# BioStar 2 Revision Notes

Version 2.8.3



# Precautions when upgrading BioStar 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.x or 2.7.x > 2.8.x
2.2	2.3 > 2.4 > 2.4.1 > 2.5.0 > 2.6.x or 2.7.x > 2.8.x
2.2.1	2.3 > 2.4 > 2.4.1 > 2.5.0 > 2.6.x or 2.7.x > 2.8.x
2.2.2	2.3 > 2.4 > 2.4.1 > 2.5.0 > 2.6.x or 2.7.x > 2.8.x
2.3	2.4 > 2.4.1 > 2.5.0 > 2.6.x or 2.7.x > 2.8.x
2.4	2.4.1 > 2.5.0 > 2.6.x or 2.7.x > 2.8.x
2.5	2.6.x or 2.7.x > 2.8.x
2.6	2.8.x
2.7	2.8.x

If you are using Windows 8.1 or Windows Server 2012 R2, install the KB2919355 update by referring to the following web page.

https://support.microsoft.com/en-us/help/2919355/windows-rt-8-1--windows-8-1--and-windows-server-2012-r2-update-april-2

• If MS SQL Server and BioStar 2 are installed on different PCs, you should install the Native Client on a PC with BioStar 2 installed.

https://www.microsoft.com/en-us/download/details.aspx?id=50402

- · 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 2.8.3, be sure to also back up the enckey in the \Program Files\BioStar 2 (x64)\util folder. Otherwise, the database will be unavailable.

# Version 2.8.3 (Build No. 2.8.3.10)

Release: 2020-07-21

#### 1. Main Fixes

- 1.1. The device rebooted abnormally when adding the device while Secure Communication with Device is on.
- 1.2. An error occurred when exporting user data to FaceStation 2.
- 1.3. The event log and the real-time log did not display Muster zone time limit event when logged in as a custom level operator.
- 1.4. When accessing as a custom level administrator with the permission for some the intrusion alarm zones, the event logs without zone IDs were not displayed when logged in as a custom level operator with permission on Intrusion alarm zones.
- 1.5. When using a large number of user groups, some user groups did not appear on the monitoring menu.
- 1.6. When the language is set to Spanish, the month, and day of the week were not displayed in the schedule of the TIME ATTENDANCE menu.
- 1.7. When device connect and disconnect were abnormally repeated, the server responds slowly.
- 1.8. An error occurred if the following actions are executed when logged in as a custom level operator who has permission to modify a specific user group and users.
  - Selecting a user and executing CSV export.
  - Selecting a user and then printing.
  - Entering the Status tab of the user menu.
  - Disabling of Anti-Passback for specific users.
- 1.9. Image log files were not encrypted.
- 1.10. When using Personal Information DB Encryption, if a user having a mobile access card gets deleted, the card was deleted in BioStar 2, but not in the Suprema Airfob portal.
- 1.11. Intrusion detection log was not displayed in the real-time log.

## 2. New Features and Improvements

- 2.1. Supports Zone in the Admin Item Settings of the custom level.
- 2.2. Supports FaceStation 2 and FaceLite as a slave of CoreStation.
- 2.3. Renamed 'Mobile Access' service name.
  - Before: Mobile Credential
  - After: Mobile Access
- 2.4. Supports Mobile Access on BioLite N2.
- 2.5. Improvemed user group tree output performance while massive user groups (20,000 or more groups) are used.
- 2.6. Supports operation options on Anti-Passback zone to operate based on the door status.
- 2.7. Improved the scheduled unlock zone function to support elevator.
- 2.8. Improved Trigger & Actions to be able to use the output port of the BioStation 2.

Improved db-converter to check the error during query execution when installing BioStar 2. Updated language resource files.

# Version 2.8.2 (Build No. 2.8.2.3)

Release: 2020-07-10

- 1. New Features and Improvements
  - 1.1. Fixed local file inclusion (LFI) vulnerability.
    - The vulnerability that could allow an attacker to gain local access via a web browser.

# Version 2.8.1 (Build No. 2.8.1.35)

Release: 2020-06-10

#### 1. Main Fixes

- 1.1. When connecting as an administrator with device and user viewing privileges, only the event log containing both the device ID and user ID is displayed.
- 1.2. When setting up some languages, some functions of the TIME ATTENDANCE menu does not work properly.
  - Even if a user logs in as an administrator who has a reading permission for the TIME ATTENDANCE menu, only certain screens of the menu are displayed.
  - PDF export for daily reports does not work properly.
  - PDF export of the individual reports updated by selecting the 'All Punches' option does not work properly.
  - Unable to output some selection items on the Rule setting page.
- 1.3. Some TA reports are only displayed in portrait format from print preview screen when exporting to PDF.
- 1.4. In the environment using MS SQL Server database, after importing users when the user ID type is set to Number, the user list cannot be displayed correctly.
- 1.5. When importing a CSV file without the mobile credential column, the result pop-up message does not show.
- 1.6. When migrating from BioStar 1.x to BioStar 2.x, the existing users and user groups of BioStar 2 are not deleted.
- 1.7. In the environment using MS SQL Server database, the automated emails of Working Alarm Time Report are sent only once a week even if setting to send more than twice a week.
- 1.8. The individual report does not work as the column setting of the saved filter.
- 1.9. Even if connecting as an administrator with only devices, users, doors, and elevators reading permissions, the real-time logs and alarms of objects for which the administrator has no permission are shown.
- 1.10. Fixed to not access cache memory simultaneously.
- 1.11. When using personal information DB encryption, card authentication fails if an administrator sets to use server matching.
- 1.12. Users are not synchronized to the TIME ATTENDANCE menu intermittently.
- 1.13. BioStar 2 cannot be upgraded when installed using MS SQL Windows authentication.

#### 2. New Features and Improvements

- 2.1. Supports MS SQL Server 2019.
- 2.2. Updated BioStar 2 copyright year.
- 2.3. Moved the 'In/Out Punches' and 'All Punches' options in the Individual Report.

- 3.1. Even if the user ID type is set to Number, an alphanumeric ID will be registered when registering the user through the API or device.
- 3.2. The CSV export on TA report does not work properly if an administrator moves the user group which is placed before the 1,000th unit to the subordinate folder of the user group which is placed after the 1,000th unit when the created user groups are more than 1,000 units.
- 3.3. The failed pop-up message is not displayed for users who failed to import due to mismatch of user ID type when importing user list by importing data files.
- 3.4. If the path related to ngrok in setting.conf is different from the actual ngrok installation path, the cloud will not work properly.
- 3.5. When migrating from BioStar 1.x to BioStar 2.x, the cards duplicated in BioStar v1.x cannot be assigned to users in BioStar 2.
- 3.6. When migrating from BioStar 1.x to BioStar 2.x, if the administrator sets the CSN type to LSB, the custom ID migration fails.
- 3.7. When connecting as a visitor operator, the custom visitor field does not appear on the visitor settings page.
- 3.8. The set number of days is counted incorrectly when setting the leave on the Schedule of the TIME ATTENDANCE menu.
- 3.9. When the language is set to Korean, if an administrator exports the updated individual report to CSV or PDF by selecting the 'All Punches' option, some column names are displayed differently from the client.
- 3.10. Fixed the individual report column settings to be displayed differently depending on the 'In/Out Punches' or 'All Punches' options.
- 3.11. PDF export of the individual reports does not work properly.
  - The date is not displayed on the first page.
  - Unnecessary pages are shown.
- 3.12. 'All Users' is displayed in English even if it is set as a language other than English when accessing the user menu in GNB.
- 3.13. Day start time and end time of time segment were able to be set to the same when Shift is set to Fixed or Floating.
- 3.14. The leave column in daily or individual reports does not appear in a clickable form.
- 3.15. Administrators other than the first administrator cannot activate the cloud.
- 3.16. Delete unnecessary device security communication codes in server settings.
- 3.17. CSN is not added when adding a user by importing CSV in version 2.7.14.
- 3.18. Two or more schedules were able to be set in the same period for the same user.
- 3.19. When exporting the individual report to PDF with "All Punches" option selected, the title information of each date is not displayed.

# Version 2.8.0 (Build No. 2.8.0.106)

Release: 2020-05-15

## 1. Main Fixes

 Firmware upgrade does not succeed properly when using 'Secure Communication with Device' option.

## 2. New Features and Improvements

- 2.1. DB encryption to enhance security on personal information
  - Encrypts 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, and image logs.
  - Supports manual key storage path setting for encryption key.
- 2.2. Changed to allow upgrading from BioStar 2.6.0 or higher to the latest version.
- 3. Bug Fixes
  - 3.1. An issue when using 'Secure Communication with Device' generates a false error indicating Wiegand readers cannot be used since the firmware or device does not support the option.

# Version 2.7.14 (Build No. 2.7.14.52)

Release: 2020-04-03

#### 1. Main Fixes

- 1.1. Slow loading of BioStar 2 when there are a large number of created user groups.
- 1.2. A problem where the offline activation for AC, TA, Video and Visitor licenses doesn't work properly in version 2.7.11 and 2.7.12.
- 1.3. When the license for TA is activated offline, offline activation for other licenses cannot be performed without refreshing or reentering the server menu.
- 1.4. In the environment using MS SQL Server database and when two or more <Trigger & Action > of the device were created, setting different actions for the same trigger causes an error.
- 1.5. Error occurs when installing BioStar 2 on any path other than the default installation path.
  - The service does not start normally.
  - The page does not load when connecting via HTTPS from a web browser.
- 1.6. User menu cannot be accessed properly by other clients at the same time when a user's face is being registered.
- 1.7. If User ID Type is set as alphanumeric, authentication succeeds even with AoC (Access on Card) registered on a blacklist.
- 1.8. When the User ID Type is set to alphanumeric, an error occurs if the user ID registered directly on the device contained a space or some symbol (,).
  - When entering the setting page of the device from the BioStar 2, BioStar 2 is abnormally terminated.
- 1.9. Problems with user group information not being display normally on the Schedule setting screen of the TA menu when there are more than 1,000 user groups created.
- 1.10. Printing of a user list doesn't work properly when there are a large number of registered users.
- 1.11. Event logs not transferred to the server when the device gets disconnected from the server and then reconnected following by a certain condition.
- 1.12. Problem where the device is not displayed in the list if the user doesn't click the refresh button after changing the port of the USB Device Agent.
- 1.13. When upgrading the version of BioStar 2, db-converter error log occurs.
- 1.14. Punch log manually entered by the administrator does not appear in the individual report correctly when updated with the 'All In/Out Punches' option selected.
- 1.15. When there are a large number of registered users, the print preview screen of the user list shows only some users.

## 2. New Features and Improvements

- 2.1. Support for connecting new devices.
  - XPass D2 (Rev 2)
- 2.2. Enhancement in Mobile Credential usage.
  - Added feature to send mobile credential certificates directly to connected devices on the BioStar 2.

- 2.3. Supports MS SQL Server 2017.
- 2.4. Supports Windows Authentication for MS SQL database server connections.
- 2.5. Added option to receive results sorted as desired when retrieving event logs using api/events/search from the BioStar 2 local API.
- 2.6. Stabilization of 'Specific Devices' Automatic User Synchronization option
  - Improved synchronization speed.
  - Improved to synchronize only devices that belong to the corresponding access level or floor level
  - Improved the problem of changes not being applied properly if the user group is changed by drag-and-drop when access groups are set as user groups.
- 2.7. Added Floor Control API to BioStar 2 API Documents.
- 2.8. Allowed additional symbols (-, \_) in the user's email account field.

- 3.1. An issue where the number of user faces registered on the BioStar 2 server is 3,000 or more, a face cannot be set in the authentication mode even though the number stored on the FaceStation 2 is less than 3,000.
- 3.2. A bug where signal setting changes in <Trigger & Action> of a device does not get applied properly.
- 3.3. A bug when using the USB fingerprint scanner, the fingerprints cannot be registered in ISO, ANSI378 template formats.
- 3.4. Removed unnecessary UI from the setting pages of BioEntry R2 and XPass D2.
- 3.5. A bug where the text of each item displays in overlap on the image log screen when the language is set as Russian.
- 3.6. A problem where the CSV user import list not being displayed properly.
  - Some characters in user IDs are missing.
  - Some users are missing.
- 3.7. Incorrect messages when clicking a cell that does not have the time value in the IN or Out column from the individual report updated with the 'All In/Out Punches' option selected.
- 3.8. Incorrect labeling in the individual report updated with the 'All In/Out Punches' option selected.
  - 'Meal Start', 'Break Start' incorrectly output to 'In'.
  - 'Meal End' and 'Break End' incorrectly output to 'Out'.
- 3.9. A bug when the 'First check-in Last check-out' option is not enabled, events without punch type does not appear in the individual report when updated with the 'All In/Out Punches' option selected.

# Version 2.7.12 (Build No. 2.7.12.39)

Release: 2020-01-15

#### 1. Main Fixes

- 1.1. A problem where BioStar 2 server does not start correctly when a certain Windows OS event does not exist.
- 1.2. Improved Muster Zone to not fall into a deadlock while processing event logs.
- 1.3. A bug in TA module where it did not allow the next leave's start time to overlap the previous leave's end time.
- 1.4. Improved performance when having a great deal of user groups.
- 1.5. An issue where access through BioStar 2 Cloud doesn't work due to an abnormal behavior of
- 1.6. An issue where access through BioStar 2 Cloud doesn't work due to an automatic update on ngrok.
- 1.7. Fixed TA module to update reports related to break time properly.
- 1.8. Fixed the 'Specific Devices' Automatic User Synchronization option to work accurately when users are created using CSV import.

## 2. New Features and Improvements

- 2.1. Added the new Suprema Mobile Credential.
- 2.2. Stabilized 'Specific Devices' Automatic User Synchronization option.
- 2.3. Improved TA module to allow generating reports simultaneously on multiple clients.
- 2.4. Applied code signing on BioStar2 installer including executables and library files.
- 2.5. Changed version of Java due to subscription policy on versions higher than 1.8.0\_201.
  - Before: 1.8.0 231 After: 1.8.0 201

- 3.1. An issue where Chinese characters were not displayed correctly on the exported PDF TA report.
- 3.2. A bug in an environment using MS SQL Server database where the results are not correct when searched in languages using Unicode.
- 3.3. An issue where the user does not get displayed on the user list properly due to a bug when CSV file contains user group information.
- 3.4. A bug where 'Image Log' did not work correctly with 'Access Denied(Anti-tailgating)' event.
- 3.5. An issue where a custom level administrator with permission only on a specific user group could view all user's real-time logs.
- 3.6. A bug where 'Time Code' does not appear from the <Rule> menu on TA module when the language is set as Japanese.
- 3.7. A bug where the action of 'Trigger & Action' configuration from device disappears after saving the settings.

3.8.	An issue where an error occurs when updating the TA report that has data exceeding the maximum length of the 'Exception' column.
3.9.	Fixed an error message that shows inaccurate status.  - Incorrect password popup displays when the BioStar 2 server cannot connect to the database.

# Version 2.7.11 (Build No. 2.7.11.65)

Release: 2019-12-04

#### 1. Main Fixes

- Even though the card type is changed on the Device setting page, the setting is not applied.
- The CPU usage increases because the event log import module operates continuously without idle time.

#### 2. New Features and Improvements

- 2.1. Enhanced Security Settings
  - Added logic to check file extensions to limit malicious file uploads.
  - Improved to select whether to allow simultaneous access using the same account.
  - Limited to connect only when the IP information of the account and the IP information of the accessing PC match when logging in by adding an IP address item to the user information.
- 2.2. Added 'Specific Devices(Only devices belonging to the access group)' option to <Automatic User Synchronization>.
- 2.3. Improved 'Alert List' and 'Alarm Monitor' features to reduce the load time of the dashboard page.
  - Changed icons and phrases.
  - Changed to output only alert list of the last 6 months.
  - Changed to output only the last 15 alarms out of those that have not been checked in the last 6 months.
- 2.4. Applied the latest BioMini Plus SDK library to the USB Device Agent.
- 2.5. Supports the alert sound for 'Input(Event Name Change)' in the <Trigger & Action> of the device.
- 2.6. Supports the sorting of lists for the User Group column of the <Muster Status> page on the MONITORING menu.
- 2.7. Supports the sorting of lists according to the <User ID Type> settings.
  - The 'ID' column of the user list on the USER menu
  - The 'User ID' column of the <Muster Status> page on the MONITORING menu
  - The list of 'User' on the Add New Access Group page
- 2.8. Changes the Java version.

- Before: 1.8.0 221 - After: 1.8.0 231

- 3.1. When using the CoreStation as multiple elevator controllers, the logic for checking the maximum number of connections (32) does not work.
- 3.2. When stopping the BioStar 2 server, related processes such as Java.exe and node.exe do not
- 3.3. The Cloud Use setting is changed to 'Not Use' when upgrading the version of BioStar 2.

- 3.4. Emails aren't sent even though automatic emails for overtime have been set up.
- 3.5. The 'ACB\_ERROR\_CODE.150' error occurs because the current time value was not entered normally when setting the elevator.
- 3.6. The image file storage path changes to a wrong path when the image log delete option is enabled.
- 3.7. The timeout event in the muster zone does not function properly.
- 3.8. The button to go to the last page on the Audit Trail page does not function properly.
- 3.9. The added device list does not display properly on the screen.
- 3.10. Modified to install the BioStar 2 properly even if some setting is missing in Setting.conf file when upgrading the version.
- 3.11. The values entered in custom user fields are not reflected in the T&A report.
- 3.12. Stabilization of Time Attendance
  - Users are not synchronized to the TIME ATTENDANCE menu.
  - The TIME ATTENDANCE menu is not loaded properly.
- 3.13. Stabilization of the Swagger API
  - Even if the parameter of /api/devices is not mandatory in the Swagger API, the query is impossible if the value is not selected.
  - Duplicate description of two different APIs

# Version 2.7.10 (Build No. 2.7.10.21)

Release: 2019-09-19

#### 1. Main Fixes

- 1.1. When the User ID Type is set to Alphanumeric, the card ID is not displayed and authentication fails when authenticating with AoC (Access on Card).
- 1.2. If the start or end date of the Temporary Schedule is set as a holiday or the end date is set as the day before a holiday, the schedule cannot be created.
- 1.3. Temporary Schedules is created on a date that does not have a shift applied.
- 1.4. Users without the permission for Monitoring can view real-time logs of devices through a web socket.
- 1.5. When adding a door, the setting of door sensor is applied differently than the settings.
- 1.6. If the T&A device is disconnected and the device is not reconnected after restarting the server, the following problems occur.
  - The device is not displayed in the T&A device list.
  - T&A report is not available with USB import and export on that device.
- 1.7. If changing a user group or access group on the user settings page, the user's access group is deleted when the user is transferred to the device by Automatic User Synchronization.
- 1.8. Authentication fails if a user authenticates with AoC (Access on Card) issued as the mobile card.
- 1.9. When you assign a schedule to a user on the Schedule page of the TIME ATTENDANCE menu and apply it, loading is not completed due to the overload of the TA server.
- 1.10. When a user without administrator permissions logs in through the cloud, the user cannot log in normally because of the permission check.
- 1.11. An error occurs when a user requests the offline key for Time Attendance license.

## 2. New Features and Improvements

- 2.1. Support for connecting new devices.
  - FaceLite
  - XPass 2 (XP2-MDPB, XP2-GDPB, XP2-GKDPB)
- 2.2. Support to the USB fingerprint scanner in VISITOR menu.
  - Supported devices: BioMini, BioMini Plus, BioMini Plus 2
- 2.3. Added the BioStar 2 Swagger.
- 2.4. Improved to control access when a user without administrator permissions attempts to access menus that the user does not have access to.
- 2.5. Improved the Custom Level for T&A management.
  - User can use Time Code, Shift, Schedule Template, Rule and Schedule regardless of permission, and can edit or read according to the permission of Admin Menu Settings.
- 2.6. Add Automatic backup function for Setting.conf file.
  - Automatic backup of Setting.conf file
  - Support to the logs to determine cause if Setting.conf file is corrupted

- 2.7. Improved the resource files not to be deleted when upgrading BioStar 2 version if a user creates and uses language resource files other than that supported by the regular version.
- 2.8. Modified to allow the user to edit 'User ID' in <User Field Mapping> of Active Directory.
- 2.9. Update the resource files of Japanese, Arabic, and Spanish.
- 2.10. Support to allow the custom user field that added in the <SERVER> of Settings to be used in the T&A report.
- 2.11. Supports the sorting for entire data in the T&A report.
- 2.12. Added option to select 'First in & Last Out' or 'All in/Out Punches' to search conditions of the individual report.
- 2.13. Changes the Java version.

Before: 1.8.0\_212After: 1.8.0\_221

- 3.1. The titles of the list for USER, DEVICE, DOOR and ELEVATOR menus are displayed in English even if it is set as a language other than English.
- 3.2. When setting up a language other than Korean or English, the 'All Users' and 'Different Users' options do not appear due to misalignment of options on the <Manage Users in Device> page if the string is long.
- 3.3. The fingerprint search function does not work properly for application to visit the Terms and Conditions.
- 3.4. In the TIME ATTENDANCE menu, only 1,000 schedules are visible.
  - Modified to display up to 20,000 items.
- 3.5. BioStar 2 and Suprema 2nd generation devices support Wiegand card format up to 256 bits, but only up to 32 digits when inputting card data values manually.
  - Modified to support up to 78 digits when inputting card data.
- 3.6. User cannot access TIME ATTENDANCE menu when connecting to BioStar 2 with a domain name.
- 3.7. When upgrading the version, the upgraded version is not applied in the system config item of AC, TA and Video database.
- 3.8. Restricted special characters can be input in usernames.
- 3.9. Visitors who have already agreed to the visit terms and conditions on the Visit Application Page are asked to agree again at check-in in the VISITOR menu.
- 3.10. The event name is output in English when exporting the event logs to CSV file if the language is set to a newly supported language (Spanish, Arabic).
- 3.11. Modified to allow addition of up to 32 events when setting up the image log.
- 3.12. If BioStar 2 service file is not replaced during the version upgrade, BioStar 2 will not be installed normally.
  - Modified that the service file to replace automatically when restarting the operating system after the BioStar 2 installation is complete.
  - Outputs a pop-up message that prompts users to restart the operating system after the BioStar 2 installation completes.
- 3.13. In version 2.7.7 of BioStar, local APIs could be registered and used even though access control license was not activated.

- 3.14. The ID of Wiegand Reader is displayed differently from the actual ID when checking the door information with [GET] doors in BioStar 2 API.
- 3.15. If a user sets the Date Format to dd/mm/yyyy, the error popup for the Period item is displayed even though the user set the period normally on the Visitor page.
- 3.16. Some user groups are missing during the migration in BioStar 1.x to BioStar 2.x Migration Tool.
- 3.17. If you upgrade XPass 2 (XP2-GKDPB) from the pop-up message that prompts users to upgrade the firmware at BioStar 2 login, the upgrade fails.

# Version 2.7.8 (Build No. 2.7.8.42)

Release: 2019-07-17

#### 1. Main Fixes

- 1.1. A user cannot access to BioStar 2 if the language is set to Turkish on Windows.
- 1.2. A user cannot access to BioStar 1.x to BioStar 2.x Migration Tool in an environment using Oracle database.
- 1.3. Some logs are missing during log migration in BioStar 1.x to BioStar 2.x Migration Tool.

## 2. New Features and Improvements

- 2.1. Enables users to search for visitors using fingerprints in the visit application page and VISITOR menu.
- 2.2. Supports user group synchronization in Active Directory.
- 2.3. Supports multiple use function of controllers.
  - Supported Devices: CoreStation
  - Detail: Supports configuring the CoreStation as a controller for up to 32 elevators
- 2.4. Supports Anti-Tailgating.
- 2.5. Supports setting options for Wiegand authentication result output.
  - User ID and Card ID
- 2.6. Supports options for selection by card type
  - Displays card options supported by each device in the BioStar 2 device settings to allow users to select those options.
- 2.7. Supports the fingerprint/face duplicate check when registering users on a device.

- 3.1. Improved user interface in VISITOR menu.
  - Duress fingerprint option is displayed.
  - The duplicate check button is displayed when registering visitor fingerprints.
  - A prompt for visitor PC assignment appearing as a pop-up message, but then connects to the login screen, when accessing the visit application page without setting up a visitor PC.
  - < Delete Visitor > button remains in the output state even when the user changes the status filter to "Visit application (expired)" after checking the visitor in the visit application list.
  - Improved pop-up prompts to confirm deletion when deleting fields created in visitor settings.
  - Check-in approval is possible even if the user does not agree to the privacy policy when checking in visitors.
  - The day is not selectable if <Expiry Date> of <Period> is selected on the calendar when applying for a visit on the visit application page.
  - A statement about the duration of personal information retention is displayed on the visit application page.
  - The changed language does not apply to phrases in the input field in real time when changing

- language settings on the visit application page.
- Running <Column Setting> in the visitor's main screen automatically deselects all selections.
- When accessing the visit application page without setting up a Visit PC, entering the BioStar 2 server address in the address bar while switching to the Visit PC settings screen causes an error.
- Improved wording of expressions in Visitor settings, VISITOR menu, and visit application page.
- 3.2. Deleted unused events in image log settings.
- 3.3. The user information is not output in <Manage Users in Device>.
- 3.4. The connection between BioStar 2 and Active Directory servers fails when the Active Directory encryption option is enabled after connecting to an Active Directory server.
- 3.5. Modified to check session expiration on some API calls.
- 3.6. The last sync time, as well as the connection test success or failure times, are output on <Synchronization> in Active Directory settings.
- 3.7. The sync time in the Active Directory settings is not updated in real time.
- 3.8. Errors occur when setting the period entry for user or visitor registration if the date format is set to 'dd/mm/yyyy'.

# Version 2.7.7 (Build No. 2.7.7.38)

Release: 2019-06-19

#### 1. Main Fixes

- 1.1. Even if changing the Smart Card Layout option to 'None', that setting is not applied.
- 1.2. When restarting MS SQL Server, the database is not connected normally.
- 1.3. 'Soft anti-passback violation detected' and 'Hard anti-passback violation detected' options are missed from the event item of IMAGE LOG.
- 1.4. Some devices(BS2-OIPW, BSA2-OIPW) support the RFID cards that are different from the correct options.
- 1.5. If Custom User Field is configured, the custom field name is displayed but data is not output when printing the user list.
- 1.6. When the Administrator option is set in the device setting, that setting is not reset even if the device is reset.
- 1.7. The BioStar 2 server will not be able to connect to the Active Directory server without restarting the server after copying the root certificate when setting the encryption of the Active Directory.
- 1.8. The custom level administrator created in BioStar 2.3.0 or earlier will not be output in versions 2.6.3 or later.
- 1.9. When changing the settings of the smart card layout, only the layout of the card type with the changes is synchronized.
- 1.10. In an environment that uses an MS SQL Server database, an error occurs if there is a log with 32 characters of user ID when importing the event logs manually or automatically.
- 1.11. Some logs are not imported when importing the event logs manually or automatically.

## 2. New Features and Improvements

- 2.1. Add the visitor management.
- 2.2. The license policy of Time & Attendance is changed.
- 2.3. Improved that a user can access the Time Attendance menu using a private domain address.
- 2.4. Improved to allow users with login IDs to proceed first when users are synchronized to the Time Attendance menu.
- 2.5. Provided the 'Error dbscript db-converter' message on the Completing the BioStar 2 Setup Wizard screen if a db script error occurs during the BioStar 2 installation.
- 2.6. Changes the Java version.

Before: 1.8.0\_201After: 1.8.0\_212

- 3.1. Problems that the user interface does not output properly.
  - Icons and strings are displayed abnormally when a user select the user group in FACE GROUP MATCHING.

- The Admin Item Settings of ACCOUNT is not displayed properly.
- Strings are not displayed properly when a user selects an item from the Admin Item Settings in ACCOUNT.
- 3.2. Even if the Use Automatic Door is set to 'ON' in the door setting, it will still be displayed as 'OFF' on the screen.
- 3.3. When the language is set to Spanish(Spain), the schedule calendar of the Time Attendance menu is displayed Chinese characters.

# Version 2.7.6 (Build No. 2.7.6.16)

Release: 2019-05-20

#### 1. Main Fixes

- If an administrator set the language to Spanish(Spain), exporting the T&A report in PDF does not work properly.
- 1.2. If you set an event by selecting the Input (Event Name Change) option in Trigger & Action of the device settings, the event does not work properly as follows:
  - DM-20
    - a) The alert does not occur.
    - b) '-1' is displayed instead of the event name set in Real-time Log.
    - c) 'Input detect' is displayed instead of the event name set in Event Log.
  - All devices
    - a) The code name is displayed instead of the event name set in DASH BOARD and MONITORING menu.
- 1.3. Change the recording method for users who do not have access logs.
  - Displayed in Long-term Idle Users menu.
  - Log 'No history' on the Last Entrance Date column.
- 1.4. When an administrator logs in as the custom level with permissions to a user group, the administrator cannot select the devices and subgroups belonging to the device group in < Delete From Device>.
- 1.5. Deactivate 'Check the database connection' and 'Generate the database tables' options in the Custom installation window when upgrading the BioStar 2 version.

#### 2. New Features and Improvements

- 2.1. Support to the Clear APB for each user.
- 2.2. Add BioStar 1.x to BioStar 2.x Migration Tool.
  - Supports the use of user and event logs from BioStar 1.x in BioStar 2.
- 2.3. Add the event items to IMAGE LOG menu.
- 2.4. Add the encryption option to Active Directory.
- 2.5. Improve that the administrator can change the port 9000 in FastCGI of Port menu.
- 2.6. Improve that the time of events is displayed as the time zone, device time, and server time on the alarm email.

- 3.1. Fixed a security vulnerability by deactivating the 3DES encryption option.
- 3.2. If an administrator sets the language other than Korean or English, an error occurs when a user logs in and select Help menu.
- 3.3. The 'Input detect' event that occurred in the interlock zone is displayed as '-1' in Real-time log.

3.4.	If an administrator selects a user group when adding an access group, the information and the number of the access group are not output properly.

# Version 2.7.5 (Build No. 2.7.5.7)

Release: 2019-04-11

- 1. New Features and Improvements
  - 1.1. Add the Active Directory menu.
    - Supports the use of Windows Active Directory user data in BioStar 2.
  - 1.2. Supports the sorting of lists in the USER, DEVICE, and DOOR menus.
    - USER: Group, Status column
    - DEVICE: RS-485 column
    - DOOR: Group column
  - 1.3. Removes the unsupported AoC events from the DEVICE, VIDEO and the Trigger & Action of Settings.
  - 1.4. Supports that the administrator can change the port 9000 in setting.conf.
  - 1.5. Added an Ambient Brightness option to the FaceStation 2 slave device.

- 2.1. The iCLASS Seos and DESFire Advanced card formats are not applied when the administrator sets up the smart card layout.
- 2.2. If an administrator set a device as an Arm / Disarm device in the Intrusion Alarm Zone, and then exclude the door that is configured by that device, a 'Failed to parse JSON (700)' error occurs.
- 2.3. If user group information is not created normally when an administrator adds or edits a user group, the user list is not displayed when that group is selected.
- 2.4. Even if an administrator adds more than 249 custom levels, only 249 are displayed on the screen.

# Version 2.7.4 (Build No. 2.7.4.25)

Release: 2019-03-20

#### 1. Main Fixes

- If you set a language that has more than two characters for the language delimiter in the resource file, that language will not properly be applied to the T & A menu.
- One of the BioStar 2 configuration files, the nssm.exe, is not installed or has been deleted from the T&A and Video web server services list because some antivirus programs have determined that the file is a malicious program.
- 1.3. The door information of access level setting is displayed differently from the setting.
- 1.4. When operating the Delete From Device in the USER menu, devices belonging to the group cannot be selected

## 2. New Features and Improvements

- 2.1. Enhanced security of login passwords.
  - Limits the use of passwords that contain the same string, consecutive string, and login ID
  - Limits reuse of the same password
- 2.2. Support for Quick Enrollment for FaceStation 2.
  - FaceStation 2 FW V1.2.2 or later
- 2.3. Support to Spanish and Arabic.
- 2.4. Support to the unlimited number of Custom Levels.
- 2.5. Changes the Java version.
  - Before: 1.8.0\_191 - After: 1.8.0\_201

## 3. Bug Fixes

3.1. The Dual Authentication setting does not display properly in the user interface even if you enable that option in elevator settings.

# Version 2.7.3 (Build No. 2.7.3.23)

Release: 2019-02-25

#### 1. Main Fixes

- Arabic does not display properly if an administrator exports the T&A report in PDF.
- 1.2. When an administrator logs in as the custom level, even though the administrator has permissions to a specific device and the user, cannot transfer users to that device.
- If upgrading to version 2.7.0 or later, the administrator cannot add a leave in a previously set schedule.
- 1.4. When there are more than 50 user groups, you cannot export the T & A report to a CSV file if any groups contain subgroups.

### 2. New Features and Improvements

- 2.1. Increase the number of administrators that can be added per device.
  - Before: 10
  - After: up to 1,000 (depends on the firmware version of the device.)
- 2.2. Change the way new settings are applied when adding administrators using batch edit of devices.
  - Before: Overwrite a new setting to existing settings.
  - After: Add a new setting to existing settings.
- 2.3. Improved that the device will be normally connected when you reconnect the device even when it is configured as a port forwarding.

- 3.1. When creating an Access Group, the setting is not applied properly if you add the same user to the User Group and User at the same time.
- 3.2. If an administrator edits the settings of the device on the server, Server Private Msg option on that device will always change to disabled.
- 3.3. The T&A function does not work properly if you upgrade from version 2.7.0 or earlier to 2.7.2.

# Version 2.7.2 (Build No. 2.7.2.19)

Release: 2019-01-15

#### 1. Main Fixes

- 1.1. If more than 16 cameras are added to the server, the camera screen is not output.
- 1.2. In an environment that uses an MS SQL Server database, the server restarts when an administrator adds more than one signal input event to the trigger & action of the device.

## 2. New Features and Improvements

- 2.1. Add the Security menu.
  - Change Password Level options.
  - Support to the setting for Maximum Password Age.
  - Support to the setting for Maximum Password Change Limit.
  - Support to the setting options for password failures at login.
- 2.2. Support to Live Video View on Graphic Map.
- 2.3. Support to viewing Anti-passback Zone and Fire Alarm Zone on Graphic Map.
- 2.4. Support to the Storage Path Settings for image logs.
- 2.5. Supports Allowed a day before/after time setting for working 24 hours or longer.

- 3.1. The HTML tag is displayed in the daylight saving time settings page.
- 3.2. Once an image file set with a graphics map is deleted, the graphics map image cannot be modified.

# Version 2.7.1 (Build No. 2.7.1.13)

Release: 2018-12-20

### 1. Main Fixes

- 1.1. Fixed a security vulnerability: Cross Site Scripting.
- 1.2. The row setting changes when the page is refreshed after setting the number of rows in the monitoring menu.
- 1.3. The log does not display normally when a user moves the page back and forth after setting the event log filter in the Monitoring menu.

## 2. New Features and Improvements

- 2.1. Supports synchronization of all devices connected to the server when users update the device.
- 2.2. Improves the ability to delete users on a device from the server's user menu.
- 2.3. Support to Input(Event Name Change) of Trigger & Action in the device advanced setting.
- 2.4. Changes the Java version.

Before: 1.8.0\_161After: 1.8.0\_191

- 2.5. Provides the log about whether a user has been updated on the device or the server.
- 2.6. Adds root password verification procedures during installation and upgrade.

## 3. Bug Fixes

3.1. Support to the OM-120 Relay time setting value from 1 second.

# Version 2.7.0 (Build No. 2.7.0.50)

Release: 2018-11-21

- 1. New Features and Improvements
  - 1.1. Support to Graphic Map
  - 1.2. Support to the working alarm time report and an automated alarm email
  - 1.3. Improves the option to Add Custom Level.
    - Adds a graphic map group to Admin Item Settings.
    - Improves the ability to set up user groups and device groups according to Custom Account Level in Time & Attendance.
  - 1.4. Support to the floating shift.
  - 1.5. Support to Punch out Time Limit in the flexible shift.
  - 1.6. Improves that an administrator can select weekend days when setting up the Schedule Template.
  - 1.7. Support to the minimum duration setting when configuring the overtime management.
  - 1.8. Separate the rounding setting of shift and overtime management.
  - 1.9. Support Fixed option for Meal deduction and Break Time setting.
  - 1.10. The Attendance management time added from Time Code is displayed in the Daily Summary Report and Individual Summary Report.
  - 1.11. Support for AES encryption option on DESFire card.
  - 1.12. Support to DESFire advanced option.
  - 1.13. Support to the number of users, fingerprints, faces, and cards in Manage Users in Device.
  - 1.14. Support to unlimited number of access levels and access groups.
  - 1.15. Punch Log History report has been improved to display the modified time.
  - 1.16. Improve the process for generating the time card.
  - 1.17. Improves the T&A report to display only the time excluding the dates in Check In and Check Out.
  - 1.18. Change the default value of the period in the T&A report.
  - 1.19. Improves to upgrading the version to the latest version directly in BioStar 2.5.0 or higher.
  - 1.20. Improves usability
    - Support to the separator option in CSV export.
    - Add <Apply & Add New> button to Time Code, Shift, Schedule Template, Rule, Schedule setting screen.
    - Change some special characters (\, /, :, \*, ?, ", ', `, <, >, |, .) to be unavailable when setting a
    - Improves that the Edit popup or T&A report page is displayed if clicking the result value of the T&A report.
    - Improves to set the time of overtime work in minutes.
    - Change the start date of the week to Monday.
    - Remove the Temporary Schedule from the Time Card.
    - Support for Arabic.
    - Change the loading icon of the Time Attendance menu like any other menu.

- 2.1. If a user connects to BioStar 2 after specifying the hostname in the Windows, the user cannot access the T&A menu.
- 2.2. Unable to add a Wigand device to BioEntry W2.
- 2.3. Users can access a higher level of Web Server Home in the web server.
- 2.4. If you set Leave to start or end date of Daylight Saving Time, the incorrect time is displayed.
- 2.5. Change the <Punch in Time Limit> setting of Flexible Shift to operate based on the setting of <Day start time>.
- 2.6. Users who have special characters (-, \_) in the ID cannot be selected in the T & A report.
- 2.7. If you change the server port value for the cloud and then restore the value before the change, a user cannot enter the Time Attendance menu.
- 2.8. Department information does not display from root when exporting the T&A report to CSV format.
- 2.9. The APB database management table is reset periodically, regardless of the Reset Time setting in the global APB zone.
- 2.10. In an environment that uses an MS SQL Server database, the modified date format setting is not normally applied to Audit Trail menu.
- 2.11. When a user upgrades the version of BioStar 2, the number of user access groups is displayed differently than the existing settings.

# Version 2.6.4 (Build No. 2.6.4.7)

Release: 2018-10-26

- 1.1. The duplicate logs are output when a user runs CSV export.
- 1.2. The server receives requests with a version lower than TLS 1.1 (Supports TLS 1.1 and above).
- 1.3. The user cannot set the same action for different triggers when setting Trigger & Action, Intrusion Alarm Zone, or Interlock Zone.
- 1.4. The assignment complete message is displayed even if a user assigns an already assigned card to another user using the API.
- 1.5. When a user who does not have permission on the door menu logs, the door list of the zone menu is disabled.
- 1.6. The Add Zone option is not displayed when a user right-clicks each item in the zone menu.

# Version 2.6.3 (Build No. 2.6.3.73)

Release: 2018-09-18

- 1. New Features and Improvements
  - 1.1. Improves the performance of showing lists.
  - 1.2. Improves the option to Add Custom Level.
    - Adds Admin Item Settings option.
  - 1.3. Improves to allow the custom level administrator with edit or read permission to the monitoring menu to receive alerts.

- 2.1. The Video menu in Settings is not displayed on the screen if the PC with BioStar 2 is not connected to the network.
- 2.2. If an elevator group that contains subgroups moves to a child of another elevator group, it causes an error and BioStar 2 does not work normally.
- 2.3. RTC and DHCP are displayed on Display/Sound of XPass D2(XPD2-GKDB) device page.
- 2.4. The firmware upgrade notification does not appear even though connecting XPass D2(XPD2-GKDB) that has a previous version firmware to BioStar 2.
- 2.5. XPass D2(XPD2-GKDB) succeeds in authentication if AoC ID is entered as keypad even though server matching is enabled.
- 2.6. If an upper and lower group without elevator is moved at the same time, the group is not displayed normally.
- 2.7. If the date format is set on the device and then it is connected to BioStar 2, the date format changes to the different option.
- 2.8. Scanning the fingerprint on the BioMini causes an error and BioStar 2 does not work normally.
- 2.9. If the user name is set to Arabic, the name does not display normally.
- 2.10. Fixed a security vulnerability that allows a user account to acquire an administrator permissions.
- 2.11. BioStar 2 version upgrade fails when using Java 1.8.0 or later on PC with BioStar 2 installed.
- 2.12. Some records are missing in T&A reports.

# Version 2.6.2 (Build No. 2.6.2.64)

Release: 2018-06-25

- 1. New Features and Improvements
  - 1.1. Support for user and log import and export via USB.
  - 1.2. Support an option for processing PIN input for XPass D2 (XPD2-GKDB) the same as card ID.
  - 1.3. Support for real-time video viewing.
  - 1.4. Improves usability and phraseology.
  - 1.5. Improves event log retrieval speed.
  - 1.6. Support for connecting new devices.
    - FaceStation 2 (FS2-DS), BioLite N2 (BLN2-PAB), XPass D2 (XPD2-GDB, XPD2-GKDB)

- 2.1. Issue where BioStar 2 log continues to be displayed as daylight saving time even after the set period of daylight saving time has ended.
- 2.2. Issue where the video server does not work if the video license is activated offline.
- 2.3. Issue where it is not possible to change configurable options when a user with administrator logs in from a mobile device.
- 2.4. Issue in version 2.4.1 or earlier where database does not migrate and login page does not appear when a version upgrade has been carried out while HTTPS default port is used.
- 2.5. Issue where server does not retry after failing to connect to database.
- 2.6. Issue where device is not auto-synced when face template has been deleted.
- 2.7. Issue where device secure communication status can be changed to 'Disabled' even when user login ID, password, and PIN have been set.
- 2.8. Issue where page display error occurs when device details page is accessed with OM-120 and DM-20 disconnected.
- 2.9. Issue where after a daylight saving time schedule has been set up on BioStar 2 server, a daylight saving schedule cannot be assigned to FaceStation 2 device.
- 2.10. Issue where model names of XPass D2 and BioLite N2 are not correctly displayed in the firmware upgrade list.
- 2.11. Issue where daylight saving time cannot be set up for FaceStation 2 device when version 2.6.0 has been installed newly.
- 2.12. Issue regarding selecting start date for daily schedule or selecting holiday dates where an extra month is added to the resulting screen in the case of months without a 31st day.
- 2.13. Issue where it is not possible to set system log storage period to 120 days.
- 2.14. Issue in a version upgraded from version 2.5.0 where USB Agent does not start automatically when user account control is set to default value.
- 2.15. Issue where incorrect IP address notification pop-up appears when a string is entered in the server address field.
- 2.16. Issue where video server does not shut down when changing database port.
- 2.17. Issue where NVR details screen is displayed when scrolling the page with arrow keys at the upper right corner of Device Details.

- 2.18. Issue where "17677" is displayed in BioStar 2 event log when reset without network.
- 2.19. Changed data encryption related pop-up text that appears when adding a device.
- 2.20. Issue where it is possible to configure devices other than those connected to the same RS-485 network when editing pre-configured schedule unlocked zone.
- 2.21. Issue where error pop-up does not appear when you change user ID type to alphanumeric characters after adding BioLite Net and Xpass S2.
- 2.22. Issue where despite daylight saving time having been set up, a time not applicable to Monitoring's floor and zone statuses is displayed.
- 2.23. Issue regarding changing the status of one or more global zones where changing the status of one zone does not automatically change the status of the other zones.
- 2.24. Issue where video license input window is activated after an upgrade to version 2.6.2.
- 2.25. Issue where master device switches to synchronization error status when deleting a door belonging to Access Level.
- 2.26. Issue where fingerprint image does not appear normally when a smart card has been added after the addition of two or more fingerprints of user.
- 2.27. Issue where device name does not show in tamper-on alarm pop-up if a tamper has occurred on the device after reset without network.
- 2.28. Issue where UI does not show normally when displaying an image log with a user name on a larger screen.
- 2.29. Issue regarding batch-editing doors where incorrect notification pop-up appears when the OK button is clicked without changing the settings.
- 2.30. Issue where column switches to its default value when entering the card menu again after changing the column settings in the card menu in Settings.
- 2.31. Issue where NVR appears when filtering by device name in Device Status or Alert History in Monitoring.
- 2.32. Issue where the "unknown" message does not appear in Schedule Lock/Unlock zone status when the device has been disconnected from the network.
- 2.33. Issue where Add, Delete, Modify NVR/camera features do not function when user has logged in as a video operator.
- 2.34. Issue where schedules are not updated in the video menu.
- 2.35. Issue where session timeout notification occurs when accessing video menu while using Time Attendance menu.
- 2.36. Issue where camera recording events for daily/holiday schedules do not function properly.
- 2.37. Problem that the change point is not updated even if the setting of the door configured in the camera menu is changed.
- 2.38. Issue where device search fails when adding a camera after failure to updating NVR configuration information.
- 2.39. Issue where you cannot proceed to the next step when selecting NVR in video menu after deleting schedules set up for camera.

# Version 2.6.1 (Build No. 2.6.1.10)

Release: 2018-05-15

- 1.1. Issue where it is not possible to sync new logs to Time Attendance and Video when using MSSQL.
- 1.2. Execution time error when upgrading version 2.4.1 > 2.5 > 2.6.
- 1.3. A change has been made so that moving is possible only when upgrading to a new version and the version of existing BioStar 2 is 2.5.

# Version 2.6.0 (Build No 2.6.0\_155)

Release: 2018-03-23

- 1. New Features and Improvements
  - 1.1. Support for Daylight Saving Time setting.
  - 1.2. Strengthened security settings.
  - Manual management of server and device encryption keys.
  - 1.3. Support for event log retention period setup.
  - 1.4. Support for muster zone and interlock zone.
  - 1.5. Changed AC license.
  - 1.6. Support for device connectivity
  - BioMini Plus 2, BioLite N2, ad XPass D2
  - 1.7. Support Reset without Network Settings.
  - 1.8. Support for Seos card.
  - 1.9. Support for user ID auto addition.
  - 1.10. Improved system log setup UI.
  - 1.11. Added an option to delete personal information and credentials when issuing AoC.
  - 1.12. Support for personal authentication for AoC.
  - 1.13. Support for customized advanced permissions for monitoring.
  - 1.14. Added port settings for port management.
  - 1.15. Support for one device mode (legacy).
  - 1.16. Support for simultaneous use of Wiegand I/O.
  - 1.17. Support for security tamper.
  - 1.18. Support for unassigned blacklist card reassignment.
  - 1.19. Added video storage status and management options.
  - 1.20. Added video recording status indication to event log.
  - 1.21. Improved Wiegand card search function.
  - 1.22. Improved working conditions and behavior.
  - 1.23. Changed site key hexadecimal value entry for smart cards.
  - 1.24. Improved firmware upgrade message and alert behavior.
  - 1.25. Stabilized MSSQL performance.
  - 1.26. A change has been made so that if there exists a user, device, door, or elevator belonging to a group, the group cannot be deleted.
  - 1.27. Support for BioEntry W2 (BEW2-OHP) smart settings.

