

Time and Attendance

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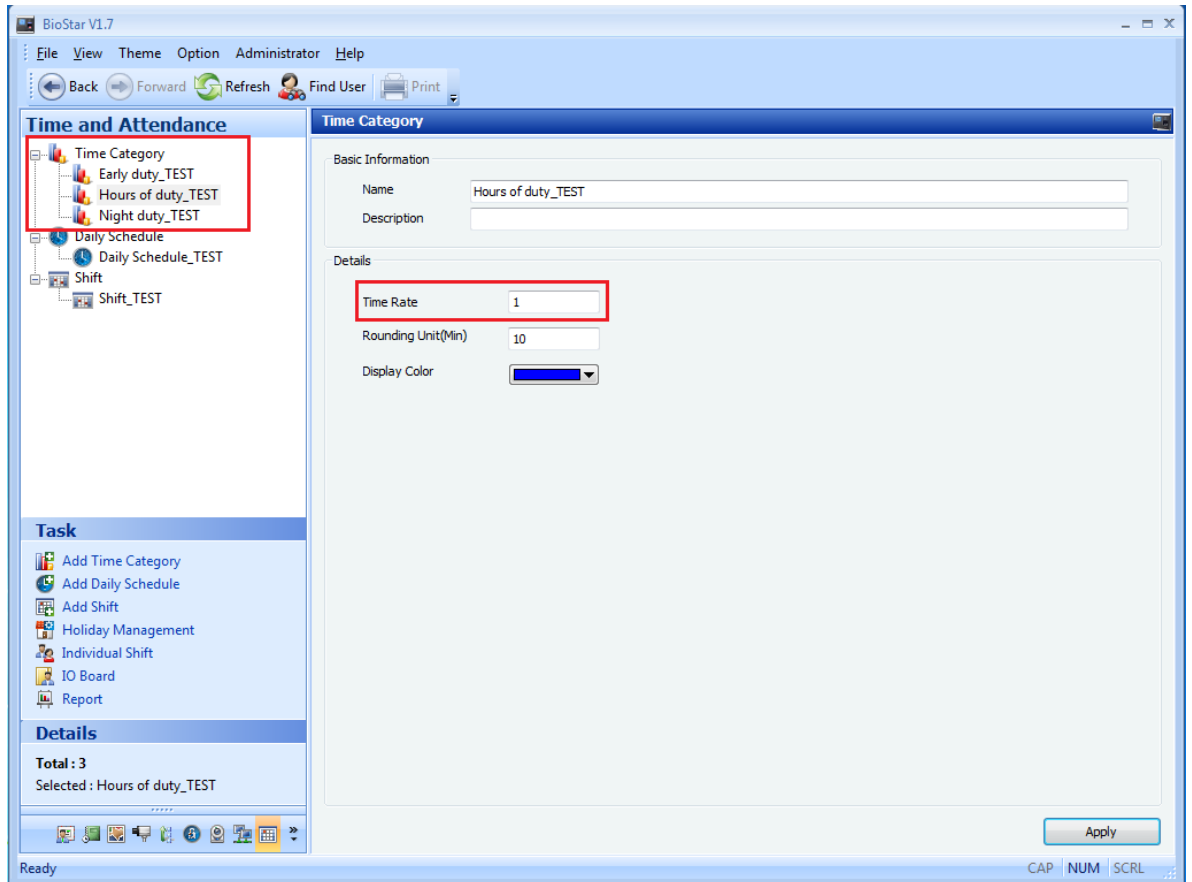
1. Introduction

1.1. Time Category

Time Category is the basic setting in the Time and Attendance settings. Time category consists of Time Rate, Rounding Unit and Display Color.

1.1.1. Time Rate

Time Rate is the rate at which time is calculated.



To calculate total work time based on the time rate:

Time Category	Early duty_TEST	Hours of duty_TEST	Night duty_TEST
Time Rate	2	1	1.5
Work time	2	8	2

Early duty_TEST (2 x 2) + Hours of duty_TEST (1 x 8) + Night duty_TEST (1.5 x 2) = **15 hours**. For example, the hourly rate for this user is \$10.00, the total wage will be \$150.00 (\$10.00 x 15 hours)

1.1.2. Rounding Unit (Min)

Rounding Unit (Min) indicate how to round users' work time. This allows employers to

calculate their employees' work time to the minute or round their clocking to, for example, the closest 5, 10, 15, 30 or 60 minutes.

Case Study:

1. Rounding: 50 min, 8 hours work
 - Total work time: $8 * 60 = 480\text{min}$
 - N-multiple of rounding 50 min = 50, 100, 150, ... 450, 500, ...
 - Since there is no 480 min in the rounding value, total work time records as 450 min. Therefore **7 hours and 30 min (450 min)** is the total work time.

2. When there are different time slot in the same time category, add total hours of both time slot and rounding off the value. (Rounding 30 min)
 - Time Slot 1: 3 hour 45 min (255 min)
 - Time Slot 2: 4 hour 25 min (265 min)
 - **CORRECT:** 3:45 (225 min) + 4:25 (265 min) = 8:10 (490 min) -> **480 min = 8 hours**
 - **WRONG:** 3:30 (210 min) + 4:00 (240 min) = 7:30 (450 min) -> 450 min = **7 hours and 30min**

Date	ID	User Name	Shift	Result	First-In Time	Last-Out Time	WorkTime	BreakTime
Date: 2014-02-26								
2014-02-26	1	test	rounding test	Normal	08:00	17:25	08:00	01:25

Event date	Event time	Event	Device
2014-02-26	08:00:00	Check-In	52959[192.168.0.161]
2014-02-26	11:45:00	Check-Out	52959[192.168.0.161]
2014-02-26	13:00:00	Check-In	52959[192.168.0.161]
2014-02-26	17:25:00	Check-Out	52959[192.168.0.161]

3. If there are two different time categories with different rounding value, they calculate separately then add together.
 - Time Category 1: Rounding 30 min, 3 hours and 45 min work
 - Time Category 2: Rounding 50 min, 4 hours and 25 min work
 - 1. Calculate the work time separately:
 - 3:45 (225 min) -> 3:30 (210 min)
 - 4:25 (265 min) -> 4:10 (250 min)
 - 2. Add the total work time:
 - 210 min + 250 min = 460 min = **7 hours and 40 min**

Date	ID	User Name	Shift	Result	First-In Time	Last-Out Time	WorkTime	BreakTime
Date: 2014-02-26								
2014-02-26	2	test user 2	rounding test 2	Normal	08:00	17:25	07:40	01:45

Detailed editing

Date: 2014-02-26 Name: test user 2
 User ID: 2 Result: Normal

Event date	Event time	Event	Device
2014-02-26	08:00:00	Check-In	52959[192.168.0.161]
2014-02-26	11:45:00	Check-Out	52959[192.168.0.161]
2014-02-26	13:00:00	Check-In	52959[192.168.0.161]
2014-02-26	17:25:00	Check-Out	52959[192.168.0.161]

1.1.3. Display Color

Set different colors for different time categories in the daily schedule.

1.2. Daily Schedule

Daily Schedule is a template for a work day that defines how a 24-hour period is divided into different types of time slots. Daily Schedule consists of 16 time slots and time category. To create a daily schedule, simply go to [Time and Attendance] menu and click [Add Daily Schedule]. For each time slot, administrator can assign detailed rules such as Rounding, Grace, Minimum Duration and etc.

Daily Schedule

Basic Information

Name:

Description:

Details

Day Start Time: 5 : 0 First Check-In / Last Check-Out

Current day:

Next day:

TimeCategory	Start/End Time	Grace(Start)	Grace(End)	Rounding(In)	Rounding(...)
Early duty(Sample)	05:00~08:00	Not Use	Not Use	10	10
Hours of duty(Sample)	08:00~17:00	Not Use	Not Use	10	10
Night duty(Sample)	17:00~03:00(+1)	Not Use	Not Use	10	10

Time Slot

Start Time: 17 : 0 Next

End Time: 3 : 0 Next

Time Category:

Grace(Start) 0

Grace(End) 0

Auto Check IN

Auto Check OUT

Minimum Duration(Min)

Rounding(In)

Rounding(Out)

Affect Result

Add, Modify, Delete, Delete All

1.2.1. Key Features

Options and Description:

1. First Check-In / Last Check-Out
 - The first and last event will be considered as Check-In and Check-Out.
 - First Check-In option is ignored when there is Check-In event.
 - Last Check-Out option is ignored when there is Check-Out event.

2. Start / End Time
 - The time at which the time slot starts and ends. This must be inputted in 24hr format. If time slot starts and ends in the next days, click the checkbox [Next].

3. Time Category
 - Select a time category from the drop-down list

4. Minimum Duration (Min)
 - The minimum required work time for the time slot. If employee's work time is shorter than the minimum duration time, BioStar will not consider as on schedule.

5. Grace Start / End
 - If the worker clocks in eight minutes after the scheduled start time, eight minutes of "Late In" are registered. To prevent this, you can set up a grace. Graces can be set up for clock-in and clock-out registrations and allows employees to be late or leave early and still consider as on schedule.

6. Rounding In / Out
 - Rounding is to determine how to round a user's work time. These rounding values will be applied before Time Category rounding.

7. Auto Check In / Out
 - The employee will be considered as on schedule even without the Check-In or Check-Out event.

8. Affect Result
 - When enabled, T&A results are shown on the [Result] field of T&A Report.

Note: You must click [Modify] to change/edit/modify the settings before clicking [Apply].

Calculating Work Time	Determining Late In or Early Out
- Minimum Duration	- Grace (Start) / Grace (Out)
- Rounding (In) / Rounding (Out)	- Auto Check In / Auto Check Out
- Affect Result	

1.2.2. T&A Results shown on the Report screen

Each time slot in the Daily Schedule has their own T&A result. The priority levels on the T&A report is as follows:

Normal < Late in < Early out < Late in / Early out < Missing in < Missing out < Absence

Case Study: Check- In (9:03), Check-Out (11:53)

Time Slot

Start Time 9 : 0 Next End Time 12 : 0 Next

Time Category Hours of duty(Sample)

Grace(Start) 5 Rounding(In) 10

Grace(End) 5 Rounding(Out) 20

Auto Check IN Affect Result

Auto Check OUT

- Check-In between 9:00 and 9:05 will not result in reduction in pay because of the Grace (tolerance)
- Check-Out recorded as 11:40 due to “Rounding Out” set as 20 mins.
- Total Work time: Recorded as 2 hours and 40mins, not 2 hours and 50mins.
- Result: T&A Report only show “Early Out” while the system checks for both “Late In” and “Early Out”.

1.3. Shift

When you have created daily schedule, the easiest way to set up shift is to copy that first daily schedule and then adjust other days, as needed. In BioStar, you can define shifts by daily or weekly.

1.3.1. Weekly Shifts

- Start Date / End Date: Select the start and end date of shift.
- Monday to Sunday calendar week will constitute a cycle.
- You can only apply one (1) daily schedule for one (1) day.

1.3.2. Daily Shifts

- Start Date / End Date: Select the start and end date of shift.
- You can specify any number of consecutive days to constitute a cycle (For example, 1, 2, ...5, ...10, ... 15, ...)
- Maximum days for Daily Shift are 31 days.
- Daily shifts are available only with the licensed standard edition of BioStar.

1.3.3. How to setup shifts

1. Go to [Time and Attendance] menu and click [Add Shift].
2. Select [Weekly] or [Daily].
3. Set [Start Date] and [End Date].
4. Click the 'checkbox' on the left.
5. Click the ellipsis button to select a daily schedule.
6. You can copy a 'shift' by clicking the arrow button on the left.
7. Click [Apply] to save the shift.

The screenshot shows the 'Shift' configuration window. The 'Basic Information' section contains 'Name' (Shift_TEST) and 'Description' fields. The 'Schedule' section has 'Cycle Type' (Weekly selected, Daily unselected), 'Start Date' (2014-02-20), and 'End Date' (2014-12-20). A grid shows the weekly schedule for Monday through Sunday, with time slots from 0 to 24. Red boxes and numbers 1-4 highlight specific UI elements: 1 points to the date fields, 2 to the 'Copy' button, 3 to the 'Daily' button, and 4 to the 'Add' button. An 'Apply' button is highlighted at the bottom right.

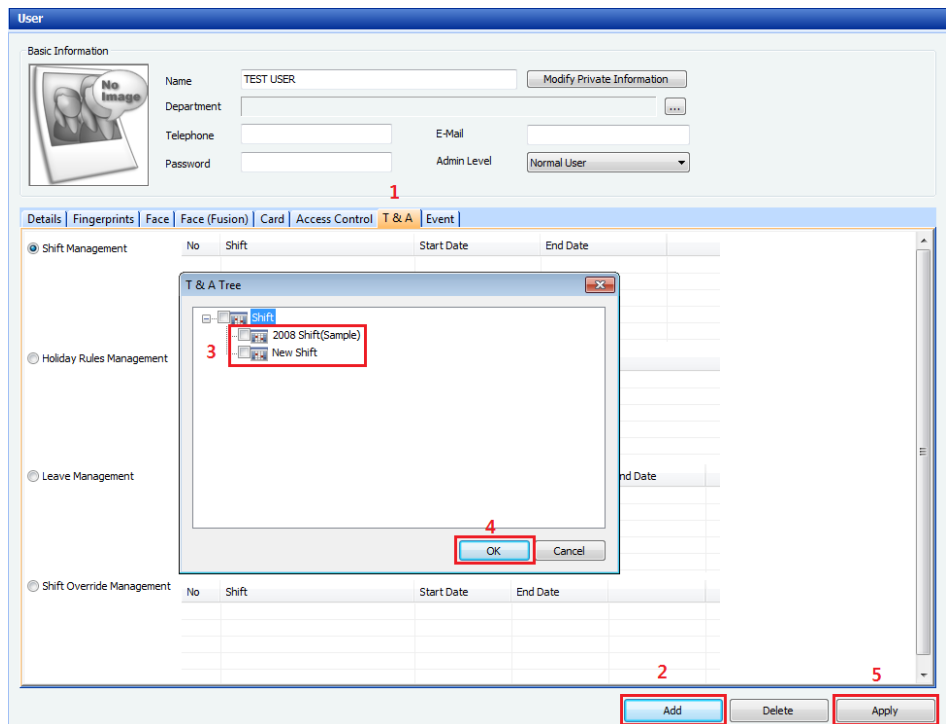
1.3.4. Important information of Shift Setting

- Be careful for duplicated Daily Schedule. If the end time of previous day is later than start time of new day, it might be possible that both time slots overlap.
- Be careful for duplicated time period between several shifts by an individual setting. When you assign several shifts to the user, it might be possible that different time periods overlap.

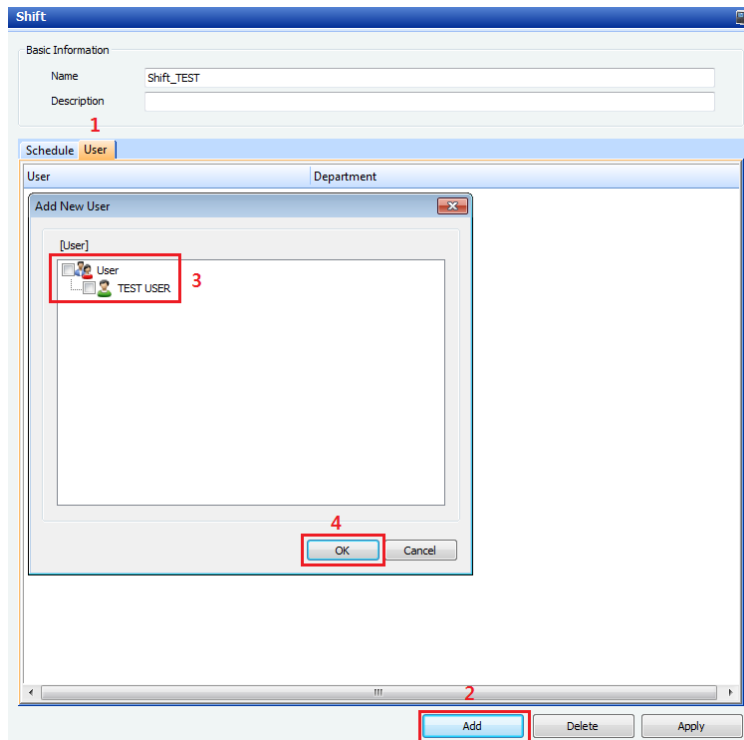
1.3.5. Assign Users to Shift

You can assign individual users to shift from User menu or assign multiple users to a shift from Time and Attendance menu.

- To assign individual users to shifts via the User pane
 1. Go to [User] and move to 'T&A' tab.
 2. Click [Shift Management] and click [Add] button to open the T&A tree of shift List.
 3. Select a shift and click [OK].
 4. Click [Apply] to save the T&A setting.



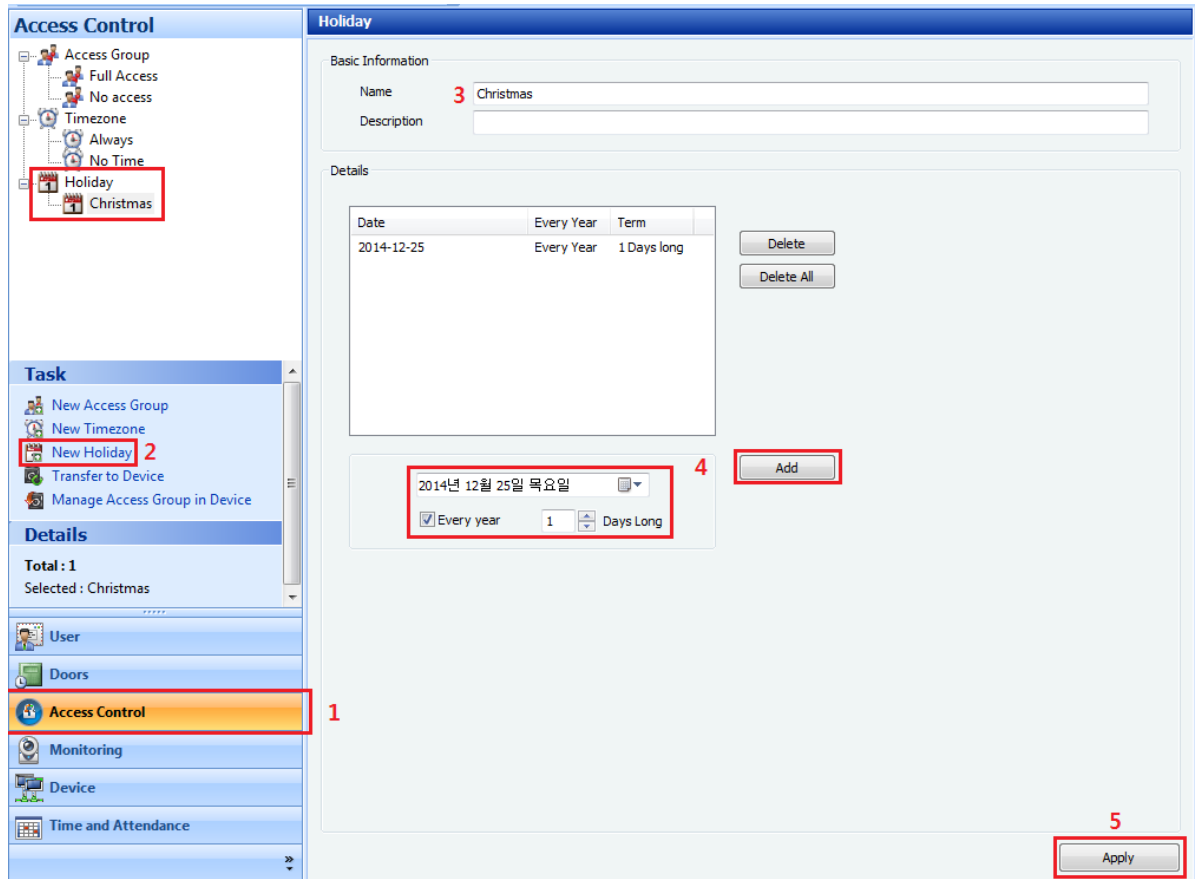
- To assign multiple users to shift via the Time and Attendance pane
 1. Click [Time and Attendance] in the left shortcut pane/
 2. In the shift pane, move to [User] tab.
 3. Click [Add] to open the “Add New User” window.
 4. Select one or more users and click [OK].
 5. Click [Apply] to save the T&A setting.



1.4. Holiday

BioStar allows you to create a maximum of 64 holiday schedules and assign 16 holiday schedules per each user.

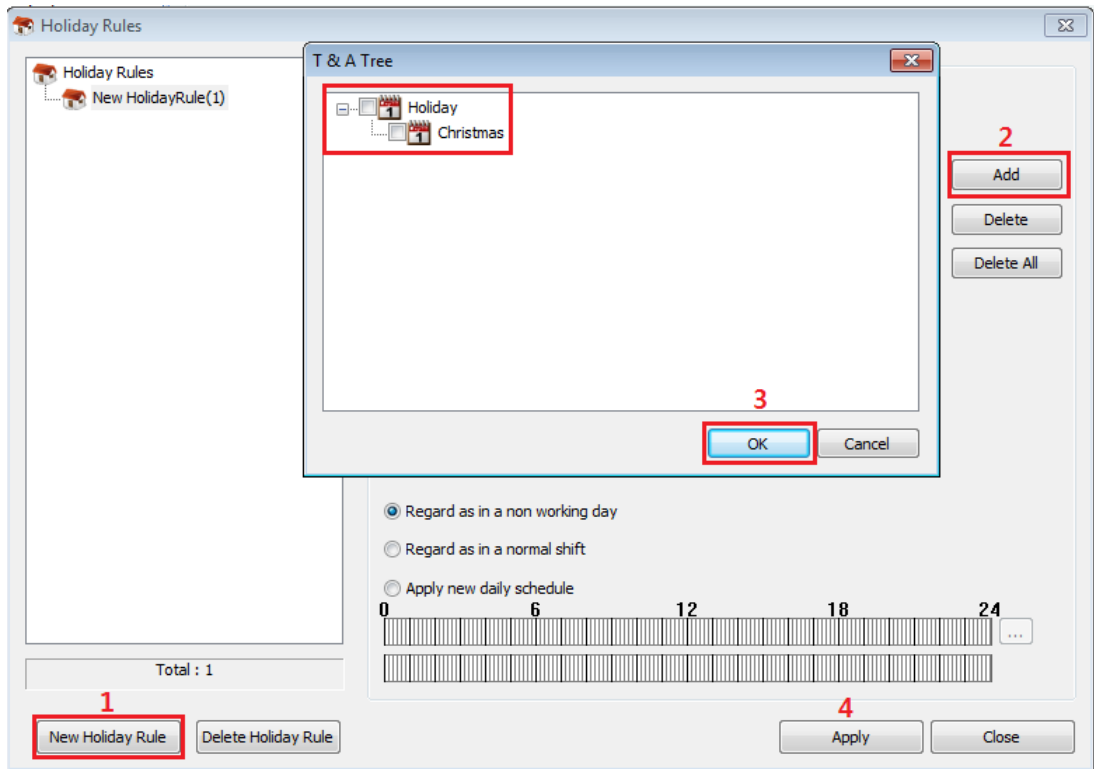
1.4.1. How to setup holiday



1. Go to [Access Control] and click [New Holiday].
2. Type a name of the holiday and description (Optional).
3. Select the date. If this holiday recurs every year, check the [Every year].
4. Set the duration of the holiday and click [Add].
5. Click [Apply] to save holiday schedule.

1.4.2. How to add Holiday Rules to Time and Attendance

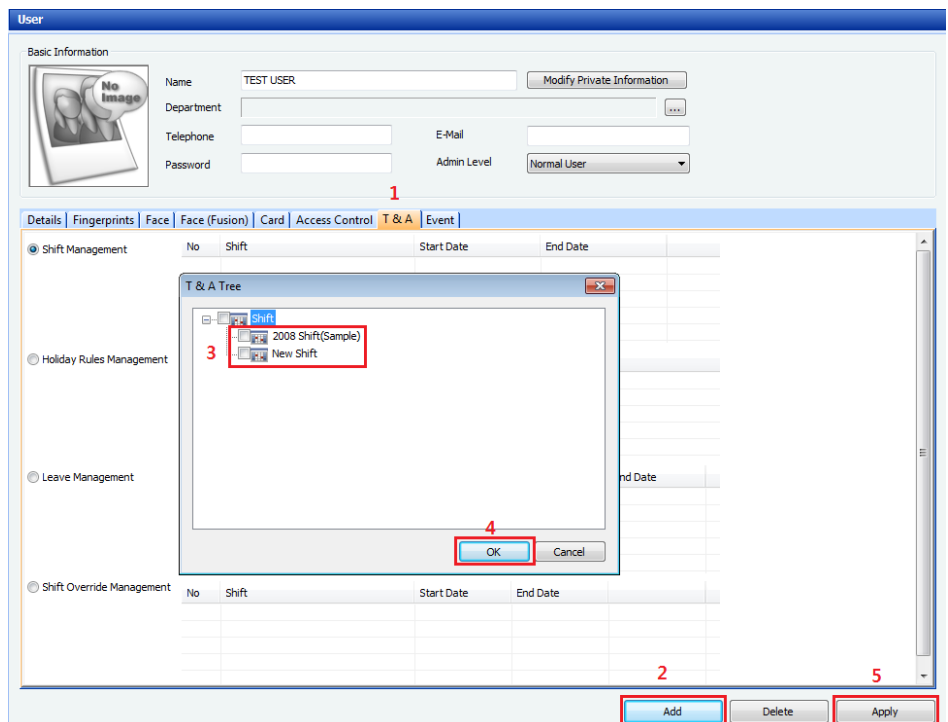
1. Click [Time and Attendance] in the left shortcut pane.
2. Click [Holiday Management] to open [Holiday Rules] window.
3. Click [New Holiday Rule] and type a name of holiday rule.
4. Click 'Add' to open the T&A tree and select a holiday then press [OK].
5. There are three options and click [Apply] to save holiday rule.
 - Regard as in a non working day: T&A reports displays [Non-Working Day] in the Result field.
 - Regard as in a normal shift: Calculate the work time as in normal shift and displays [Absence] when there are no Check-In or Check-Out events.
 - Apply a new daily schedule: You can select the [Daily Schedule] click by ... button.



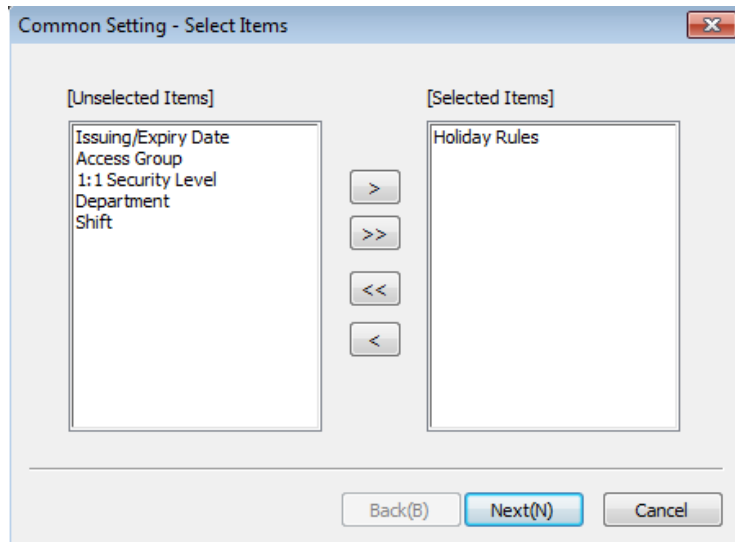
1.4.3. Assign Users to Holiday

You can assign individual users or assign multiple users to holiday from User menu.

- To assign individual users to shifts in the User Menu
 1. Go to [User] and move to 'T&A' tab.
 2. Click [Holiday Rules Management] and click [Add] button to open the T&A tree of holiday List.
 3. Select a holiday and click [OK].
 4. Click [Apply] to save the T&A setting.



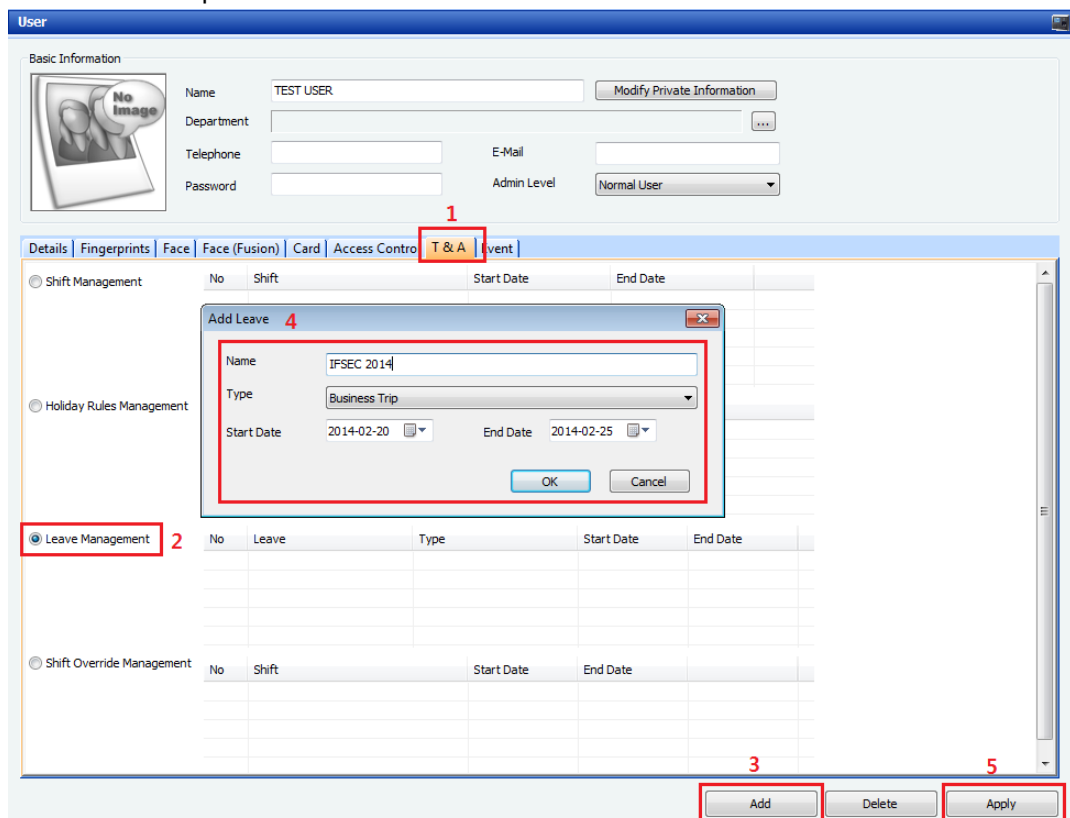
- To assign multiple users to holiday in the User menu
 - Go to [User] and right click the [User] at the top of user tree.
 - Click [Common Setting] and select [Holiday Rules] to move it to [Selected Items]. Click [Next].
 - Select a holiday(s) to apply and click [Next].
 - Click [Finish] to save the holiday setting.



1.5. Leave

BioStar v1.7 allows you to create up to 15 different leave types. BioStar v.1.62 or below supports up to 5 leave types.

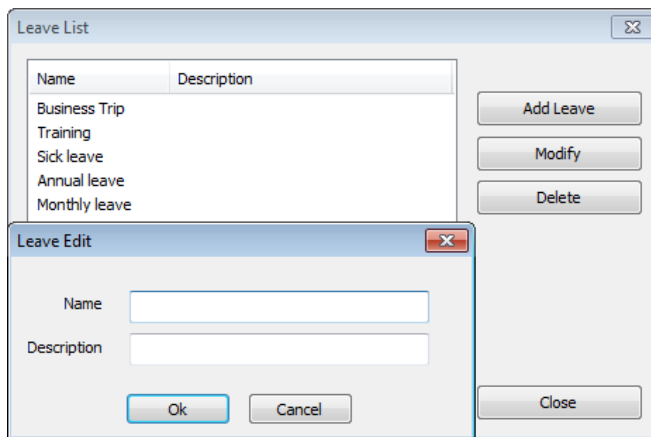
1.5.1. How to add leave period



1. Click [User] in the left shortcut pane and select a user you wish to add [Leave].
2. Move to the T&A tab.
3. Click [Leave Management] button and click [Add] to open “Add Leave” window.
4. Fill out the name of leave and select the Type, Start Date and End Date, then click [OK].
5. Click [Apply] to save a Leave Management.

- Five types of Leave: Business Trip / Training / Sick Leave / Annual Leave / Monthly Leave.
- During the leave period, work time will not be calculated even though an employee comes to work.
- Leave period has priority even there is duplication schedules between shift and leave.

1.5.2. How to add custom leave



1. Click [Option] and move to [T&A].
2. Click [Leave Type Setting] to open “Leave List” window.
3. Click [Add Leave] to make your custom leave type.
4. Insert name and description then click [OK].

1.6. T&A Function Key

To set the device T&A key, click [Device] in the left shortcut pane and move to 'T&A' tab.

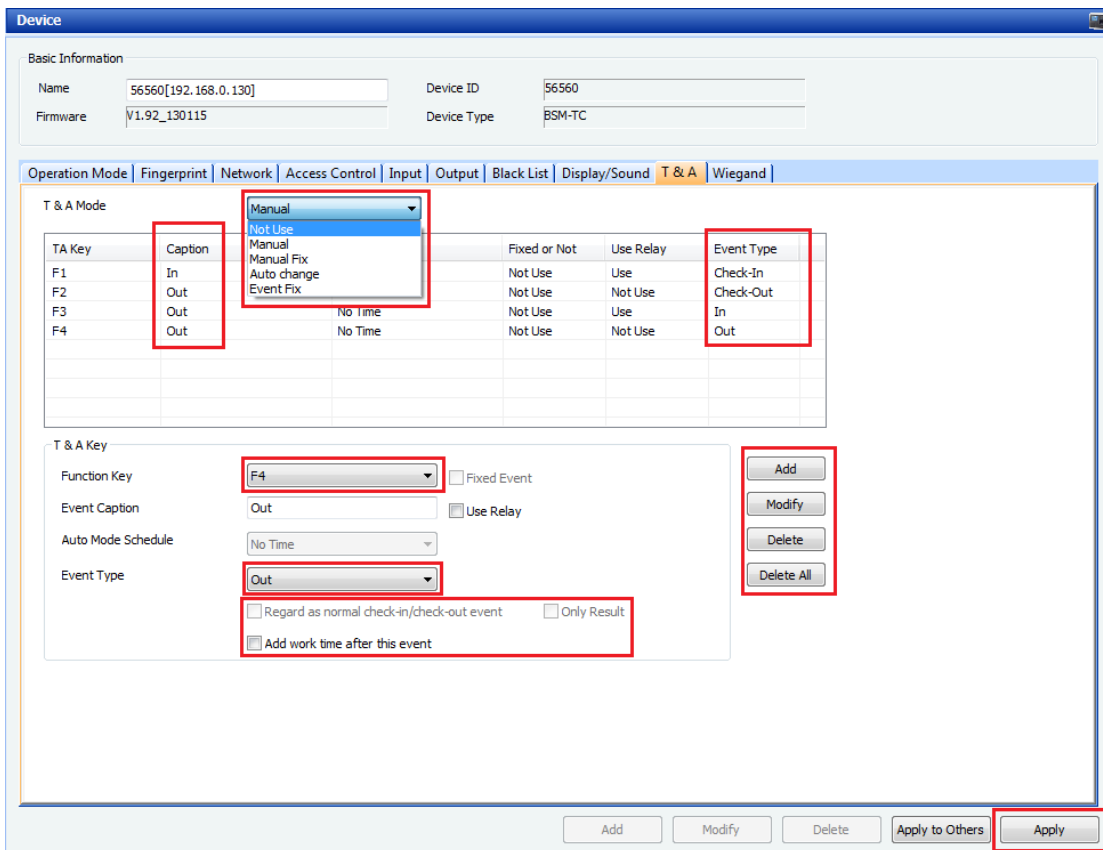
1.6.1. How to set T&A Function Key

1. Select the T&A Mode
 - Not Use: Disable the time and attendance function
 - Manual: User must press the T&A key every time
 - Manual Fix: Previous pressed T&A key remains until a different T&A key is pressed
 - Auto Change: T&A mode changes automatically by specified time periods
2. Select function key from the drop-down list. Fixed event box will be activated when you are using [Event Fix] mode.
For example, BioStation. F1 to F4, 1 to 9, CALL, 0 or ESC

BioLite Net: < x 1, > x 1, < x 2, ~ , > x 15

3. Select Event Caption. Enter the caption that you wish to display in the LCD.
Note: Caption is just the name, not a distinguishing element within the process
4. Select the Auto Mode Schedule: In the Auto Change mode, time zones will appear in the drop-down list.
5. Select the Event Type: Set the types of event to assign to the key (Not use, Check-In, Check-Out, In or Out)
 - Check-In/Check-Out: Event acknowledging check-in/check-out
 - In: Generally an event coming in, and is used in pair with (Out) event. When used without an Out event, hours before the “In” event are excluded from work hours
 - Out: Generally an event going out, and is used in pair with (In) event.
6. Option
 - Regard as normal check-in / check-out event: User will consider as check-in / check-out on time even though they arrive late or leave early
 - Only Result: This option is valid when you select [Regard as normal check-in/check-out] event. When enabled, T&A report shows all users come/leave on time. However, user’s total work time will be calculated correctly based on actual check-in / check-out event.
 - Add work time after this event: This option is valid when you select [Out] in the event type. When enabled, system will calculate user’s total work time including the remaining time slot even though user leaves the work early pressing [Out] key. It is useful for employee who works at field instead of office.
7. Event Duplication
 - BioStar only accepts events that we can calculate the exact work time.
 - When there are duplicated events (Check-In and In) the closest event to the Check-Out is valid.
Example 1, Out – In 1 – In 2 – In 3 – Check-Out
➔ Out – In 1, In 3 – Check-Out (In 2 is ignored)
 - Example 2, Check-In – In – Check-Out
➔ In – Check-Out (Check-in is ignored)
 - When there are duplicated events (Out, Check-Out) the closest event to the Check-Out is valid.
Example 1, Check-In – Out – Check-Out
➔ Check-In – Out (Check-Out is ignored)

Note: You must click [Add] and then [Apply] to save T&A setting. You can also apply the same setting other devices by clicking [Apply to Others].



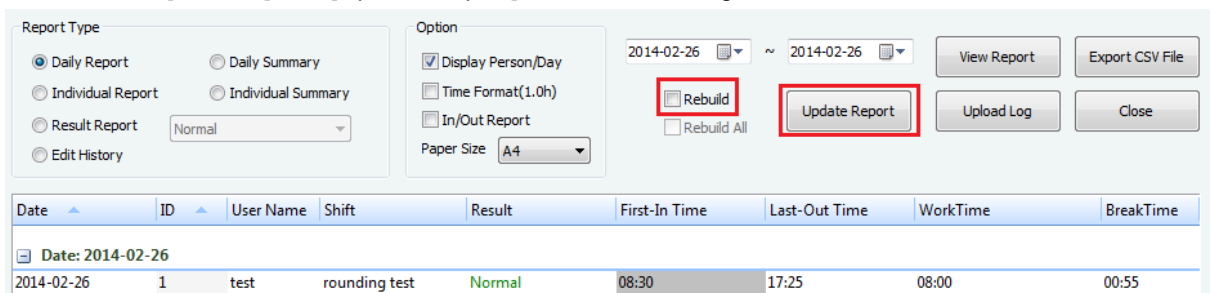
1.7. Report

You can create T&A report to view the users' work time. It is also possible to edit and save the modification to the report, but the original data will not be deleted.

1.7.1. General Editing

You can edit/modify each data on the report field directly.

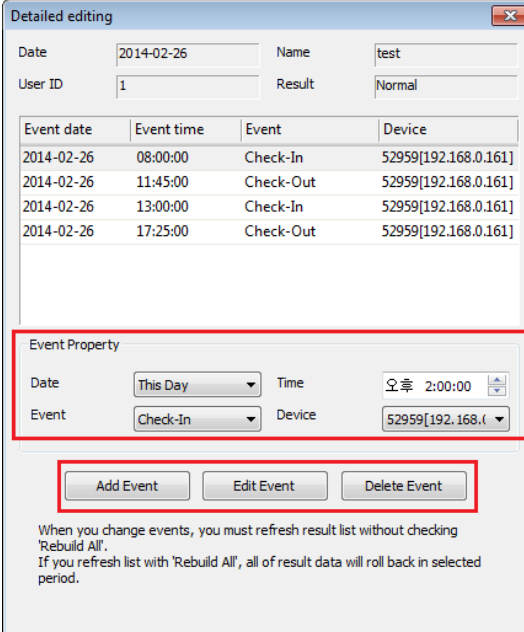
- Simply click the field you would like to edit/modify.
- Edited parts are marked as gray color.
- Edited/modified data will **NOT** affect other data of the same day.
For example, user with 8 hours work time (Check-In at 09:00, Check-Out at 17:00), the total work time remain 8 hours even "Check-In" time is changed to 08:00.
- Click [Rebuild] and [Update Report] to recover an original T&A data.



1.7.2. Detailed Editing

You can edit/modify each data on the report by right click the selected user and click [Detailed editing].

- Detailed editing allows you to add/delete/modify selected user's T&A data.
- Edited parts are **NOT** marked as gray color.
- Edited/modified data will affect other data of the same day.
For example, user with 8 hours work time (Check-In at 09:00, Check-Out at 17:00), the total work time changes to 10 hours when "Check-In" time is changed to 08:00.
- Click [Rebuild All] and [Update Report] to recover an original T&A data.



Event date	Event time	Event	Device
2014-02-26	08:00:00	Check-In	52959[192.168.0.161]
2014-02-26	11:45:00	Check-Out	52959[192.168.0.161]
2014-02-26	13:00:00	Check-In	52959[192.168.0.161]
2014-02-26	17:25:00	Check-Out	52959[192.168.0.161]

Event Property

Date: This Day Time: 2:00:00

Event: Check-In Device: 52959[192.168.0.161]

Add Event Edit Event Delete Event

When you change events, you must refresh result list without checking 'Rebuild All'.
If you refresh list with 'Rebuild All', all of result data will roll back in selected period.

Note: You must do [Rebuild] when you made following modifications:

- Shift has changed from A to B for a selected user;
- Time Category or Daily Schedule has changed;
- Shift details has changed;

2. FAQ

2.1. Why is my report result displaying “Absence”?

There are a couple of possible reasons for report result displaying “Absence”. Please kindly check below:

- No Time Slot with “Affect Result” box checked ([See “1.2.1 Key Features” for details](#))
- T&A “Event Type” are not set in the device ([See “1.6.1 How to set T&A Function Key” for details](#))
- Minimum Duration is not met ([See “1.2.1 Key Features” for details](#))
- Due to priority level on the T&A report ([See “1.2.2 T&A Results shown on the Report screen” for details](#))

2.2. How do I calculate total work time without pressing T&A key?

[First Check-In / Last Check-Out] option enables BioStar to calculate total work time for users who did not press T&A key. This option simply calculates the time between the first and last event.

- Note that if there are Check-In or Check-Out events present, the “First Check-In / Last Check-Out” option will be ignored. ([See “1.2.1 Key Features” for details](#))

2.3. How do I calculate the [Break Time]?

Break Time is a new feature in BioStar v1.7. BioStar v1.7 automatically calculates Work Time and Break Time.

- Break Time is calculated by subtracting the work time from the total time. This means the break time is calculated based on the sum of total OUT time.
- To calculate the Break Time correctly, all the time rates should be one (1).
- For BioStar v.1.62 or below, it is not possible to calculate the Break Time.

Note: If you would like to calculate exact work time without break time (lunch time etc), users must use T&A key when they authenticate.

2.4. How do I edit/modify user report in detail?

BioStar allows you to edit/change/modify T&A data in the report. There are two types of editing; General and Detailed Editing. ([See “1.7 Report” for details](#))

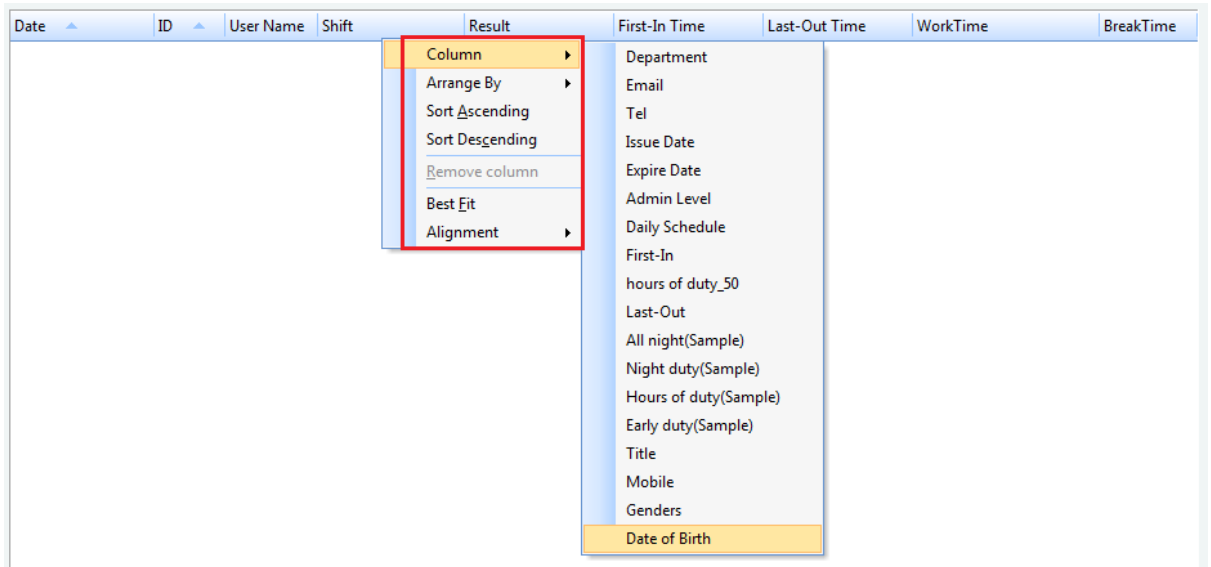
2.5. What is the difference between check-In, In, Check-Out and Out event?

There are four event types in T&A; Check-In, In, Check-Out and Out. ([See “1.6.1 How to set T&A Function Key” for details](#))

- Check-In: Formal check-in event upon arrival at work
- In: General check in event during a day (Used with “Out” events)
- Check-Out: Formal check-out event upon departure at work
- Out: General check out event during a day (Used with “In” events)

2.6. How do I add/delete/modify T&A report column?

Right-click the report column and you can add/delete/modify T&A report column.



2.7. How does the [Rounding] work?

Employers can round the employees clocking to, for example, the closest 5, 10 or 15 minutes. This can be useful when paying part-time or contract employees. (See [“1.2.1 Key Features”](#) for details)

- For example, the rounding is set to 15 minutes. One employee punched at 9 AM and worked until 11.10AM. Employee has worked for 2 hours and 10 minutes. However since the rounding is set to 15 minutes, the extra 10 minutes does not count here. Therefore, the total work time would be 2 hours.

2.8. How does the [Grace] work?

The importance of [Grace] is that very few employees will eventually punch precisely on time. By setting up [Grace], you can set the tolerance for employees who punched after the work start time or before the work end time. (See [“1.2.1 Key Features”](#) for details)

- For example, time slot starts at 10AM. Grace set to 10 minutes.
 - ➔ All employees who punch their first check-in by 10:10AM will be regarded as normal, not being late.

2.9. What is the difference between [Rebuild] and [Rebuild All]?

You may click [Rebuild] when you want to restore the T&A data after “General Editing”. [Rebuild] does not affect edited data through “Detailed Editing”. [Rebuild All] will restore original T&A data and all edited data will be lost. (See [“1.7 Report”](#) for details)

2.10. What are the BioStar T&A Specification?

BioStar v1.62

Feature	Details	BioStar (Free)	BioStar SE (Standard)
Work time Calculation	Work time Calculation	Yes	Yes
	Time Category	64	64
	Daily schedule	256	256
	Time slot for each Daily schedule	16	16
Shift Management	Shift Management	weekly	daily/weekly
	Maximum number of Shifts	64	64
	Maximum number of Holidays	64	64
	Maximum number of Shifts for each user	16	16
	Maximum number of Holidays for each user	16	16
	Maximum number of Leaves for each user	32	32
	Number of Leave types	5	5
Holiday Management	Maximum number of Holidays	64	64
Report	Generation of Reports	Yes	Yes
In/Out Board *	In/Out Board	N/A	Yes

BioStar v1.7

Feature	Details	BioStar (Free)	BioStar SE (Standard)
Work time Calculation	Work time Calculation	Yes	Yes
	Time Category	64	64
	Daily schedule	256	256
	Time slot for each Daily schedule	16	16
Shift Management	Shift Management	weekly	daily/weekly
	Maximum number of Shifts	1024	1024
	Maximum number of Holidays	64	64
	Maximum number of Shifts for each user	16	16
	Maximum number of Holidays for each user	16	16
	Maximum number of Leaves for each user	32	32
	Number of Leave types	5	5
Holiday Management	Maximum number of Holidays	64	64
Report	Generation of Reports	Yes	Yes
In/Out Board *	In/Out Board	N/A	Yes