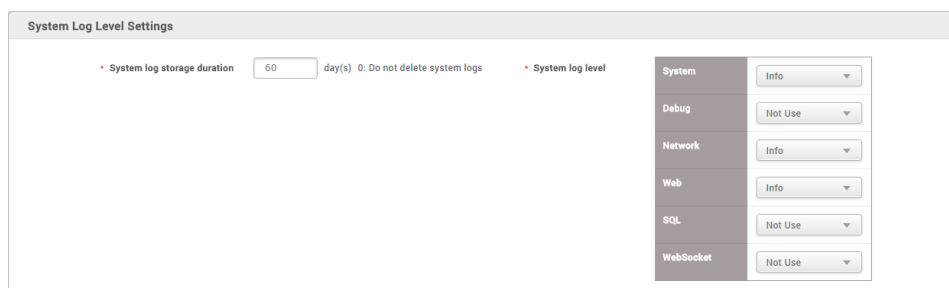
Item	Description
	simultaneously. - When User ID Type is changed from Alphanumeric to Number, all user information registered on BioStar 2 should be deleted. - The devices and the firmware versions where the User ID Type can be changed are as follows. - CoreStation FW 1.0.0 or later - FaceStation 2 FW 1.0.0 or later - FaceLite FW 1.0.0 or later - BioEntry W2 FW 1.1.0 or later - BioStation L2 FW 1.2.0 or later - BioStation A2 FW 1.3.0 or later - BioStation 2 FW 1.4.0 or later - BioLite N2 FW 1.0.0 or later - BioEntry P2 FW 1.0.0 or later - BioEntry R2 FW 1.0.0 or later - XPass 2 FW 1.0.0 or later - XPass D2 FW 1.0.0 or later - XPass FW 2.4.0 or later - XPass S2 FW 2.4.0 or later - X-Station 2 FW 1.0.0 or later - BioStation 3 FW 1.0.0 or later - BioStation 3 Max FW 1.0.0 or later - If you change the value in the Order field, the position of the custom field on the User page changes. - For a number input field, a number from 0 to 4294962795 is allowed and characters are not allowed. ex - Number Input Bo.. - For a text input field, up to 32 characters are allowed. ex - Text Input Box - For a combo box field, the items that have been set to the field are displayed as item. If you want to configure a combo box field as shown in the screenshot below, you need to enter <i>Option 1;Option 2;Option 3;Option 4</i> in the data field. ex - Combo Box Option 1 None Option 1 Option 2 Option 3 Option 4

16 BioStar 2 Settings



Item	Description
Server Matching	You can configure server matching. If you use server matching, the user's fingerprint will be matched from BioStar 2, not the device. The Server Matching will appear when the Advance or higher license is activated. - Use Server Matching: Activates/Deactivates server matching. - Max. Simultaneous Server Matching Count: You can configure how many matchings can be done simultaneously. - Fast Mode: You can configure the fingerprint matching speed. - Security Level: You can configure the server matching's security level for fingerprints and faces. The higher the security level is set, the more the false rejection rate (FRR) can occur.  Note - Max. Simultaneous Server Matching Count depends on the PC's CPU performance.

System Log Level Settings



Item	Description
System Log Level Settings	You can set the duration and log level of the system log to be stored in the database. The system log storage period can be set up to 120 days, and logs is not deleted when setting to 0. System logs are managed according to pre-defined categories, and

16 BioStar 2 Settings

Item	Description
	the log level is divided into Trace, Debug, Info, Warning, and Error. The high level contains all lower level logs. For example, when set to Trace, you can store the logs including Debug, Info, Warning, and Error logs.

- 2) Click Apply to save the settings.

Note

- Please inquire your network administrator for any help necessary with the web server protocol configuration.

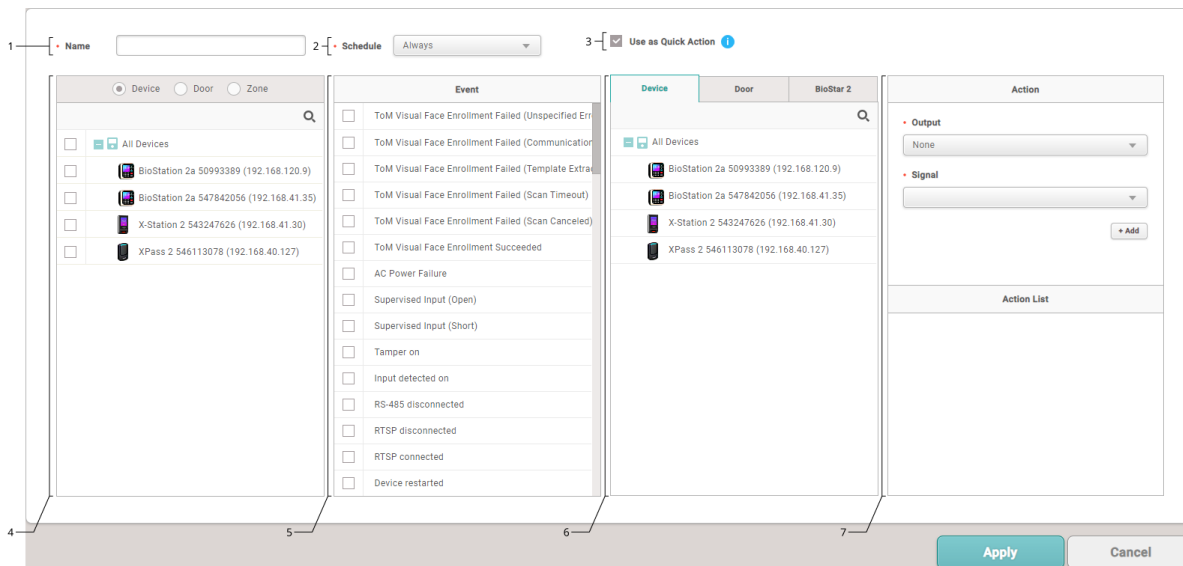
Related Information

[Real-time Log](#)

Trigger & Action

You can set the device or BioStar to do a specific operation when a specific event has occurred at the devices, doors and zones.

- 1) Click Settings > TRIGGER & ACTION.
- 2) Click ADD TRIGGER & ACTION and configure the settings.



16 BioStar 2 Settings

No.	Item	Description
1	Name	Enter a name of the trigger & action.
2	Schedule	Select a schedule.  Note ▪ When configuring a user defined condition by selecting Input, if no desired schedule is available, click + Add Schedule to create it. ▪ For more information on configuring schedules, refer to Schedules.
3	Use as Quick Action	Setting the Quick Action, you gain the ability to conveniently control multiple doors simultaneously. Simply click the Quick Action button on the BioStar 2 main screen to initiate the command. For more information on configuring Quick Action, refer to How to Use the Quick Action .
4	Device, Door, Zone	Select a device/door/zone at which a specific event will be monitored. Multiple devices/doors/zones can be selected. The devices/doors/zones work independently even when they are disconnected from the BioStar server.  Note ▪ The Zone will appear when the Advance or higher license is activated.
5	Triggering Event	Set a triggering event. At least one event must be selected.  Note ▪ Event lists may be activated differently depending on the options selected in Device, Door, and Zone.
6	Device, Door, BioStar 2	Select a device which performs the action. You can select a device, door, or BioStar 2 to perform an action.
7	Action	Set a signal to send when the selected triggering event occurs. You can also set an email to which the log will be sent from BioStar 2. • Select BioStar 2 and click  to configure the email server information. • To add an email address, click + Add and enter an email address. Click OK to add the recipient.

3) Click Apply to save the settings.

 **Note**

- For more information on email server information, contact your system administrator.

16 BioStar 2 Settings

Schedules

You can add access schedules and holiday schedules.

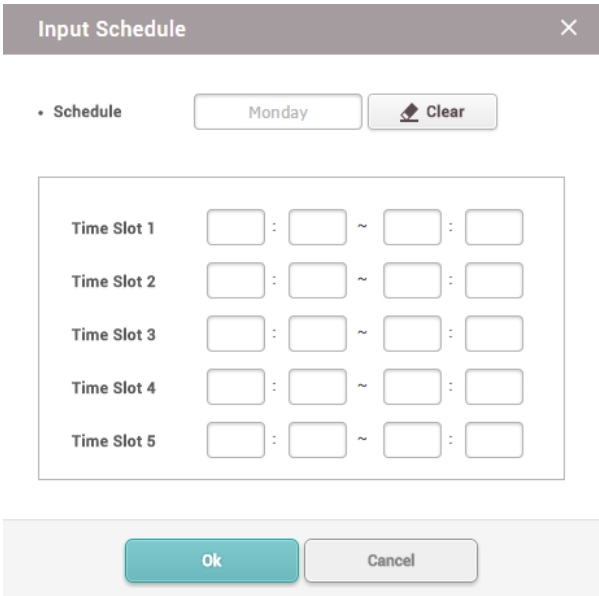
— Adding New Schedule

- 1) Click Settings > SCHEDULE.
- 2) Click ADD SCHEDULE.
- 3) Enter the required information into the fields and set a schedule for each day of the week.

The screenshot shows the 'Add New Schedule' form. It has three main sections: 1. Basic Information: Fields for 'Name' and 'Description'. 2. Schedule Type: Radio buttons for 'Weekly' (selected) and 'Daily'. 3. Time Slots: A grid for each day of the week (Sunday to Saturday) with time slots from 0 to 24. Below this is a 'Holiday Schedule' section with a checked checkbox, a dropdown menu set to 'None', and another time slot grid. Numbered callouts 1 through 7 point to specific elements: 1. Name field, 2. Description field, 3. Type radio buttons, 4. Sunday time slot grid, 5. Holiday Schedule checkbox, 6. Holiday Schedule dropdown, 7. Holiday Schedule time slot grid.

No.	Item	Description
1	Name	Enter a name of the schedule.
2	Description	Enter a short description of the schedule.
3	Type	For schedule type, select Weekly or Daily. When set to Daily, Cycle and Start Date can be selected.
4	Time Slots	Click on time slots to set a desired schedule and click OK.

16 BioStar 2 Settings

No.	Item	Description
		 - Up to 5 time slots can be configured for each day of the week or each day. - After setting a schedule, click  to copy the time slots set immediately above. - Click  to edit the time slots. Click  to delete the set time slots.
5	Holiday Schedule	Specify whether to apply a holiday schedule. When the option is selected, the detailed settings can be applied.
6	Holiday Time Slots	Click on time slots to set a desired schedule for holidays. Click  to edit the time slots. Click  to delete the set time slots.
7	Holiday Selection	Select pre-defined holidays. - Click + Add to add a pre-defined holiday. - Click  to delete a holiday.

4) Click Apply to add the holiday schedule.

+ Adding Holiday Schedule

Alert

You can set the alarm type and message to display when a specific event has occurred at the devices, doors and zones. You can adjust settings so that BioStar 2 can play the uploaded sound file upon the occurrence of alarms.

16 BioStar 2 Settings

1) Click Settings > ALERT.

Device	Door	Thermal & Mask	Authentication
☐ Device Disconnection Detected	☒ Forced door opened	☒ Access denied (Exceeded threshold temp.)	☐ 1:1 authentication failed
☐ Device restarted	☒ Held door opened	☒ Access denied (Temp. not measured correctly)	☒ 1:1 duress authentication succeeded
☐ RTSP connected	☐ Forced door open alarmed	☒ Access denied (Mask not detected)	☐ 1:N authentication failed
☐ RTSP disconnected	☐ Held door open alarmed	☐ Access granted (Soft temp. violation on check only)	☒ 1:N duress authentication succeeded
☒ RS-485 disconnected		☐ Access granted (Soft mask violation on check only)	☒ Access denied (Invalid access group)
☒ Tamper on			☒ Access denied (Disabled user)
☐ Supervised Input (Short)			☒ Access denied(Invalid period)
☐ Supervised Input (Open)			☒ Access denied (Blacklist)
☒ AC Power Failure			☒ Access denied (Hard Anti-passback)
☐ Low battery level			☒ Access denied (Forced lock schedule)
☐ Critical battery level			☒ Access denied (Soft anti-passback)
☒ Empty battery			☒ Fake Fingerprint Detected
			☐ Access Denied (Anti-Tailgating)

- 2) Select event types to display on the screen.
- 3) Click  and enter a message to display on the screen. If you have uploaded the sound file to play upon the occurrence of a corresponding event, select it from the list of Sound File and set the Play Options. If there is no sound file to play, upload it with reference to the Sound of Preference.

Alert Message

Name

Alert Message

Message

Sound File

alert

Play Options

Once

Apply

Cancel

- 4) Click Apply to save the alert messages.
- 5) Click Apply to save the changes.

 Related Information

Preference

16 BioStar 2 Settings

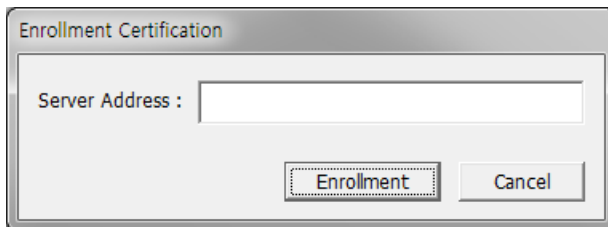
HTTPS

In order to connect BioStar 2 through HTTPS, it is necessary to register the IP address where BioStar 2 is installed and install the certificate. For correct network connection, install the certificate before using BioStar 2.

Note

- BioStar 2.5.0 uses HTTPS as the default communication protocol.

- 1) Click Settings > HTTPS.
- 2) Click Cert. Download.
- 3) Unzip the downloaded file and run cert-register.exe file. Enrollment Certification window will appear.



- 4) Enter the IP address of the PC where BioStar 2 is installed and click Enrollment.
- 5) Check the security warning message and click Yes.
- 6) When you restart the web browser and enter the registered IP address, Secure will appear on the address bar of the web browser.

Remote Access

Remote access is a new feature that replaces the existing BioStar 2 CLOUD feature. This feature allows to securely access internal networks from external networks using the ngrok service. This feature enables access to the BioStar 2 server remotely without firewall settings or port forwarding.

Note

- Please refer to the [Link](#) for how to Remote Access setting.

Image Log

It is possible to set the default value which can be added when using the delete option of image log and an image log from the device.

- 1) Click Settings > Image Log.
- 2) Edit the necessary fields.

16 BioStar 2 Settings

Preset

• Configuration

Event	Schedule	
1:1 authentication succeeded	Always	
1:1 authentication failed	Always	
1:1 duress authentication succeeded	Always	
1:N authentication succeeded	Always	
1:N authentication failed	Always	
1:N duress authentication succeeded	Always	
Dual authentication succeeded	Always	
Dual authentication failed	Always	
Authentication failed	Always	
Access denied	Always	
Access denied (invalid access group)	Always	
Administrator menu entered	Always	

+ Add

Delete Option

• Delete Option

None

Storage Path Settings

• Image Log File Path

.\imagelog\

User Profile Image Option

• Display user profile image when there is no image log for the events

☐

No.	Item	Description
1	Preset	It is possible to set the default setting to be used when adding an image log to the device. It is possible to add an event and schedule to delete by clicking + Add. Note If there is no desired schedule, set a desired condition by clicking + Add Schedule.
2	Delete Option	It is possible to set the delete condition of image log. - Delete Option: It is possible to set the condition to delete an image log. - Amount of Image Log: It is possible to set the unit of condition set at Delete Option. - Delete Cycle: It is possible to set the cycle to carry out the delete condition of image log set from Delete Option and Amount of Image Log.
3	Storage Path Settings	Set the path to save image log files. Note

16 BioStar 2 Settings

No.	Item	Description
		▪ The save path must be set to a directory that has already been created.
4	User Profile Image Option	If this option is on, the profile image registered for a user is displayed on the Event Log and Real-time Log pages when there are user related events. This option is particularly useful when you have devices that do not have a built-in camera.  Note ▪ Even if the user profile image option is on, the image captured from the device camera is displayed when there is an image log for the event.

3) Click Apply to save the changes.

 Note

- The default setting set from Setting > Image Log does not apply to the device. To add or change an image log of the device, refer to [Image Log](#).

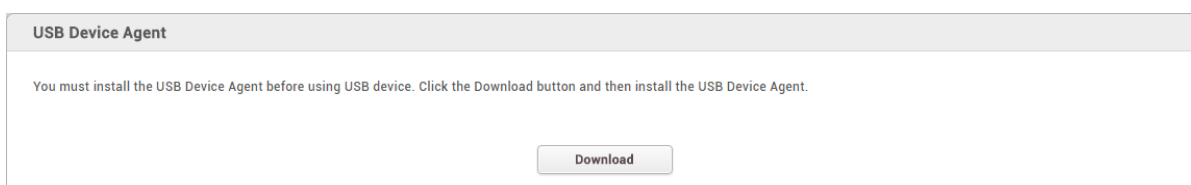
USB Agent

If you want to use the USB Device when logging into BioStar 2 from a client PC, installing the USB Device Agent is required.

 Note

- If User Account Control is enabled in Windows, USB Agent cannot be run automatically. Disable the User Account Control or run as administrator.

- 1) Click Settings > USB AGENT.
- 2) Download the file by clicking Download, and install it.



- 3) Select the byte order of USB card device.

16 BioStar 2 Settings

Byte Order of USB Card Device

Byte order is applied to CSN card type only.

• Byte Order MSB

- 4) Set the port that the USB Agent will use.

USB Agent Port

The USB Agent port number setting is to designate the port number to be communicated from the server, because the agent program runs at each client independently.

• USB Agent Port Number

- 5) Click Apply to save the changes.

Face Group Matching

Face group matching is the function used to specify a matching group based on the user groups set in BioStar 2 and authenticate users in that manner.

Note

- Up to 10 matching groups can be created.
- Each group can include up to 3,000 face templates.
- The total number of face templates in the matching group cannot exceed 5,000.

- 1) Click Settings > Face Group Matching.

- 2) Edit the necessary fields.

General

1

• Group Matching

☒ Use

2

• Group Matching Device Settings

Device ID	Device Name	Device Group	IP Address	
4	FaceStation 2 4 (192.168.16.208)	All Devices	192.168.16.208	

3

• Matching Group Settings

Order	Group Name	User Group	Number of Faces	
1	15F	15F USER	4 / 3000	
2	16F	16F USER	4 / 3000	
3	17F	17F USER	1 / 3000	

No.	Item	Description
1	Group Matching	Set whether or not to use Group Matching.  Note

16 BioStar 2 Settings

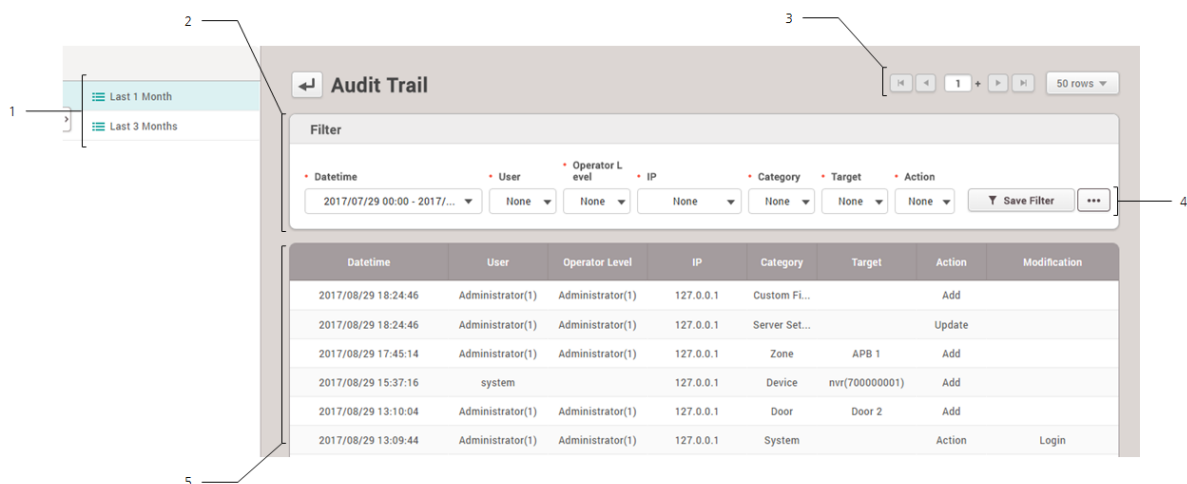
No.	Item	Description
		To disable the group matching while it is being used, all devices set previously and the group settings must be deleted.
2	Group Matching Device Settings	Set a device to use the group matching. Only FaceStation 2 can be added.
3	Matching Group Settings	Click + Add and set Group Name and User Group.  Note - Up to 10 matching groups can be created. - A number of user groups can be set for one matching group. - If the number of face templates included in the user group exceeds 3,000, it cannot be set as a matching group.

3) Click Apply to save the changes.

Audit Trail

Audit trail tracks user access information as well as all the information changed in the system. You can set a filter for each item for sorting.

1) Click Settings > Audit Trail.



No.	Item	Description
1	Period	You can set the previous 1 month or 3 months conveniently for the period.
2	Filter	You can set conditions for each filter item. Click Save Filter to save the filter.

16 BioStar 2 Settings

No.	Item	Description
3	Page Navigation Buttons and Number of List Rows	You can move a page or set the number of list rows to be displayed on one page. ◀: Go to the first page. ◀◀: Go to the previous page. 2 / 2: Enter the page number to move to. ▶: Go to the next page. ▶▶: Go to the last page. 25 rows ▼: Set the number of list rows to be displayed on one page.
4	Function Buttons (CSV Export, Column Setting)	You can save the list of audit list as a CSV file or changes the column setting.
5	Audit List	Shows the audit list.

Daylight Saving Time

Daylight Saving Time (DST) is a function that adjusts the time to better utilize natural daylight.

- 1) Click Settings > Daylight Saving Time.
- 2) Click + Add.
- 3) Edit the necessary items and click Add.

Add Daylight Saving Time

• Name
DST

• Start Date/Time
03 ▼ Month
1 ▼ Week
SUN ▼ Day of Week
01:00 ▼

• End Date/Time
11 ▼ Month
2 ▼ Week
SUN ▼ Day of Week
01:00 ▼

Add
Close

- 4) Click Apply to save the settings.

Note

- You cannot edit or delete a daylight saving time that is already in use.

16 BioStar 2 Settings

Security

You can set the password level and the maximum password age. You can also set the maximum invalid attempts and the maximum password change limit.

- 1) Click Settings > SECURITY.
- 2) Edit the necessary items.

— Login Password

Login Password

• Password Level

Medium

• Maximum Password Age

Inactive

• Maximum Invalid Attempts

Active

max 100 time(s) / 10 minutes of login limit

• Maximum Password Change Limit

Inactive

Item	Description
Password Level	Set the policy for the password complexity for BioStar 2 login. - Low: You can enter up to 32 characters. - Medium: You must combine 8 to 32 alphabetic characters (uppercase or lowercase), and numbers. - Strong: You must combine 10 to 32 alphabetic characters (uppercase and lowercase, at least one alphabetic capital), numbers, and symbols.

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Item	Description
Maximum Password Change Limit	You can set the Maximum Password Change Limit.  Note You can set the Maximum Password Change Limit up to 10 times.

— Advanced Security Settings

Advanced Security Settings

• Encrypt Personal Data on Database

☒ Use

• Personal Data Encryption Key

Change

• Secure communication with device

☒ Use

• Use external certificates

☐ Not Use

• Device Hashkey Management

☐ Not Use

Item	Description
Encrypt Personal Data on Database	When Use is set for Encrypt Personal Data on Database, all sensitive data including credential data and personal information will be stored in the database as encrypted. If this option is set as Not Use, the encrypted data will be decrypted and the user's personal information will be stored in an unencrypted state.  Note - Items to be encrypted when using Encrypt Personal Data on Database are as follows. - Profile image - User ID - Name - Phone number - User IP - Email information for sender and recipients - Login ID - Login password - Face template - Fingerprint template - Card ID - Smart card layout key - Custom information for user and visitor - Image log files - Do not force start the server while encrypting personal data on the database. Errors such as failure to log in to BioStar 2 may occur.

16 BioStar 2 Settings

Item	Description
Personal Data Encryption Key	You can set the personal data encryption key. Click Change and set a new encryption key. If changing the encryption key, the existing data will be re-encrypted.  Note You can enter the encryption key with 32 characters using letters, numbers, and symbols.
Secure communication with device	The communication between BioStar 2 and a device can be protected using a certificate. When Use is set for Secure communication with device, BioStar 2 creates and sends a certificate to the device. The device can use a secure channel for exchanging data with BioStar 2 using this certificate. In order to use an external certificate, Root certificate, Public key certificate, and Private key files must be uploaded. If Device Hashkey Management set to Use, you can set a new data encryption key and administrator password.  Note - The devices and the firmware versions where the secure communication can be set are as follows. - FaceStation 2 FW 1.1.0 or later - BioStation A2 FW 1.5.0 or later - BioStation 2 FW 1.6.0 or later - BioStation L2 FW 1.3.0 or later - BioLite N2 FW 1.0.0 or later - BioEntry P2 FW 1.1.0 or later - BioEntry W2 FW 1.2.0 or later - FaceLite FW 1.0.0 or later - XPass 2 FW 1.0.0 or later - CoreStation FW 1.1.0 or later - X-Station 2 FW 1.0.0 or later - BioStation 3 FW 1.0.0 or later - BioStar 2 creates or deletes a certificate according to the setting status of Secure communication with device, and the same certificate as the previous certificate will not be created. For example, if the setting of Secure communication with device is changed in the order of [Use - Not Use], the created certificate will be deleted automatically. When the setting is changed in the order of [Use - Not Use - Use], the operation of [Create A certificate - Delete A certificate - Create B

16 BioStar 2 Settings

Item	Description
	certificate] is carried out. ▪ If the device is disconnected from the network physically while using the secure communication of BioStar 2, do not turn off the secure communication option. In such a case, the certificate of BioStar 2 will be deleted, and the device will not be able to connect again. To connect it again, the certificate saved in the device must be deleted or the device must be reset to factory default. For more details, refer to the manual of the device.

Note

- The Advanced Security Settings tab is only active when you log in as the initial administrator.

Session Security

Session Security

• Simultaneous Connection Allow

☒ Active

Item	Description
Simultaneous Connection Allow	You can set whether to allow simultaneous connections using the same account. If you set Simultaneous Connection Allow to Inactive, a previously logged in user will be logged out when attempting to connect to the same account simultaneously.

Unified Gateway Setting

Unified Gateway Setting

• Unified Gateway

☒ Active

Item	Description
Unified Gateway	You can change the execution port of BioStar 2 to the Unified Gateway. Unified Gateway allows efficient processing of requests to the BioStar 2 server through the reverse proxy method, improves security vulnerabilities in iframes, and minimizes SSL certificate errors.

16 BioStar 2 Settings

Item	Description
	 Note ▪ When you activate Unified Gateway, the server restarts and automatically directed to the login page. ▪ If the port is in use, a pop-up message will appear. Enter a different port number and activate it again.

- 3) Click Apply to save the settings.

Directory Integration

This document provides guidance on how to synchronize and manage users by integrating Microsoft Entra ID (hereafter Entra ID) or Active Directory with BioStar 2.

Note

- Please refer to the [Link](#) for how to Directory intergration with Entra ID or Active Directory.

Active Directory Encryption

You can use the encryption when communicating with a Windows Active Directory server.
Set according to the following order when using the encryption for the first time.

Step 1. Installing Active Directory Certificate Services

To use Windows Active Directory server encryption communication, you must install the Active Directory Certificate Services.

The Active Directory Certificate Services can be installed as follows:

- 1) On the PC where the Windows Active Directory server is installed, run Server Manager, and then click Manage > Add Roles and Features.
- 2) On Before You Begin, click Next.
- 3) On Select Installation Type, select Role-Based or feature-based installation and then click Next.
- 4) On Select destination server, select Select a server from the server pool, check the server, and click Next.
- 5) On Select Server Roles, select Active Directory Certificate Services and click Next.
- 6) When a pop-up window appears, view the details and click Add Features > Next.
- 7) View the details of Active Directory Certificate Services and click Next.
- 8) On Confirm installation selections, click Install. When installation is complete, click Configure Active Directory Certificate Services on the destination server.

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- 9) When AD CS Configuration wizard appears, view the details and click Next.
- 10) On Role Services, click Certification Authority > Next.
- 11) On the Setup Type page, select Enterprise CA and click Next.
- 12) On the Specify the type of the CA page, select Root CA and click Next.
- 13) On the Specify the type of the private key page, select Create a new private key and click Next.
- 14) Set the Cryptography for CA, CA Name, and Validity Period, and then click Next.
- 15) On the CA Database page, set the folder location for the certificate database and the certificate database log and then click Next.
- 16) On Confirmation page, view the details of Active Directory Certificate Services and click Configure.

Step 2. Connecting LDAPS (LDAP over SSL/TLS)

- 1) Click Start > Run.
- 2) Enter ldp in the input field.
- 3) When the Ldp-disconnected window appears, click Connect.
- 4) Fill in Server and Port fields and select SSL. And then click OK.

Step 3. Copying the root certificate

- 1) Run Command Prompt on the PC where the Windows Active Directory server is installed.
- 2) Enter `certutil -ca.cert client.crt` command to copy the root certificate.
- 3) Enter `keytool -import -keystore ad.jks -file client.crt` command to convert the server certificate to .jks format.
- 4) Save the .jks-formatted server certificate to the BioStar 2 installation path.

Visitor

You can configure visiting sites and PCs. You can also set the terms and conditions for visitors. And You can create the information fields that you want to know from the visitors by using the Custom Visitor Field.

Note

- The VISITOR setting will appear when the Visitor license is activated.
- Activate the Automatic User Synchronization or Use Server Matching option to use the VISITOR.

- 1) Click Settings > VISITOR.
- 2) Set the necessary items.

16 BioStar 2 Settings

Site Settings

Site Settings

• Site

Name	Access Group	Card Use	Card Type	Card Data Format	
Suprema 01	Acces...	☒	CSN	None	
Suprema 02	Acces...	☒	Wiegand	26 bit ...	

+ Add

Apply

Item	Description
Site	You can set the access group to use in the visiting PC and managing PC of each site. You can also set whether or not to use cards. If you are using a card, you can also set Card Type and Card Data Format. ▪ Name: You can set the name of site. ▪ Access Group: You can select the access group to assign to the visitor. ▪ Card Use: You can set whether or not to use a card. ▪ Card Type: You can select the type of card to use in the site. The card type is activated only when you select Card Use. ▪ Card Data Format: You can configure the format for reading card data. The Card Data Format is activated only when you set the Card Type to Wiegand. Note ▪ Up to 48 characters may be entered for a site name. Click Apply to save the setting of the site.

Visit PC Settings

Visit PC Settings

1 • Visit PC Setting

Name	Fingerprint Device Name	Card Device Name	Site	
Management PC	Bio...	Bio...	Suprema 01	
Application PC	Bio...	Bio...	Suprema 02	

+ Add

Apply

2 • Visit application page

https://192.168.14.25/#/register_welcome

Drag and drop links from your visiting PC to create shortcuts on your desktop

No	Item	Description
1	Visit PC	You can set the visiting PC and managing PC.

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No.	Item	Description
	Setting	▪ Name: You can set the name of the visiting PC and managing PC. ▪ Fingerprint Device Name: Select a device to enroll visitors' fingerprints when visitors access the site using the fingerprint authentication. ▪ Card Device Name: Select a device to issue the card to visitors when visitors access the site using the card authentication. ▪ Site: Select a site to manage the visit on the visiting PC.  Note ▪ Up to 48 characters may be entered for a name of the visiting PC. ▪ You can use the fingerprint and card device at the same time. You can select only one for each. ▪ You can only select one site per PC. Click Apply to save the setting of the Visit PC Setting.
2	Visit application page	You can create a shortcut icon of Visit application page on the desktop of the visiting PC. Drag and drop the link to the desktop of the visiting PC.

Visit PC Select

Visit PC Select

Visit PC Select
Visiting PC
Apply

Item	Description
Visit PC Select	You can select the PC set in Visit PC Setting and assign it to the current PC. Click Apply to save the setting.

Terms & Visitor Settings

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No	Item	Description
1	Terms and Conditions	You can set the terms and conditions for visitors. Click  to activate the input field and enter the contents of terms and conditions.  Note - Up to 65,535 characters may be entered for the sentence of terms and conditions. - Up to 64 characters may be entered for the sentence of accept terms and conditions.
2	Privacy Policy	You can set the privacy policy for visitors. Click  to activate the input field and enter the privacy policy.  Note - Up to 65,535 characters may be entered for the sentence of privacy policy. - Up to 64 characters may be entered for the sentence of accept privacy policy.
3	Allowed period for credential	You can set the period for keeping personal data that visitors provide when they visit. Click  to activate the input field and enter the number of days to keep personal data.  Note You can delete the visitors that have the personal data expired in

16 BioStar 2 Settings

No	Item	Description
		VISITOR menu.
4	Guide to Completion of Visit	You can set the guide to appear on the screen as a pop-up when a visitor completes an application for a visit. Click  to activate the input field and enter the guide for visitors.  Note - Up to 65,535 characters may be entered for the sentence of guide. - If you do not enter the sentence of a guide, nothing will be displayed on the screen when visitors complete their visit application.
5	Default access period for visitor	You can set the access period for visitors. Click  to activate the input field and enter the default access period for visitors.

Custom Visitor Field

Custom Visitor Field

Custom Visitor Field Settings

Order	Name	Type	Data	
1	purpose of visit	Text Input Box		

+ Add

Apply

Item	Description
Custom Visitor Field Settings	You can add custom visitor fields for extra visitor information and these fields appear on the visit application page. Order: You can set the order of the Custom Visitor Field. Name: You can set the name of the Custom Visitor Field. Type: You can choose the Text Input Box, Number Input Box or Combo Box. Data: Enter the options to appear in the combo boxes. Each item is separated by a semicolon (;). Data is only activated when Type is set to Combo Box.  Note - For a Text Input Box, characters and numbers are allowed.

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Item	Description
	Purpose of visit - For a Number Input Box, numbers are allowed and characters are not allowed. Number of visitors - For a Combo Box, the items that have been set to the field are displayed as item. If you want to configure a combo box field as shown in the screenshot below, you need to enter Option 1;Option 2;Option 3;Option 4 in the data field. Option None None Option1 Option2 Option3 Option4 Click Apply to save the setting of the Custom Visitor Field.

Mobile Access

By linking BioStar 2 and Airfob Portal, you can issue the mobile access cards to users in BioStar 2. Users can be issued mobile access cards through a link received by email or SMS without signing up for Airfob Portal or registering mobile access cards separately.

Note

- Mobile access cards can only use either the CSN Mobile card or Template on Mobile.
- The devices and the firmware versions that can use the CSN Mobile card are as follows.
 - XPass 2 FW 1.1.0 or later
 - XPass D2(Rev 2) FW 1.4.0 or later
 - BioLite N2 FW 1.3.0 or later
 - BioEntry W2(Rev 2) FW 1.6.0 or later
 - FaceStation 2 FW 1.4.0 or later
 - FaceStation F2 FW 1.0.0 or later
 - BioStation 2 FW 1.9.0 or later (Only models with NFC features are compatible.)
 - BioStation A2 FW 1.8.0 or later (Only models with NFC features are compatible.)
 - FaceLite FW 1.2.0 or later
 - X-Station 2 FW 1.0.0 or later
 - BioStation 3 FW 1.0.0 or later
 - BioEntry W3 FW 1.0.0 or later
 - BioStation 3 Max FW 1.0.0 or later

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- The devices and the firmware versions that can use the Template on Mobile are as follows.
 - BioStation 3 FW 1.2.0 or later
 - BioEntry W3 FW 1.0.0 or later
 - FaceStation F2 FW 2.2.0 or later
 - X-Station 2 FW 1.3.1 or later
 - BioStation 3 Max FW 1.0.0 or later

You can set up Suprema Mobile Access as shown below.

Step 1. Join Airfob Portal and open site

In Airfob Portal, you can set up mobile access cards and registration devices, and manage sites and credits.

☑ Related information

[Airfob Portal](#)

Step 2. Configure the Mobile Access in BioStar 2

You can set whether to use the mobile access and manage settings related to Airfob Portal.
You can also register devices to use mobile access cards.

Related information

[Configuring Mobile Access](#)

Step 3. Registering Devices

You can register devices to use mobile access directly from the Airfob Pass application or BioStar 2.

Related information

[Configuring Mobile Access](#)

Step 4. Issuing Mobile Access Card

You can issue mobile access cards to users registered with BioStar 2.
To issue a mobile access card to a user, you must enter user information based on the messaging option.

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Related information

[Adding User Information](#)

[Enroll Mobile Access Card](#)

Airfob Portal

In Airfob Portal, you can set up mobile access cards and registration devices, and manage sites and credits.

- 1) Access the Airfob Portal(<https://portal.airfob.com/en>).
- 2) Click Get Started to sign up and create a site.
- 3) Enter the Airfob Portal administrator's email address in the Email input field and click Get Started. The authentication code will be sent to the email address you entered.
- 4) Enter the authentication code you received in the authentication code field and click Confirm.

Note

- The authentication code is a 6 digit number.

- 5) Check the Privacy and Terms and click Agree.
- 6) Set the password and nickname to use in the Airfob Portal and click Create Account. Creating the account will be completed.
- 7) Click Sign In.
- 8) Enter the email and password, then click Sign In.
- 9) Click Create Site to open the site.

Note

- Site means an organization or company that uses the mobile access.

- 10) Set the name and country of the site, and then click Next.
- 11) Select the site type.

Note

- You can select types either Dynamic or Regular depending on the type of sites or situations.
 - Dynamic: This type allows you to reissue, revoke, or stop mobile access cards or specify the expiration date of it. It deducts credits according to the period of use or devices. Dynamic can be used in gyms, libraries, or shared facilities where it provides membership services.
 - Regular: This type can be used permanently until an administrator deletes the access authority. It deducts credits according to the number of issuances. Regular can be used in

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companies as employee ID cards or access cards.

- BioStar 2 only supports regular card sites. Dynamic cards will be supported in the future.

12) Click Create. Creating the site will be completed.

13) Click the site name to access the Airfob Portal of the site.

Note

- For more information on using the Airfob Portal, see the Airfob Portal(<https://portal.airfob.com/en>).

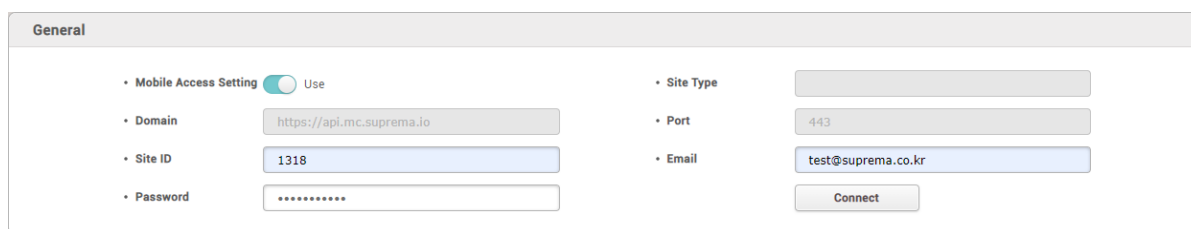
Configuring Mobile Access

You can set whether to use the mobile access and manage settings related to Airfob Portal.

You can also register devices to use mobile access cards.

1) Click Settings > MOBILE ACCESS.

2) Edit the necessary items.



Item	Description
General	▪ Mobile Access Setting: You can set whether to use the mobile access. If you set the Mobile Access Setting to Use, you can issue mobile access cards to users.  Note ▪ To use Mobile Access with BioStar 2, complete the Airfob Portal sign-up and initial setup first. ▪ Site Type: You can see the site type.  Note ▪ You can select types either Dynamic or Regular depending on the type of sites or situations. - Dynamic: This type allows you to reissue, revoke, or stop mobile access cards or specify the expiration date of it. It deducts credits according to the period of use or devices. Dynamic can be used in gyms, libraries, or shared facilities where it provides membership services. - Regular: This type can be used permanently until an administrator deletes the access authority. It deducts credits according to the number of issuances. Regular can be used in companies as employee ID cards or access cards.

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Item	Description
------	-------------

- Domain: You can see the domain address of the Airfob Portal.
- Port: You can see the port number of the Airfob Portal.
- Site ID: Enter the site ID that you created in the Airfob Portal. You can find the site ID in Settings > Site menu of the Airfob Portal.
- Email: Enter the email address of the mobile access administrator.
- Password: Enter the password of the mobile access administrator.
- Device Registration: You can register devices to use the mobile access. Device Registration appears when you complete entering the Domain, Port, Site ID, Email, and Password, and then click Connect to successfully connect to the Airfob Portal.

• Device Registration

Device ID	Device Name	Device Group	IP Address	
Not found				

+ Add

Click + Add to add devices to use the mobile access. The list of devices registered in BioStar 2 is displayed.

Enrollment Device

1 / 1

50 rows

Go

	Device ID	Name	Group	IP Address
☐	547832712	FaceLite 547832712 (192.168.14.240)	All Devices	192.168.14.240
☐	547833190	Xpass2 Keypad 547833190 (192.168.14.233)	All Devices	192.168.14.233

Add

Close

Select the device and click Add.

• Device Registration

Device ID	Device Name	Device Group	IP Address	
547833190	Xpass2 Keypad 547833190 (192.168.14.233)	All Devices	192.168.14.233	

+ Add

The devices that have been added to the list of devices are displayed. Click to resend the mobile access certificate. Click to delete the registered device.

Note

- The devices and the firmware versions that can use the mobile access are as follows.

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Item	Description
	- XPass 2 FW 1.1.0 or later - XPass D2(Rev 2) FW 1.4.0 or later - BioLite N2 FW 1.3.0 or later - BioEntry W2(Rev 2) FW 1.6.0 or later - FaceStation 2 FW 1.4.0 or later - FaceStation F2 FW 1.0.0 or later - BioStation 2 FW 1.9.0 or later (Only models with NFC features are compatible.) - BioStation A2 FW 1.8.0 or later (Only models with NFC features are compatible.) - FaceLite FW 1.2.0 or later - X-Station 2 FW 1.0.0 or later - BioStation 3 FW 1.0.0 or later - BioEntry W3 FW 1.0.0 or later - BioStation 3 Max FW 1.0.0 or later ▪ You can also register devices using the Airfob Pass application. ▪ If you delete the registered device, the mobile access certificate sent to the device will be deleted.

Email Setting

You can set contents such as title, company name, company logo, and contact of email that will send users a visual face mobile enrollment link or issue a QR/barcode.

Note

- Enter user's email address in the **user information** to use visual face mobile enrollment or Secure QR.
- The devices that can use Visual Face are as follows.
 - FaceStation F2, BioStation 3, BioEntry W3
- The devices that can use Use QR/Barcode through Scanner are as follows.
 - X-Station 2 (XS2-QDPB, XS2-QAPB)
- The devices that can use Use QR/Barcode through Camera are as follows.
 - X-Station 2 (XS2-ODPB, XS2-OAPB, XS2-DPB, XS2-APB) firmware 1.2.0 or higher
 - BioStation 3 (BS3-DB, BS3-APWB) firmware 1.1.0 or higher
 - Using Use QR/Barcode through Camera requires a separate device license. For more information, refer to **Device License**.

- 1) Click Settings > EMAIL SETTING.
- 2) Edit the necessary items.

Email Contents Setting

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Email Contents Setting

1

SMTP Setting

SMTP setting

2

Test Mail Recipient Address

Send Email

No.	Item	Description
1	SMTP Setting	Set the SMTP(Simple Mail Transfer Protocol) for sending emails. SMTP Option Sender Information SMTP Server Name Description Server Address Port(default:25) 25 User Name Password Security Type SSL Sender Apply Cancel

SMTP Server Name: Enter the SMTP server name.

Description: Enter the description.

Server Address: Enter the SMTP server address.
SMTP server address is the same form as 'smtp. Email Service Provider.com', and you can check it on the settings screen of email to use as an SMTP .

Port (default:25): Enter the port number of the SMTP server. you can check it on the settings screen of email to use as an SMTP.

User Name: Enter the account of the SMTP service.

Password: Enter the password of the SMTP service.

Security Type: Select security type.

Sender: Enter the email address of the sender.

Note

For more information on SMTP information, contact your system administrator.

When using the SMTP server as an email account with two-factor authentication and

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No.	Item	Description
		change the password of the account, note the following: Once you set up two-factor authentication, the SMTP password is the same as the app password generated using two-factor authentication, not the password of the email account. At this time, if the password of the email account is changed, the app password is automatically deleted, and the SMTP password is no longer available. When changing the password for the email account, regenerate the app password and then set the SMTP password again.
2	Test Mail Recipient Address	Enter an email address to receive the test email and click Send Email.

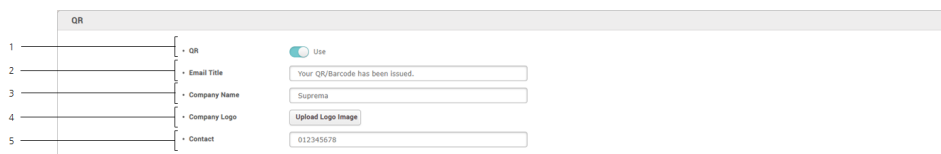
Visual Face Mobile Enrollment

No.	Item	Description
1	Visual Face Mobile Enrollment	To use the visual face mobile enrollment set it as Use. If you set it as Not Use, it will be unable to send the visual face mobile enrollment link to users.
2	Email Title	Enter the title of the email.
3	Company Name	Enter the company name.
4	Company Logo	Upload the company logo image.  Note - Supported image file formats are GIF, JPG, JPEG, JPE, JFIF, PNG. - Supported image file size is up to 5MB.

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No.	Item	Description
5	Contact	Enter the contact information of the person in charge.
6	Footer	Enter the content to notify the user who is enrolling the visual face, such as a legal notice. It appears at the bottom of the email.  Note Footer can be up to 5,000 characters in length.

QR



No.	Item	Description
1	QR	To use the QR/Barcode set it as Use. If you set it as Not Use, it will be unable to issue the QR/Barcode to users via email.
2	Email Title	Enter the title of the email.
3	Company Name	Enter the company name.
4	Company Logo	Upload the company logo image.  Note - Supported image file formats are GIF, JPG, JPEG, JPE, JFIF, PNG. - Supported image file size is up to 5MB.
5	Contact	Enter the contact information of the person in charge.

3) Click Apply to save the settings.

License

Activate BioStar 2 License and Device License.

16 BioStar 2 Settings

 Note

- To check the license error code, please refer to [Link](#).

BioStar 2 License

- 1) Click Setting > LICENSE.

BioStar 2 License

Access Control

• Applied License

Advanced

• Issued to

BioStar2ADV

• Expiry date

2023/04/18

Time Attendance

• Activate License Online

Name

Activation Key

Activate

• Activate License Offline

Request offline key

Activate

Video

• Activate License Online

Name

Activation Key

Activate

• Activate License Offline

Request offline key

Activate

Visitor

• Activate License Online

Name

Activation Key

Activate

• Activate License Offline

Request offline key

Activate

Item	Description
BioStar 2 License	You can activate the purchased BioStar 2 license. To activate the BioStar 2 license online, click Activate after entering your name and the activation key that you've received from Suprema. To activate the BioStar 2 license offline, click Request offline key, then the Activate License Offline dialog will appear. Follow the instructions on the dialog.

Device License

Activating a device license issued by Suprema allows using specific features corresponding to the license.

Contact the place of purchase to issue a device license.

Device license can be activated on the device using BioStar 2 and USB memory.

 Note

- One feature is available per device license.
- You can include multiple device licenses in one device license file. (Supports up to 100)
- The device license file is an encrypted file and cannot be modified

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arbitrarily.

- Device licenses are issued based on device ID. If the device ID is changed in an unusual way, the warranty service for the license is not provided.

1) Click Setting > LICENSE.

The screenshot shows the 'Device License' configuration window. It includes a 'License File' field with a 'Browse' button, a 'License Type' dropdown, a 'Device Count' field, and a 'Device List' table. Annotations 1 through 5 point to these elements respectively.

Device ID	Device Name	Product Name	Device Status	License Status	Activated Count
432073370	CoreStation 40 432073370 (192.168.40.164)	CS-40	Normal	Not Activated	4 / 8
432073371	CoreStation 40 432073371 (192.168.40.164)	CS-40	Normal	Activated	8 / 8
432073372	CoreStation 40 432073372 (192.168.40.164)	CS-40	Disconnected	N/A	-
432073373	-	-	Unregistered	N/A	-

No.	Item	Description
1	License File	Click Browse to load the device license file from the path where the device license is saved, and License Type, Device Count, and Device List are displayed.
2	License Type	Check the type of license included in the device license file. - Camera QR - Note - Devices that can use Camera QR are as follows. - X-Station 2 (XS2-ODPB, XS2-OAPB, XS2-DPB, XS2-APB) firmware 1.2.0 or higher - BioStation 3 (BS3-DB, BS3-APWB) firmware 1.1.0 or higher - XPass Q2 firmware 1.0.0 or higher - Wireless Door Lock - Note - Supported OSDP antenna and wireless door lock are as below: - U&Z OSDP Antenna: CX8936 - U&Z Wireless Door Lock: CX217x (Handle), CX212x (Knob) - You can issue a device license for up to 12 devices equal to the number of wireless door locks you want to connect.

16 BioStar 2 Settings

No.	Item	Description
		The maximum number of wireless door locks that can be connected with a device license is 12. Even if you activate multiple device licenses, you cannot exceed 12 devices.
3	Device Count	Check the number of devices included in the device license file.
4	License Count	Check the number of Wireless Door Locks that can be activated with a device license.  Note This item only appears when a Wireless Door Lock device license is activated.
5	Device List	- Device ID: Displays the unique ID of the device. - Device Name: Displays the device name. - Product Name: Displays the model name of the device. - Device Status: Check the device status. Only devices in Normal state can activate licenses. - Normal, Disconnected, Not Supported, Unregistered - License Status: Displays whether the license is activated. Only Not Activated devices can activate licenses. - Not Activated, Activated, N/A - Activated Count: Check the connection current situation of Wireless Door Locks.  Note - This item only appears when a Wireless Door Lock device license is activated.

- After checking the device list, click Activated to activate the device license. If the license activation fails, an activation failed message is displayed and you can try to activate the license again.

Card Printer

In the CARD PRINTER menu, BioStar 2 and cardPresso can be linked to print a card with a design the user wants from BioStar 2.

 Note

16 BioStar 2 Settings

- To use the card printer feature, you must activate the license issued by cardPresso.
 - License type: cardPresso XXL edition
- Install cardPresso on the PC where BioStar 2 is installed.

- 1) Click Settings > CARD PRINTER.
- 2) Edit the necessary items.

Card Printer

General

- cardPresso Setting: ☒ Use
- ID:
- Password:
- Card Template:

No	Name	Use as default	
1	C:\template\example.card	☐	
2	C:\template\example2.card	☒	
- IP Address:
- Port:
- Printer Name:
- Card Template Print Test:

Item	Description
cardPresso Setting	Set whether to use a card printer.
ID	Enter your cardPresso login ID. The default ID is 'ADMIN'.
Password	Enter your cardPresso login password. The default password is 'admin'.
IP Address	Enter the IP address of the PC that runs the cardPresso web print server.
Port	Enter the port number used by cardPresso to receive print operations.
Printer Name	Enter the name of the printer to be used as a card printer. It can be found in the Windows Control Panel > Devices and printers.
Card Template	Click + Add to add a card template. For Name, enter the full path including the card template file name and extension. Note ▪ The file name of the card template can be entered using alphanumeric, and special characters. ▪ Up to 20 card templates are supported. ▪ Example path: C:\W template\W example.card ▪ For details on how to create a card template, refer to the cardpresso manual.

16 BioStar 2 Settings

Item	Description
Card Template Print Test	Test print the card template.

- 3) Click Apply to save the settings.

System Backup

The SYSTEM BACKUP menu backs up important information such as BioStar 2's database, various settings, key values, etc.

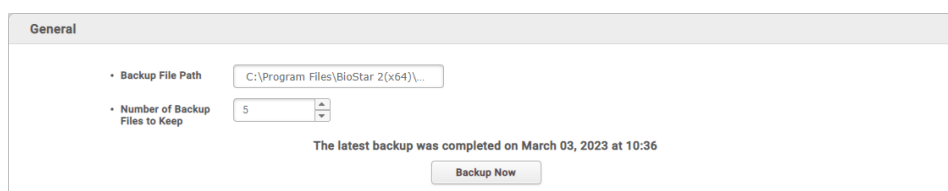
Note

- If the MSSQL database and BioStar 2 are installed on different PCs, BioStar 2 System Backup and Restore cannot be used.

General Backup

Set the necessary items for system backup.

- 1) Click Settings > SYSTEM BACKUP.
- 2) Edit the necessary items.



Item	Description
Backup File Path	Set the path to save the backup file.  Note ▪ The save path must be set to a directory that has already been created.
Number of Backup Files to Keep	Set the maximum number of backup files.  Note ▪ If the maximum number of backups are exceeded, the oldest backup files are automatically deleted. ▪ Number of Backup Files to Keep, only numbers

16 BioStar 2 Settings

Item	Description
	between 1 and 100 are entered.
Backup Now	To back up manually, click Backup Now.

- 3) Click Apply to save the settings.

Automatic System Backup

Set the system to back up automatically.

- 1) Click Settings > SYSTEM BACKUP.
- 2) Edit the necessary items.

Item	Description
Frequency	Select the automatic system backup frequency as Daily / Weekly / Monthly.
Day	When Frequency is set to Weekly, set the day of the week to automatically system backup.
Date	When Frequency is set to Monthly, set the date of the month to automatically system backup.  Note ▪ When set to the 29th, 30th, or 31st, automatic system backup will not run for months without the corresponding date.
Time	Set the time to automatically system backup.  Note ▪ Based on the time zone set in BioStar 2.

- 3) Click Apply to save the settings.

16 BioStar 2 Settings

🕒 Related Information

System Restore

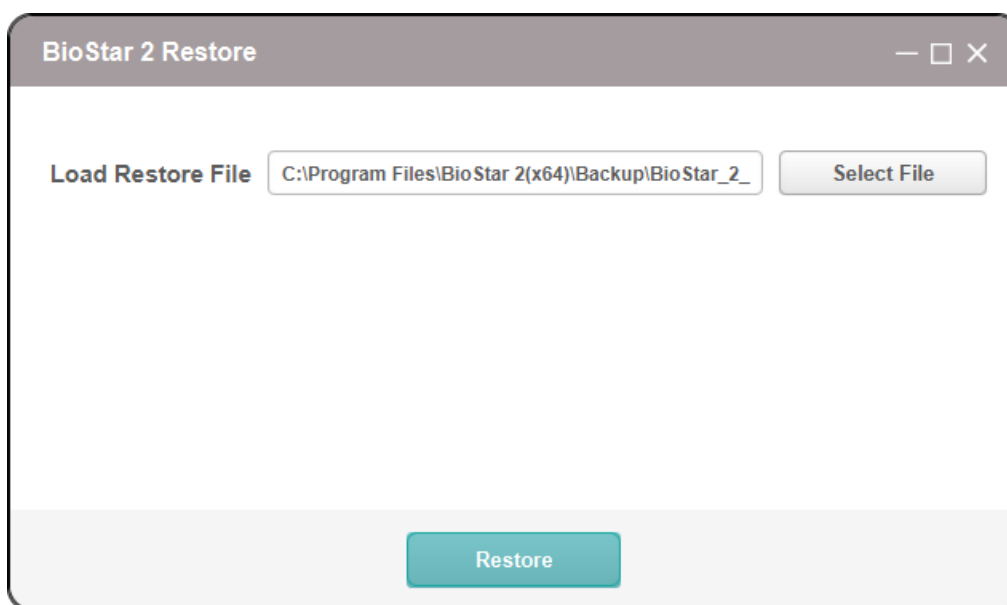
System Restore

If BioStar 2 does not operate normally, it can use the BioStar 2 Restore program to restore backed up files by selecting a restore point.

📌 Note

- If the MSSQL database and BioStar 2 are installed on different PCs, BioStar 2 System Backup and Restore cannot be used.

- 1) Run  Start > BioStar 2 > BioStar 2 Restore.
- Program path: C:\Program Files\BioStar 2(x64)\biostar-restore.exe
- 2) Click Select File to select the saved backup file and then click Restore to start restoring.



- 3) Starting Biostar services...Done messages displayed and restoration is completed.
- 4) Reconnect to BioStar 2.

📌 Note

- If the BioStar 2 version at the time of backup is different from the current version, the restoration will not proceed.

Custom Interface

Quick Action Layout

16 BioStar 2 Settings

You can add Quick Action button to the main screen.

Note

- For more information, refer to [How to Use the Quick Action](#).

For any inquires or technical support concerning BioStar 2, please contact the Suprema Technical Support Team (<https://support.supremainc.com>).

For efficient technical support, please provide the following information.

- Company name, your name and job title, country information (regional information), contact information and the best time to reach you
- Current BioStar 2 version and device models (examples: BioStar 2 V1.0.233, BioLite Net)
- Details of the error message
- BioStar 2 system log
- Description of your symptom and problem

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just-in-time compiler that can be used to optimize pattern matching. These are both optional features that can be omitted when the library is built.

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Redux Toolkit

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Autoprefixer

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Axios

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Classnames

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Day.js

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i18next-http-backend

<https://www.npmjs.com/package/i18next-http-backend>

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Immer

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prop-types

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React Hook Form

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React-dom

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REACT ROUTER-dom

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react-number-format

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redux-persist

<https://github.com/rt2zz/redux-persist>

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ngStorage

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moment.js

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async.min.js

<https://github.com/caolan/async>

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ngDraggable.js

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mssqlJdbc

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hibernate

<https://hibernate.org>

LGPL 2.1

Most Hibernate projects are released under LGPL v2.1.

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More detailed explanation

The original version of the LGPL was written in 1991 with embedded C programming in mind, before Java existed. This has sometimes led to questions about how to interpret LGPL in a Java context. The “L” in LGPL originally stood for “library”; LGPL was designed to enable libraries to be used by proprietary applications in situations that might be impermissible under the ordinary GPL. For this reason, the LGPL is classified as a “weak copyleft” license, in contrast to the GPL which is considered a “strong copyleft”. The “L” in LGPL was later reinterpreted to mean “lesser”, to communicate the fact that it has more limited scope than the GPL and is not meant exclusively for libraries.

By the 2000s, the LGPL had become one of the most widely used and best known open source licenses. At this time, some Java developers naturally began to adopt the LGPL for their projects as a more permissive and flexible alternative to the GPL. For projects like Hibernate, the LGPL had a simple interpretation in the Java setting, which can be summarized as follows:

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Use in GraalVM native images

Recently there has been interest in native compilation for Java using tools like GraalVM, such as commonly used in frameworks like Quarkus. The view of the Hibernate maintainers is that native compilation is a technical detail that does not fundamentally change how LGPL works for Java code. In a native image that includes LGPL-licensed code from Hibernate, the Hibernate code remains under the terms of the LGPL, but the other code in the generated binary is not affected by the licensing of the Hibernate code.

ASL 2.0

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`*/`

(By Douglas Crockford <douglas@crockford.com>)

For lib/cpp/src/thrift/windows/SocketPair.cpp

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For lib/py/compat/win32/stdint.h

`// ISO C9x compliant stdint.h for Microsoft Visual Studio`

`// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124`

`//`

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//  
////////////////////////////////////
```

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IN NO EVENT WILL COMPANY BE LIABLE TO YOU FOR ANY SPECIAL, INCIDENTAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF DATA, LOSS OF BUSINESS PROFITS OR ANY OTHER PECUNIARY LOSS) OR FOR THE COST OF PROCURING SUBSTITUTE PRODUCTS ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE EXECUTION OF OR INABILITY TO EXECUTE THE SOFTWARE, WHETHER SUCH LIABILITY ARISES FROM ANY CLAIM BASED UPON CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, AND WHETHER OR NOT COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE. THE FOREGOING LIMITATIONS WILL SURVIVE AND APPLY EVEN IF ANY LIMITED REMEDY SPECIFIED IN THIS AGREEMENT IS FOUND TO HAVE FAILED OF ITS ESSENTIAL PURPOSE.

10. Refund Policy.

Your Local Distributor has the obligation and responsibility to refund the license fee paid (if any) and the fee will be refundable in accordance with the refund policy of your Local Distributor. If you are unwilling to install or use the Software, you must click "I do not accept" or otherwise may not install or use the Software and you must ask your Local Distributor for a full refund of the fee within 30 days after the date of purchase. Once you click "I Accept" and enter the serial number of the Software, it will be deemed to have been used, and thus, you will not, under any circumstances, be entitled to any license fee paid.

11. Indemnities.

You shall indemnify, defend and hold Company and its affiliates and subsidiaries harmless from and against any and all claims, including, but not limited to, the claim in relation to: (a) your infringement of any intellectual property, privacy or other rights of any third party; (b) injury to or death of any person(s) or damage to or loss of property; (c) your breach of any term in this Agreement; and/or (d) your violation of applicable law. In such a case, Company will provide you with written notice of such claim, suit or action.

12. Export Law.

You agree to comply fully with all export or import controls imposed by the country of origin, destination or use, including regulations under such laws. You agree not to export or re-export (directly or indirectly) to ensure that neither the Software nor any technical data related thereto nor any direct product thereof are exported or re-exported directly or indirectly in violation of, or used for any purposes

18 Appendix

prohibited by, such laws and regulations.

13. Governing Law.

This Agreement will be governed by and construed in accordance with the laws of the Republic of Korea, without regard to or application of conflict of laws rules or principles. The United Nations Convention on Contracts for the International Sale of Goods will not apply.

14. Arbitration.

In the event of any dispute controversy or claim arising out of, or in connection with, or relating to this Agreement, or the breach, termination or invalidity of this Agreement, all attempts shall be made to solve it through mutual consultation in a spirit of confidence and integrity. If all attempts so made through mutual consultations have proved to be of no help within a reasonable time, arbitration rather than legal proceedings shall solve it. The matter shall be finally settled by arbitration in Seoul, Korea in accordance with the Domestic(International) Arbitration Rules of the Korean Commercial Arbitration Board and under the Law of Korea.

15. General.

You may not assign or transfer this Agreement or any rights granted hereunder, by operation of law or otherwise, without Company's prior written consent, and any attempt by you to do so, without such consent, will be void. Except as expressly set forth in this Agreement, the exercise by either party of any of its remedies under this Agreement will be without prejudice to its other remedies under this Agreement or otherwise. All notices or approvals required or permitted under this Agreement will be in writing and delivered by electronic mail, confirmed facsimile transmission, by overnight delivery service, or by certified mail, and in each instance will be deemed given upon receipt. All notices or approvals will be sent to the addresses set forth in the applicable ordering document or invoice or to such other address as may be specified by either party to the other in accordance with this section. The failure by either party to enforce any provision of this Agreement will not constitute a waiver of future enforcement of that or any other provision. Any waiver, modification or amendment of any provision of this Agreement will be effective only if in writing and signed by authorized representatives of both parties. If any provision of this Agreement is held to be unenforceable or invalid, that provision will be enforced to the maximum extent possible, and the other provisions will remain in full force and effect. This Agreement is the complete and exclusive understanding and agreement between the parties regarding its subject matter, and supersedes all proposals, understandings or communications between the parties, oral or written, regarding its subject matter, unless you and Company have executed a separate agreement. Any terms or conditions contained in your purchase order or other ordering document that are inconsistent with or in addition to the terms and conditions of this Agreement are hereby rejected by Company and will be deemed null.

16. Contact Information.

If you have any questions regarding this Agreement, please visit <https://www.supremainc.com/en/support>.

18 Appendix

Starting with BioStar v2.9.5, Feature Guide is provided separately by topic on how to use new or improved features.

Click on the desired guide below to view it in web format.

BioStar 2.9.12

[Setting Remote Access](#)

BioStar 2.9.11

[Setting Master Admin](#)

BioStar 2.9.10

[CoreStation 20 Setup and Door Creation](#)

[Setting Facility Code Authentication for Offline Mode in Door Interface](#)

[Directory Integration Settings](#)

BioStar 2.9.8

[Setting Denial of Authentication When Wearing a Mask](#)

[Uploading Files to User Information](#)

[Displaying User Private Messages on Devices](#)

[Updated Timed Anti PassBack](#)

[CSN Mobile Card Deletion Management Guidelines](#)

[Other Updates and Improvements](#)

BioStar 2.9.7

[Logging in Biostar 2 with Multi-Factor Authentication](#)

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Synchronizing Visual Face as Template Only

BioStar 2.9.5

How to Use the New Dashboard

How to Use the Quick Action

How to Set Up the Timed Anti Passback

How to Search for Users With Advanced Search

How to Enroll Profile Photo & Visual Face Using a Webcam

How to Use a Wireless Door Lock

How to Use the Unified Gateway

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