

# *SPEKTRUM WORKFORCE MANAGEMENT SOFTWARE*

*USER MANUAL*



**DOCUMENT REVISION HISTORY**

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## Table of Contents

<b>1.0</b>	<b>What is Spektrum .....</b>	<b>9</b>
1.1	Time & Attendance Module.....	12
<b>2.0</b>	<b>Getting Started .....</b>	<b>13</b>
2.1	Logging in – Main Console .....	13
<b>3.0</b>	<b>Navigation (Menu) .....</b>	<b>14</b>
3.1	Common Icons .....	15
3.2	Function-specific Icons.....	16
3.3	Submenus .....	18
3.4	Navigation and Customisation .....	19
<b>4.0</b>	<b>User Guide .....</b>	<b>26</b>
4.1	Company .....	27
4.2	System Options .....	27
4.3	Devices .....	28
4.4	Device Group .....	29
4.4.1	Manage your groups .....	29
4.5	Work Code .....	30
4.6	Attendance Type .....	31
4.6.1	Define Attendance types.....	31
4.6.2	Link Attendance Type to Work Code.....	32
4.7	Site .....	33
4.7.1	Define Multiple Sites .....	33
4.7.2	Linking Devices to Sites .....	34
4.8	Department.....	35
4.8.1	Define Departments .....	36
4.9	Employee Group .....	37
4.9.1	Define Employee Group .....	37
4.10	Roles.....	38
4.10.1	Administrator .....	39
4.10.2	Manager .....	40
4.10.3	Enroller.....	41
4.10.4	Default / Employee .....	41
4.11	Employee .....	42

4.11.1	Employee status .....	44
4.11.2	Link Employee to a Department .....	44
4.11.3	Link Employee to an Employee Group .....	45
4.11.4	Link Employee to a Device Group .....	46
4.11.5	Employee Submenu .....	46
4.11.6	Employee Status Filtering.....	48
4.11.7	Pull and Push Biometrics .....	49
4.11.8	Calculating Attendance .....	53
4.12	My Details .....	56
4.13	User.....	57
4.13.1	Define User Access .....	57
4.14	Punch .....	58
4.14.1	Amending a Punch .....	60
4.14.2	Creating a Punch .....	61
4.14.3	Punch Period Filtering .....	62
4.15	Attendance .....	63
4.16	Export Punches .....	64
<b>5.0</b>	<b>Schedules &amp; Rosters .....</b>	<b>66</b>
5.1	Teams.....	67
5.2	Parameters.....	68
5.3	Shifts .....	70
5.4	Rosters .....	72
5.4.1	Creating a Roster .....	72
5.4.2	Selecting Employees.....	73
5.4.3	Allocating Shift .....	74
5.4.4	Repeating Shift .....	75
5.4.5	Duplication Pattern .....	76
5.4.6	Roster: Export to Excel .....	77
5.4.7	Roster: Chart by Employee Designation.....	79
5.4.8	Holidays.....	80
5.4.9	Apply for Leave through the Roster .....	81
5.4.10	Calc. Summaries .....	82
5.4.11	Daily Summary .....	84
5.4.12	Period Summary.....	85
5.4.13	Period Summary – Overtime Approval .....	85

<b>6.0</b>	<b>Reports.....</b>	<b>86</b>
6.1	Attendance Report.....	86
6.2	Who's In Report .....	86
<b>7.0</b>	<b>Leave .....</b>	<b>87</b>
7.1	Set up Leave.....	87
7.1.1	Leave types.....	87
7.1.2	Define Leave Admins.....	88
7.1.3	Create a Leave Policy. ....	89
7.1.4	Configure a Leave Period. ....	91
7.1.5	Adding a Stop Leave Period.....	95
7.2	Leave Request.....	96
7.2.1	Add Leave Request.....	96
7.2.2	Cancel a Leave Request.....	98
7.2.3	Approve or Deny a Leave request. ....	98
7.2.4	Export Leave Requests .....	99
7.3	Leave Approvals.....	100
7.3.1	View Leave Approvals .....	100
7.4	My Leave.....	101
7.5	Leave History. ....	103
7.5.1	View Leave History .....	103
7.5.2	Import Leave Balances. ....	104
7.6	Leave Balances.....	105
7.6.1	Check Employee Leave Balances.....	105
7.6.2	Check Leave Balance from My Leave. ....	106
7.7	Calendar.....	107
7.7.1	View Leave with Calendar .....	107
7.7.2	Add Leave request through the Calendar. ....	110
<b>8.0</b>	<b>Additional Help .....</b>	<b>112</b>
8.1	The Help Widget .....	112

## Table of Contents

Figure 1: How Spektrum Works	10
Figure 2: The Login Screen	13
Figure 3: Navigation Menu	14
Figure 4: Menu bar (Visible vs Hidden)	14
Figure 5: Common Icons	15
Figure 6: Function Specific Icons	17
Figure 7: Submenus	18
Figure 8: Global Search	19
Figure 9: Filter Row Menu	19
Figure 10: Filter Row	19
Figure 11: Filter Row Menu	20
Figure 12: Search Operators	20
Figure 13: Moving fields	20
Figure 14: Ascending order (Left) and Descending order (Right)	21
Figure 15: Setting a filter	21
Figure 16: The Right Button Menu	21
Figure 17: Group Panel	22
Figure 18: Group fields	22
Figure 19: Customisation Dialog	22
Figure 20: Field is Visible	23
Figure 21: Field is Hidden	23
Figure 22: Column Chooser Option	23
Figure 23: Column Chooser	24
Figure 24: The Footer Option	24
Figure 25: The Count Function	25
Figure 26: Spektrum Main Menu	26
Figure 27: System Options	27
Figure 28: Devices	28
Figure 29: Device Group	29
Figure 30: Work Code	30
Figure 31: Enabling Work Codes	30
Figure 32: Attendance Type	31
Figure 33: Linking Work Codes to Attendance Type	32
Figure 34: Site	33
Figure 35: Linking your Devices to your Sites	34
Figure 36: Organisational Chart - Department	35
Figure 37: The Departments	35
Figure 38: Employee Group	37
Figure 39: Roles	38
Figure 40: The Administrator Role	39
Figure 41: The Manager Role link	40
Figure 42: The Manager's Portal	40
Figure 43: The Enroller	41
Figure 44: The Default or Employee	41
Figure 45: The Employees view	42
Figure 46: Employee options	42
Figure 47: The Revoke Reader Access option	43
Figure 48: The Employee status	44

Figure 49: Link your Employee to a Department	44
Figure 50: Linking your Employee to an Employee Group	45
Figure 51: Linking your Employee to a Device Group	46
Figure 52: Sync Data	46
Figure 53: Portal login credentials	47
Figure 54: Password on the first login	47
Figure 55: Wrong login credentials	48
Figure 56: Filtering All, Active or InActive Employees	48
Figure 57: Status Filtering	49
Figure 58: Pull Bio's	49
Figure 59: Bio's saved in Spektrum	51
Figure 60: Push Bio's	51
Figure 61: Calculate Attendance - Without Work Codes	53
Figure 62: Calculate Attendance using Work Codes	54
Figure 63: Error in Attendance Calculation	56
Figure 64: My Details	56
Figure 65: User	57
Figure 66: The Punch section	58
Figure 67: The unknown Punches	59
Figure 68: Amending a Punch	60
Figure 69: Amend a Punch Menu	60
Figure 70: Employee Search	61
Figure 71: The Punch Quick Entry Menu	62
Figure 72: Filtering All, Today, Yesterday, This week, Last week or This month Punches	62
Figure 73: Attendance	63
Figure 74: Export File	64
Figure 75: Export Punch Fields	64
Figure 76: Export Date Range	65
Figure 77: Schedules & Rosters	66
Figure 78: Create Team	67
Figure 79: Company Parameters	68
Figure 80: Create Shift	70
Figure 81: Create Roster	72
Figure 82: Roster Designer	72
Figure 83: Employee Selection	73
Figure 84: Roster Designer populated with Employees	73
Figure 85: Filtering Rosters	74
Figure 86: Edit Roster	74
Figure 87: Add Shift	75
Figure 88: Repeat Shift	75
Figure 89: Source Employee	76
Figure 90: Duplicate Roster Pattern	76
Figure 91: Final result Roster Pattern	77
Figure 92: Export Roster	78
Figure 93: Employee Designation Chart	79
Figure 94: New Holiday	80
Figure 95: Roster list	81
Figure 96: New Absence Entry	81
Figure 97: Calc. Summaries	82
Figure 98: Calculation Parameters	82

Figure 99: Daily Summary	84
Figure 100: Period Summary	85
Figure 101: Attendance Report Date Range	86
Figure 102: Leave	87
Figure 103: Create Leave Type	88
Figure 104: Leave Admins	89
Figure 105: Leave Policy	89
Figure 106: New Leave Type Policies	90
Figure 107: Add Leave Type Policy	90
Figure 108: Leave Period	91
Figure 109: New Employment Type Leave Period Options	92
Figure 110: Employment Type Leave Period Options	92
Figure 111: Leave Period Accrual Schedule Item	93
Figure 112: Calculate Schedules	93
Figure 113: Clone Leave Period	94
Figure 114: Balance Carry Over	94
Figure 115: Leave Carry Over Menu	95
Figure 116: Stop Leave Period	95
Figure 117: Excluded Employees	96
Figure 118: Leave Application	96
Figure 119: Booking a single leave day	97
Figure 120: Booking multiple leave days	97
Figure 121: Book leave by Start and End Time	98
Figure 122: Cancel Leave Request	98
Figure 123: Leave Approve Requests	99
Figure 124: Changing Leave Request status	99
Figure 125: Export Leave Requests	99
Figure 126: My Leave Approvals	100
Figure 127: My Leave	101
Figure 128: My Leave Type	101
Figure 129: My Leave Period	101
Figure 130: Pending Approvals	102
Figure 131: Taken	102
Figure 132: Approved	102
Figure 133: Rejected	102
Figure 134: My Leave Icons, New Leave Application (Left) and Balance Details (Right)	102
Figure 135: List of Leave Requests	103
Figure 136: Leave History	103
Figure 137: New Leave History	104
Figure 138: Edit Leave Transaction	104
Figure 139: Leave History Import	104
Figure 140: Template for Leave History Import	105
Figure 141: Leave Balances	105
Figure 142: Employee Select	106
Figure 143: Balance Details icon in My Leave	106
Figure 144: Leave Balance Transactions	107
Figure 145: Calendar tab in My Leave	107
Figure 146: Calendar View	108
Figure 147: Viewing options	108
Figure 148: Calendar by Day	108

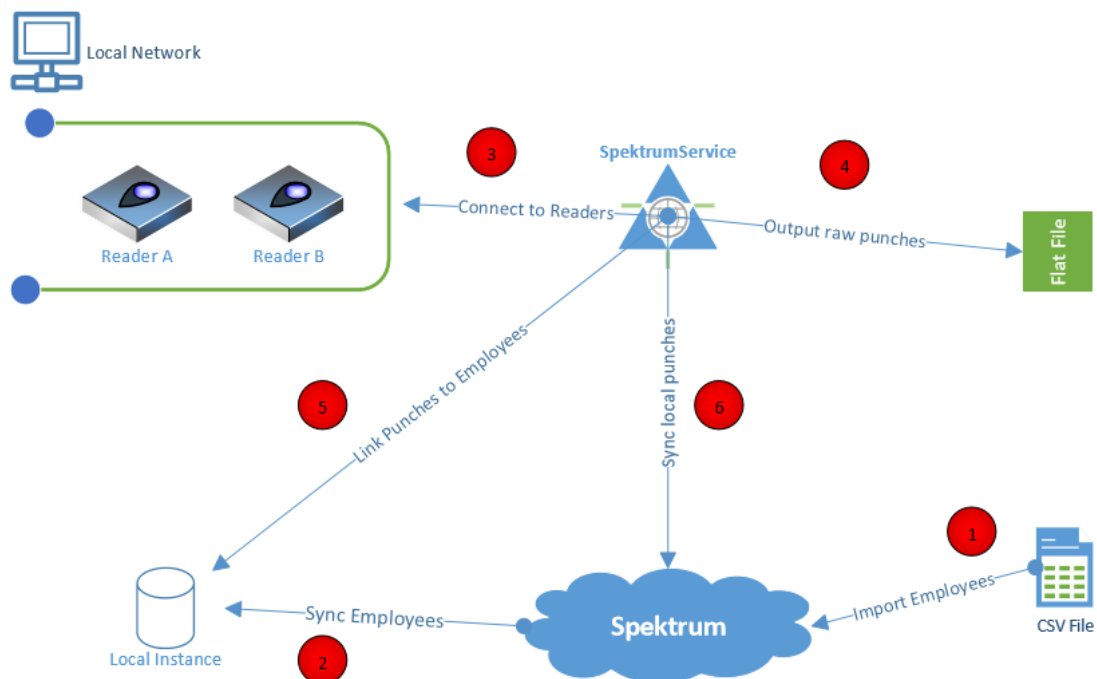


<b>Figure 149: Calendar by Work Week</b>	<b>109</b>
<b>Figure 150: Calendar by Week</b>	<b>109</b>
<b>Figure 151: Calendar by Month</b>	<b>109</b>
<b>Figure 152: Calendar by Timeline</b>	<b>110</b>
<b>Figure 153: Calendar by Agenda</b>	<b>110</b>
<b>Figure 154: Blue Calendar Icon</b>	<b>110</b>
<b>Figure 155: New Leave Entry from Calendar</b>	<b>111</b>
<b>Figure 193: The Help Widget</b>	<b>112</b>

## 1.0 What is Spektrum

AIS Spektrum is a web-based workforce management solution developed to manage your employees in an easy and comprehensive manner. Spektrum is made up of the local hardware (local computer and Readers) which is installed within your organisation, and the web-based platform, which lets you manage your employees' attendance from any device via a standard web browser. Across all its modules, AIS Spektrum features an intuitive user interface, advanced user management and sophisticated reporting tools which allow you to maintain an effective and productive workforce.

For Spektrum to work, it must make use of a local instance (i.e. the local computer), a local network (network between the Readers), and the Spektrum cloud. Firstly, the employee records are imported to the Spektrum cloud, either by importing them manually using the Spektrum Portal or by importing a CSV file. Once the employee records are imported, they are synced with the local computer and then the Spektrum Service connects with the Readers every five minutes to collect the employees' raw punches and save them to a flat file. These punches are then linked to the respective employees in the local computer and the Spektrum Service syncs these local punches to the Spektrum cloud. By syncing the raw punches and the respective employees to the Spektrum cloud, you are given access to your employees' punches and attendances easily through a simple URL, <https://spektrum.aissoftware.com.mt>.



*Figure 1: How Spektrum Works*

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AIS Spektrum is designed for businesses of all sizes operating in any industry. The solution is web-based, providing you with access to your information from practically anywhere. AIS Spektrum allows organisations to focus on their business objectives by reducing the burden on internal staff members and resources. With enhanced security controls, multi-user access rights and comprehensive audit trails included, AIS Spektrum is the right workforce management platform for your business.

Benefits of Spektrum include:

- Reduced downtime and maintenance costs
- Benefit from the latest software upgrades automatically
- Highly secure web platform with in-built audit trails and logging
- 24x7 access from any networked device to view real-time information
- Automatic back-up and disaster recovery in place

## 1.1 Time & Attendance Module

The AIS Spektrum Time & Attendance module is the next generation attendance tool suitable for businesses in a various range of industries. The Time & Attendance module collects user punches from a variety of T&A devices, such as biometric hand, fingerprint and face recognition technologies. Data is collected and converted into Attendance records in a simple and easy manner, to ensure that your payroll process is as easy as possible.

The Time & Attendance module caters for a mix of readers installed across multiple sites, allowing you to choose which technology mix to deploy across your organisation. Organisations can choose to extend the visibility of user punches with an employee self-service portal made available to managers and employees alike. The web-based platform means that you can manage your teams from any device via a standard web browser.

### Features:

- Supports an extensive range of biometric readers
- Automated or scheduled reader polling and data downloads
- Allows for multiple reader deployments across various sites
- Integration with any third-party applications

### Attendance management

- Role-based security model across specific departments
- Full administrator control to manage employee punches
- Support for multiple punches per user per day
- Support for work codes

### Data Filtering & Reporting

- Standard Time & Attendance in-built reports for quick access
- On-screen data filtering coupled with an advanced reporting tool
- Exporting to various formats such as CSV, TXT, PDF, XLSX and more

## 2.0 Getting Started

Spektrum is a web-based application and therefore accessible from any internet-enabled device. These devices include:

- Desktop computers
- Laptops
- Tablets and Smartphones

Following a Role-based security model, access to Spektrum is controlled by the user access credentials.

### 2.1 Logging in – Main Console

To log into the management console, follow these steps:

1. <https://spektrum.aissoftware.com.mt>
2. Type Company Name (provided by AIS)
3. Enter Username
4. Enter Password
5. Press Log In

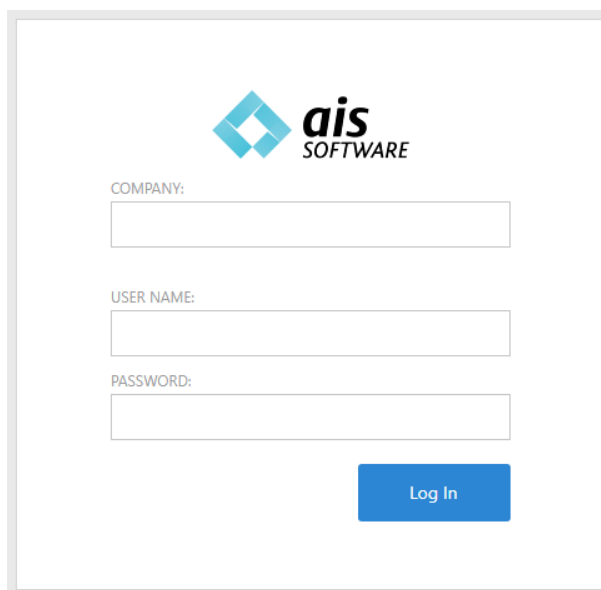


Figure 2: The Login Screen

Your access level into Spektrum depends on the Role and security levels assigned (by the Administrator) to your user. It is possible to grant your various Managers access to their specific sections and employees assigned to them. Access to this portal is identical to the process discussed in section 2.1 above.

It is very important to note that, the portal user access count is limited by the Spektrum subscription chosen by your organisation. Should you wish to increase this access count, get in touch with our Spektrum support team on [support@ais.com.mt](mailto:support@ais.com.mt)

### 3.0 Navigation (Menu)

Spektrum is a menu driven application designed to allow for simple navigation, to take you directly to the function you require from a single window. The Spektrum navigation menu is found on the left-hand side of your screen, as shown in Figure 3 below.

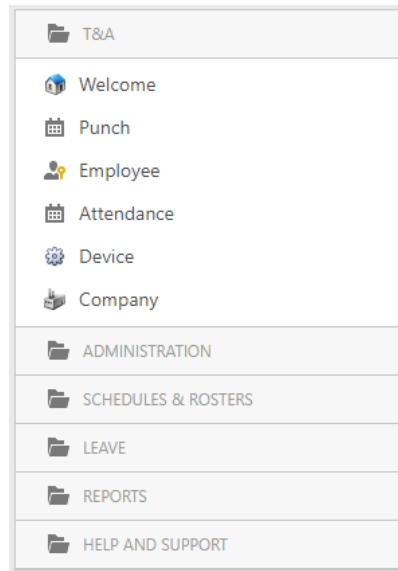



Figure 3: Navigation Menu

Each menu option is clearly labelled and each link redirects you to the related page and function. Each individual page is headed by a menu bar which in turn is populated by a list of function buttons or icons. A comprehensive guide to these icons and buttons can be found in section 3.1 below.

A handy feature of the menu bar is the Show / Hide (menu)  button which is found in the topmost left corner adjacent to the Spektrum logo. Hide the menu to expand the operation window to the full width of the screen, as shown in Figure 4 below.

This feature is particularly useful when Spektrum is accessed from mobile devices such as tablets or smartphones.

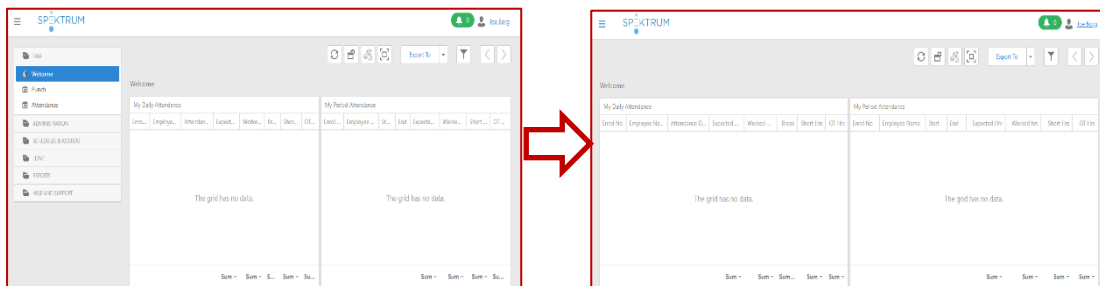


Figure 4: Menu bar (Visible vs Hidden)

3.1 Common Icons

Each page is headed by its own set of icons and shortcuts relative to the functions. The majority of these icons are common throughout Spektrum such as; Edit, Refresh, and Clear, whilst other icons are specific to the page such as; Change my password or Generate New Password under User.

Here are the Spektrum icons explained in further detail:











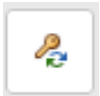



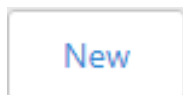
	<p><b>Edit</b></p> <p>You must select the object you wish to edit beforehand.</p>		<p><b>Submenu</b></p> <p>Open the page submenu for additional functionality.</p>
	<p><b>Refresh</b></p> <p>Reload the page. This function is not to be mistaken with the browser refresh option.</p>		<p><b>Clear Search</b></p>
	<p><b>Search</b></p> <p>Opens a 2<sup>nd</sup> window for customised search criteria and parameters.</p>		<p><b>Previous Item</b></p>
	<p><b>Next Item</b></p>		<p><b>Delete</b></p> <p>You must select the object you wish to delete beforehand.</p>
	<p><b>Validate</b></p> <p>Checks all entries for errors.</p>		<p><b>Change my password</b></p> <p>Administrative function to change a users' portal password.</p>
	<p><b>Generate a password</b></p> <p>Administrative function to reset a users' portal password.</p>		<p><b>Menu show/hide icon</b></p>

Figure 5: Common Icons

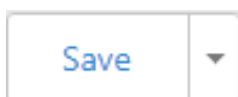
Additionally, certain pages include additional functionality either built-in to the menu bar options indicated with a drop down  or under the submenu icon: 

## 3.2 Function-specific Icons

Spektrum also includes a number of page or function specific icons which provide added functionality. Most of these icons also call an additional submenu with more features. These function-specific icons are explained as follows:

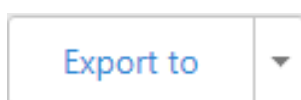


Create a NEW object, depending on the page.



Save the new object. Drop down options are:

Save, Save and Close or Save and New.



Depending on the page you can export the data to the most common file formats including CSV, TXT, PDF, XLSX and more.

## Backup Users

Backup users to a file (on your local device).



Sync Data

Sync data between Spektrum and the local instance.



Pull user biometric templates from the reader.



Send user enrolment data to the reader(s) in the Device Group the Employee is assigned to.



Toggle menu options between User Punches and Export mode.



Export security roles to file.

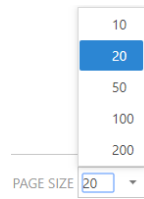
Link

Allows you to link single / multiple entries with this object; example Link under Role will add the selected Employee(s) to that role.

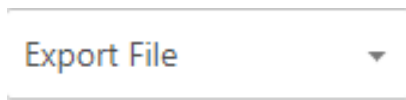
Unlink

The reverse of the Link function. Select the required object(s) to remove their association.





The Page Size option controls the number of information lines that are viewed on screen. Options are 10 / 20 / 50 / 100 or 200 lines.



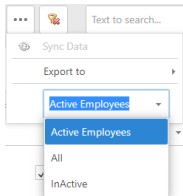
The Export File option under the punch menu is used to create a data export file (CSV format) for integration with 3<sup>rd</sup> party applications.

Figure 6: Function Specific Icons

3.3 Submenus

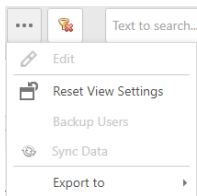
More functionality is accessed via the submenu icon  in certain menu bars. These submenus are expanded in the following table:

The Employee submenu



This submenu reveals functions specific to this group.

The Device submenu



The Punch submenu

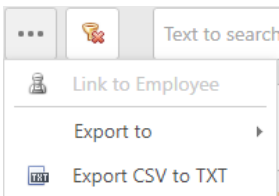


Figure 7: Submenus

### 3.4 Navigation and Customisation

There are the following methods available on every screen in Spektrum:

#### Global Search

In the top-right of every screen menu, one will find the Search Box:



Figure 8: Global Search

Put in any text into this box and click on the Search Icon. The system will try to find all entries that **contain** the text entered and will filter out the information accordingly. This will return all the records that **contain** the text entered i.e. if you enter "Grech", all the records that **contain** the word "Grech" will be returned.

#### Field Search

One must switch on the 'Filter Row' by right-clicking on any field header and selecting 'Filter Row'.

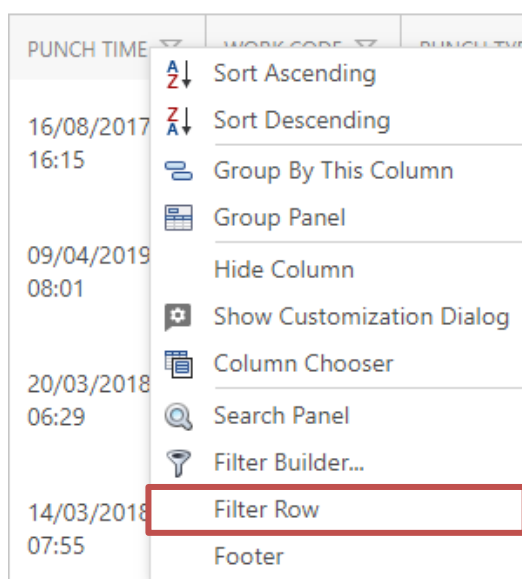


Figure 9: Filter Row Menu

This will open a blank row directly underneath the field headers:

	EMPLOYEE NAME ▼	DESIGNATION ▼	DEFAULT_DEPARTMENT ▼	DATE JOINED ▼	ENROL NO ↑ ▼	ID CARD NO ▼
<input type="checkbox"/>						

Figure 10: Filter Row

Now you are able to search by entering the text directly under the field (column) that you require. As soon as you stop typing, Spektrum will go through all the entries available within that column and will match all entries that **contain** the text that you entered.

This will return only the records that **contain** the text entered, if you enter the text “Grech”, the record that contains for example, “John Grech”, will be returned since it contains the name “Grech”.

If, for example, there is the need for you to search for all entries that **do not contain** the text entered, you will have to change the logical operator (Search type). This is possible by right-clicking on any field header and this time selecting ‘Filter Row Menu’. Upon selection one will see another series of funnels appearing within the filter row:

<input type="checkbox"/>	EMPLOYEE NAME	DESIGNATION	DEFAULT_DEPARTMENT	DATE JOINED	ENROL NO	ID CARD NO

Figure 11: Filter Row Menu

Once you left-click on the funnel within the filter row, you will be able to change how the search is performed:

DESIGNATION	DEFAULT_DEPARTMENT

Figure 12: Search Operators

In addition to searching, one can perform the following:

- Field Positioning
- Sorting
- Filtering
- Grouping
- Removing / Adding of fields

### Field Positioning

The field position will control the layout in which data is exported by replicating what is shown on-screen.

The Field position can be adjusted by a simple click/hold and drag/drop action. To move a Field simply click and hold the Field, and then drag it to the required position. In the below example, the EMPLOYEE DESIGNATION field is dropped to its new position in front of the DEFAULT\_DEPARTMENT tab.

<input type="checkbox"/>	EMPLOYEE NAME	EMPLOYEE DESIGNATION	DEFAULT_DEPARTMENT	EMPLOYEE DESIGNATION	STATUS	FACE TEMPLATE	HAND TEMPLATE
--------------------------	---------------	----------------------	--------------------	----------------------	--------	---------------	---------------

Figure 13: Moving fields

## Sorting

Data in the fields can be sorted in Ascending or Descending order. This is indicated by the arrow.



Figure 14: Ascending order (Left) and Descending order (Right)

It is also possible to execute multiple sorts on different fields by holding the Shift key and selecting the 2<sup>nd</sup> field, 3<sup>rd</sup> field and so on, to sort by, in that order.

## Filtering

Data can be filtered or limited to the desired parameters. The filter menu is available by clicking the funnel icon. In the example below, the PUNCH DATE field is filtered with specific From/To dates.

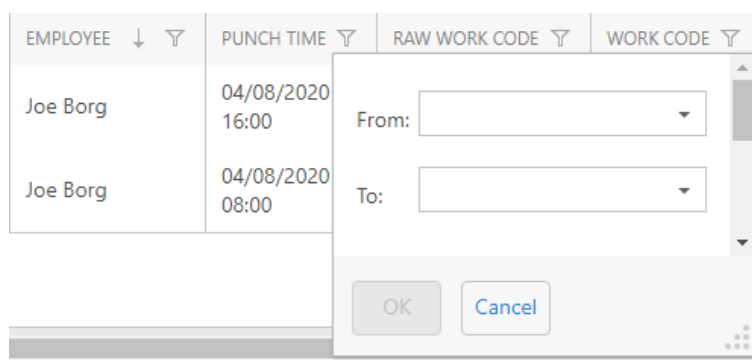


Figure 15: Setting a filter

Additionally, further customisation is available on the field headers. A Right Button Click will reveal the submenu, as shown in Figure 16 below.

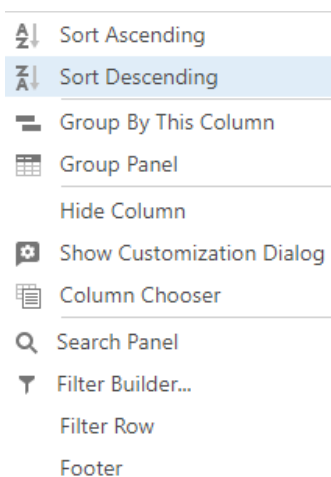


Figure 16: The Right Button Menu

## Grouping

One may use the grouping function to organise data in a particular manner. For example, list the employees first by Default\_Department, then by Employee Designation and finally by Employee Group.

To enable Grouping, right-click on any field header and select 'Group Panel'. This will have the effect of opening a panel right on top of the field headers:

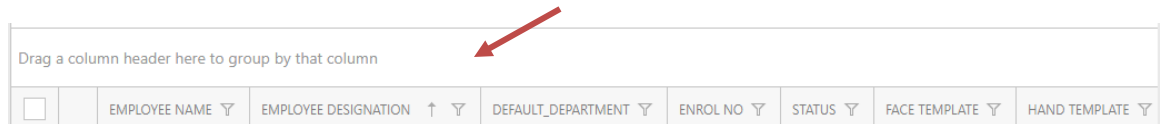


Figure 17: Group Panel

The concept here is to drag and drop the fields you wish to group by in this panel. Once done, you can right-click on one of the fields and select 'Expand All' to see all the grouped entries:

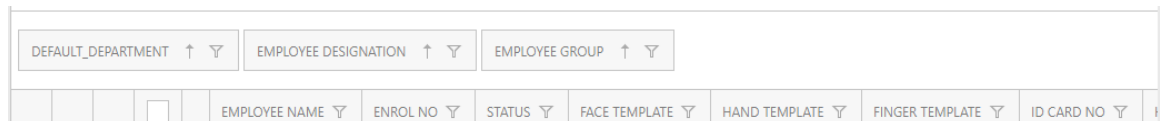


Figure 18: Group fields

Spektrum includes a special inbuilt feature that makes all of this sorting, filtering, grouping and field choosing very easy to manage. Right-click on any field header and select 'Show Customisation Dialog'. This will pull up the following control:

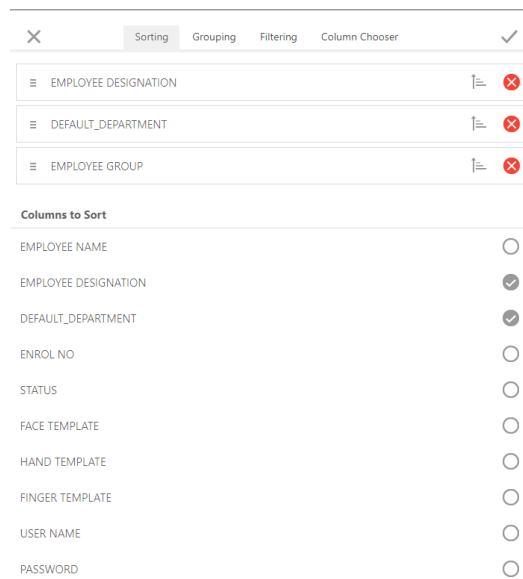


Figure 19: Customisation Dialog

One can quickly set up multiple sorting, grouping and filtering by clicking on the tabs available and simply selecting the desired fields. In addition, adding or removing fields to and from a specific screen is accomplished by clicking on the 'Column Chooser' tab and selecting which fields are needed and which fields are not. The eye icon on the right-hand side of the field names represents whether the Field is visible in the layout or hidden.

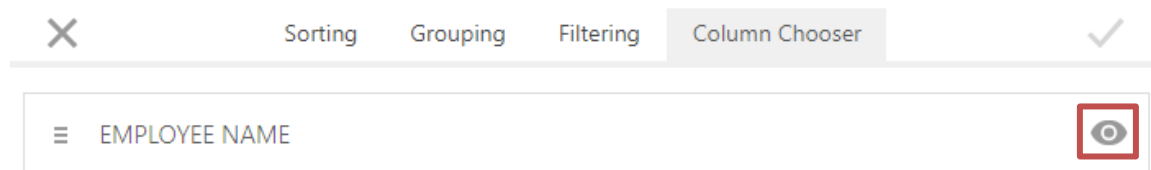


Figure 20: Field is Visible

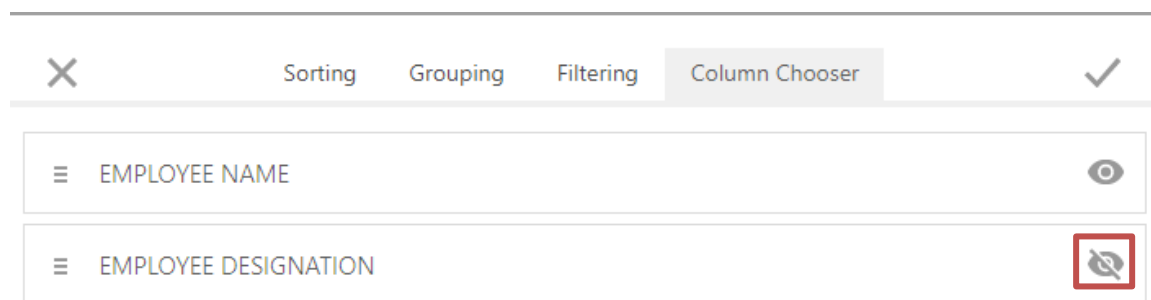


Figure 21: Field is Hidden

### Removing / Adding of Fields

An alternate way to access the Column Chooser is to right-click on a field and select the Column Chooser option.

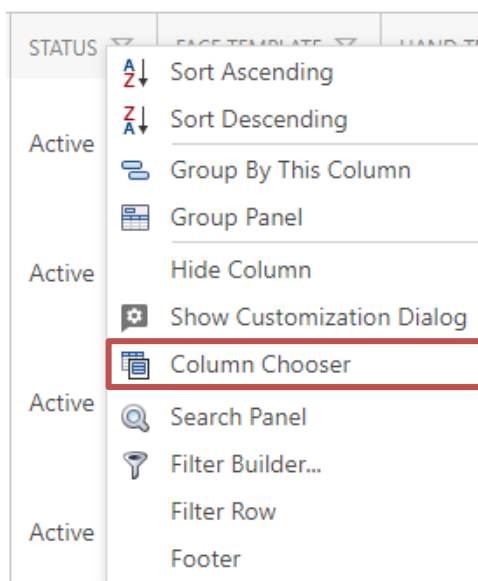


Figure 22: Column Chooser Option

Upon selecting the Column Chooser option, the following screen will appear in the bottom-right of the screen:

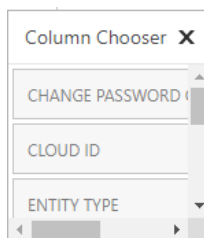


Figure 23: Column Chooser

One can add a Field to the layout simply by dragging the Field needed from the Column Chooser to the layout. To remove a Field from the layout, simply drag the Field from the layout to the Column Chooser.

All the changes in the screens are saved to one's profile and will be remembered after logging out and in again.

### Using the Footer

To add the Footer to your table, right-click on a field and select the 'Footer' option. This will add a footer right under the table.

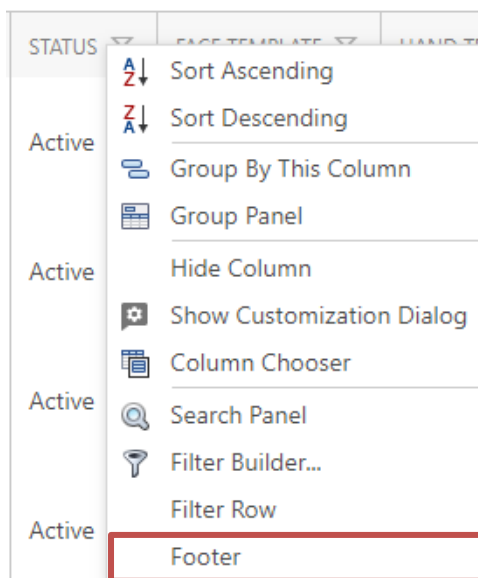


Figure 24: The Footer Option



The Footer offers a 'Count' function, which is particularly useful in the Employee page, as it gives you the number of employees you currently have registered on Spektrum. To enable the Count function, right-click on the footer and click the count option.

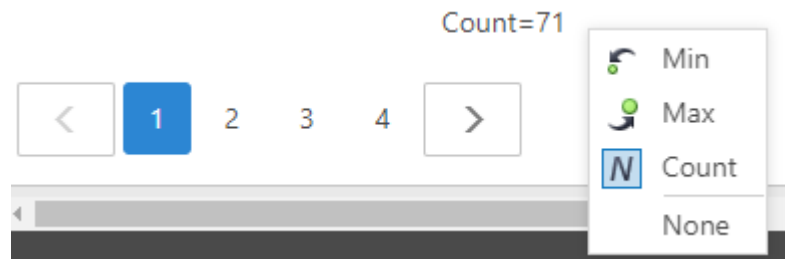


Figure 25: The Count Function

## 4.0 User Guide

The scope of this document is to provide you with first-hand assistance for this application. From this point onwards, each function and feature will be described in more detail. Immediately after logging into Spektrum, the below landing screen will be displayed.

The navigation menu is displayed on the left side of your screen.

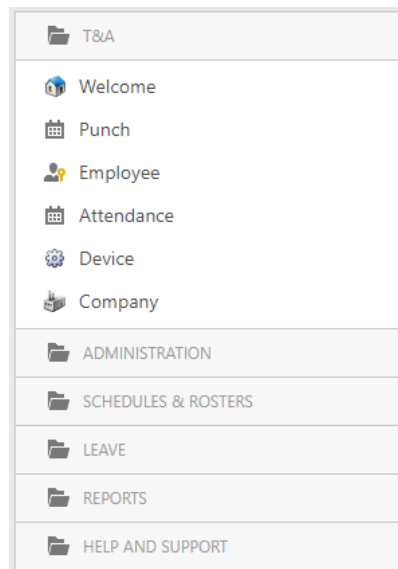


Figure 26: Spektrum Main Menu

## 4.1 Company

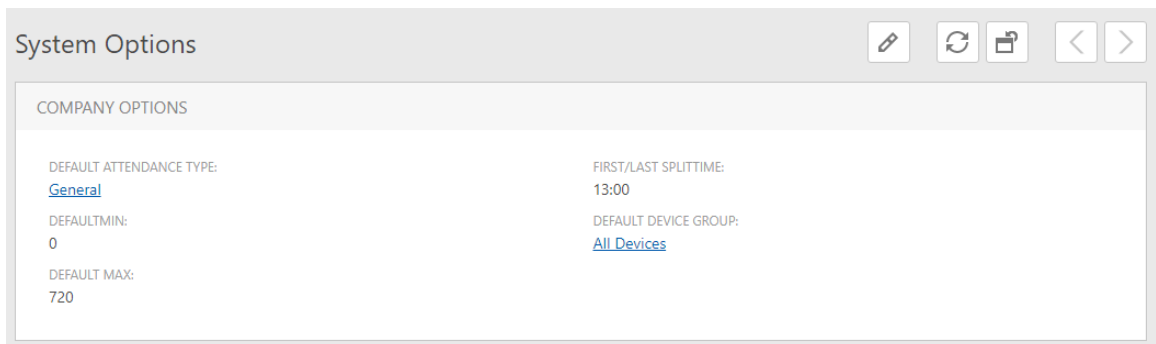
This section allows you to create new Companies and also amend existing Companies.

To create a new Company, simply click on the New button and fill in the required details.

To amend/edit an existing Company click on the **Edit** button (which is represented by a pencil icon) on the left hand-side of the company name.

## 4.2 System Options

This section allows you to customise the individual settings for your organisation. You can define features such as default attendance type, default minimum, default maximum, split time and device group.



The screenshot shows the 'System Options' window. At the top, there is a title bar with the text 'System Options' and several icons (edit, refresh, lock, back, forward). Below the title bar, there is a section titled 'COMPANY OPTIONS'. Inside this section, there are two columns of settings. The left column contains: 'DEFAULT ATTENDANCE TYPE:' with a link to 'General', 'DEFAULT MIN:' with the value '0', and 'DEFAULT MAX:' with the value '720'. The right column contains: 'FIRST/LAST SPLIT TIME:' with the value '13:00' and 'DEFAULT DEVICE GROUP:' with a link to 'All Devices'.

Figure 27: System Options

The parameters are explained below:

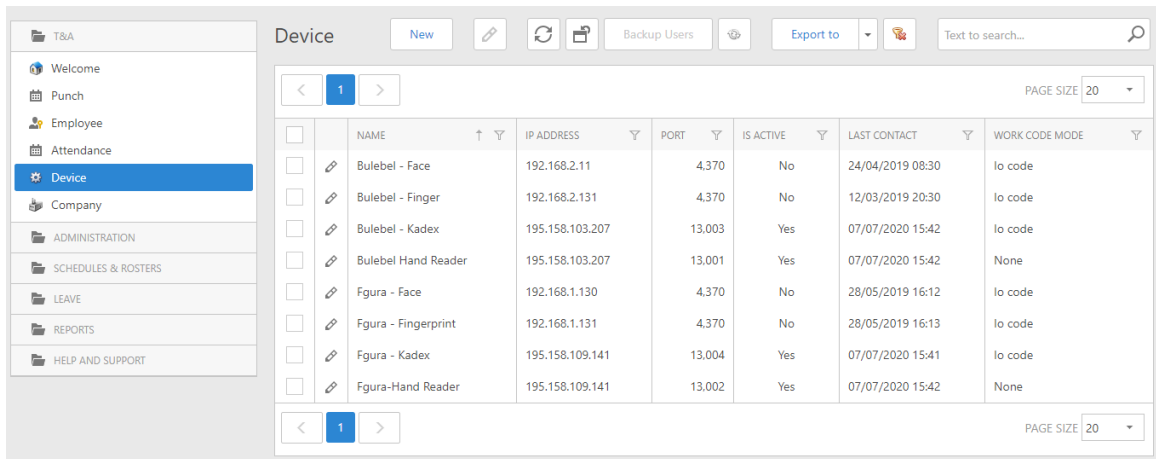
- **Default MIN:** This mandatory feature corrects any double punch, from the same user within the specified time bracket. There is no minimum or maximum values and the time bracket interval is in your control and can be amended as required.
- **Default MAX:** This mandatory feature defines the maximum number of minutes to be considered as a working day
- **SPLIT TIME:** An optional feature defines if a punch is to be defined as an IN or OUT and is used if Work Codes are not enforced on the reader(s). By default, punches detected before the split time will be marked as Start of day or IN and punches recorded after the split will be marked as End of day or OUT. You are in control of the Split time value.

### 4.3 Devices

Spektrum is capable of interfacing with different technology readers provided by AIS Technology. These technologies include:

- Palm / Hand
- Fingerprint
- Face recognition
- RFID card / Tag
- Pin / Code

Any mix of these technologies can be deployed anywhere in your organisation without limit whilst all readers will be centrally managed by Spektrum.



	NAME	IP ADDRESS	PORT	IS ACTIVE	LAST CONTACT	WORK CODE MODE
<input type="checkbox"/>	Bulebel - Face	192.168.2.11	4.370	No	24/04/2019 08:30	Io code
<input type="checkbox"/>	Bulebel - Finger	192.168.2.131	4.370	No	12/03/2019 20:30	Io code
<input type="checkbox"/>	Bulebel - Kadex	195.158.103.207	13.003	Yes	07/07/2020 15:42	Io code
<input type="checkbox"/>	Bulebel Hand Reader	195.158.103.207	13.001	Yes	07/07/2020 15:42	None
<input type="checkbox"/>	Fgura - Face	192.168.1.130	4.370	No	28/05/2019 16:12	Io code
<input type="checkbox"/>	Fgura - Fingerprint	192.168.1.131	4.370	No	28/05/2019 16:13	Io code
<input type="checkbox"/>	Fgura - Kadex	195.158.109.141	13.004	Yes	07/07/2020 15:41	Io code
<input type="checkbox"/>	Fgura-Hand Reader	195.158.109.141	13.002	Yes	07/07/2020 15:42	None

Figure 28: Devices

One of the fields in the Devices table is the 'Last Contact' field. This field indicates the last time Spektrum has had contact with the devices. Spektrum should establish contact with the devices every 5 to 15 minutes. If the last contact is far off, say an hour, a day or even more, this means that Spektrum is not communicating with the device, therefore punches will no longer be uploaded to Spektrum. In such a case, there are a number of steps you should follow:

- Restart any devices which are not connecting to Spektrum and check that the network cable is inserted properly.
- Contact your IT Department or providers in order to check for any network connectivity issues.

If after performing these steps you are still facing device connectivity issues, you may contact either of our support teams, depending on the issue.

Spektrum Technical Support - [support@ais.com.mt](mailto:support@ais.com.mt)

Spektrum Software Support - [support@aisrelations.freshdesk.com](mailto:support@aisrelations.freshdesk.com)

Alternatively, you may report any Spektrum related issue using the 'Help' widget, located in the bottom-right hand corner in Spektrum.

## 4.4 Device Group

Spektrum has the ability to support an unlimited number of readers as well as an unlimited number of sites or locations. As explained in Section 4.3 above, these can be different technology readers. Additionally, you can mix technologies within the same site.

By setting up the Device Groups, you can limit your employees to a particular reader or a group of readers. This means that you can force your employees to punch IN and OUT on only one reader, a group of readers or give them access to all the devices and let them roam freely.

Device Groups are used to facilitate the process of linking the employees to the Readers. With the help of Device Groups, to link an employee to more than one Reader, the employee only needs to be linked to one Reader of each type available (Fingerprint Scanner, Hand Scanner, Face Scanner) in the Device Group. The biometrics of the employee are then pulled from the Readers that they were linked to and then they can be pushed to the Device Group needed. If you want to link the employee to all the Readers, the biometrics of the employee must be pushed to the Device Group called 'All Devices'.

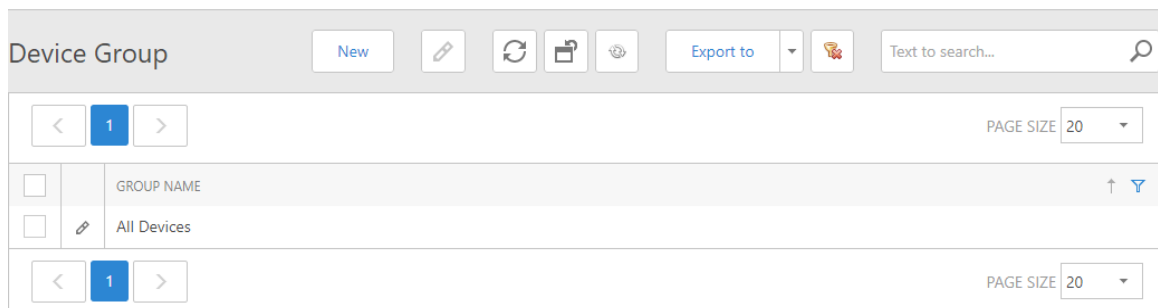


Figure 29: Device Group

### 4.4.1 Manage your groups

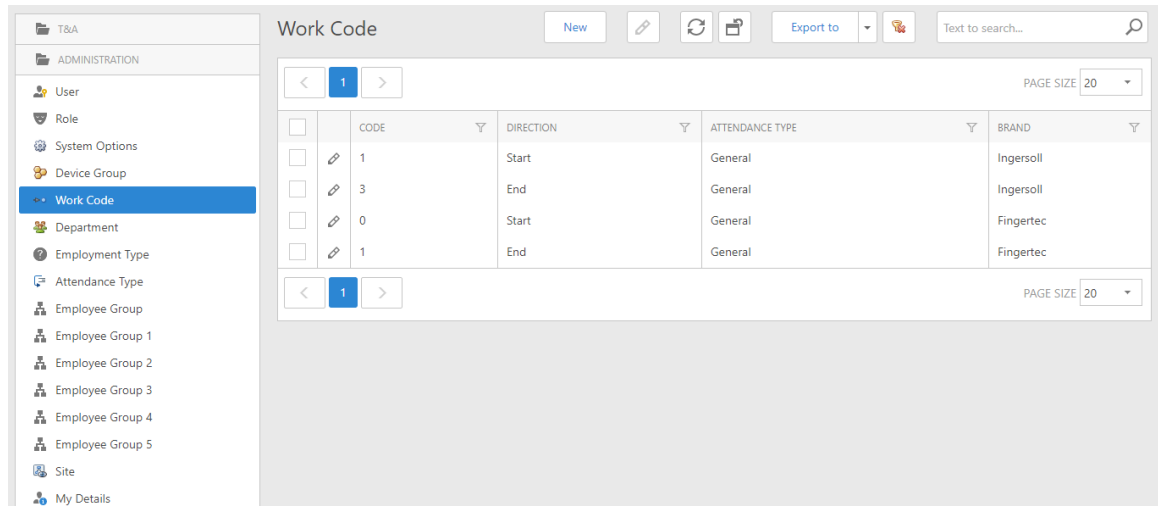
To create a Device Group, proceed as follows:

- Choose Device Group
- Choose New
- Type a unique Group Name
- Choose Link
- Select from the devices available
  - Choose single, multiple or all devices
- Press OK
- Save and close

## 4.5 Work Code

Work Codes are predefined by AIS according to the Reader being used. If Work Codes are enabled within your organisation, every time an employee enters their Enrol Number in a Reader and is successfully authenticated, the employee is asked to choose an option (IN, OUT, Lunch In, Lunch Out, etc.) depending on the reason why they are punching.

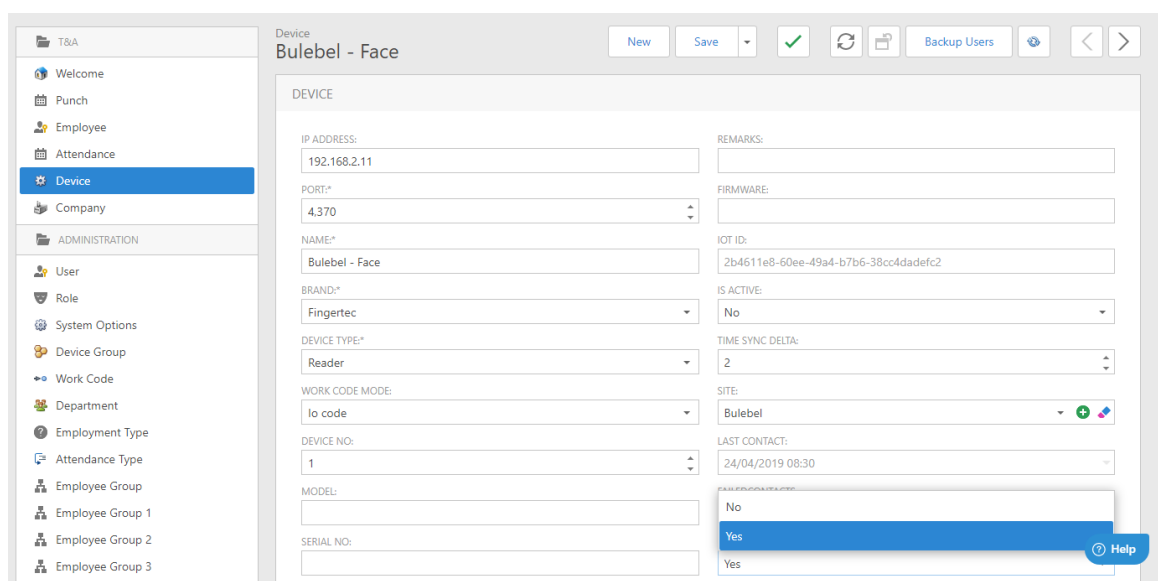
Work Codes are also tied within Spektrum to the Attendance Type which identifies the users' movement. When generating Attendance records for Employees, the Work Codes will define the Attendance Type for each set of punches.



	CODE	DIRECTION	ATTENDANCE TYPE	BRAND
<input type="checkbox"/>	1	Start	General	Ingersoll
<input type="checkbox"/>	3	End	General	Ingersoll
<input type="checkbox"/>	0	Start	General	Fingertec
<input type="checkbox"/>	1	End	General	Fingertec

Figure 30: Work Code

It is important to note that in order to use the Work Codes within your organisation, click the Edit button of the device you wish to activate Work Codes for, and select YES from the **Use Work Code** drop-down menu, as shown in Figure 29 below.



Device: Bulebel - Face

IP ADDRESS: 192.168.2.11

PORT: 4.370

NAME: Bulebel - Face

BRAND: Fingertec

DEVICE TYPE: Reader

WORK CODE MODE: Io code

DEVICE NO: 1

MODEL:

SERIAL NO:

REMARKS:

FIRMWARE:

IOT ID: 2b4611e8-60ee-49a4-b7b6-38cc4ddefc2

IS ACTIVE: No

TIME SYNC DELTA: 2

SITE: Bulebel

LAST CONTACT: 24/04/2019 08:30

USE WORK CODE: Yes

Figure 31: Enabling Work Codes

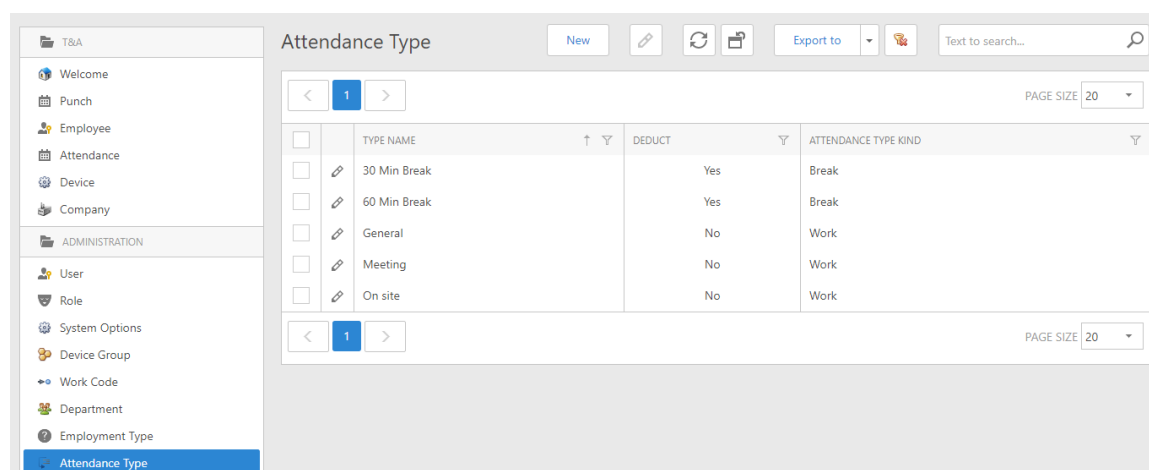
## 4.6 Attendance Type

Attendance Type works in conjunction with the Work Codes. By defining the Attendance Type entries in Spektrum, you are controlling the punch options available for your users on your Reader(s). These Attendance Types are selectable via key press on your reader. Each Work Code is attributed to a unique key value inputted on the reader.

The most common Attendance Types in Spektrum are:

- IN
- Out
- Break IN
- Break OUT

With Attendance Types in Spektrum, you have the ability to create a function that automatically deducts a set number of minutes from the Employee's daily punching, such as Deduct set to YES in the 30- & 60-min Break Attendance Type, as shown in Figure 30 below.



	TYPE NAME	DEDUCT	ATTENDANCE TYPE KIND
<input type="checkbox"/>	30 Min Break	Yes	Break
<input type="checkbox"/>	60 Min Break	Yes	Break
<input type="checkbox"/>	General	No	Work
<input type="checkbox"/>	Meeting	No	Work
<input type="checkbox"/>	On site	No	Work

Figure 32: Attendance Type

### 4.6.1 Define Attendance types

To customise your Attendance Types, proceed as follows:

- New
- Type a name
- Choose if this option will deduct time or not
- Choose Save and close

#### 4.6.2 Link Attendance Type to Work Code

After having determined that Work Codes are related to specific key values on your Reader(s), the next step is to link an Attendance Type to the Work Code. As shown in Figure 31 below, the drop-down list includes all the Attendance Types you created in Spektrum. Choosing an Attendance Type will link it to the Work Code being edited.

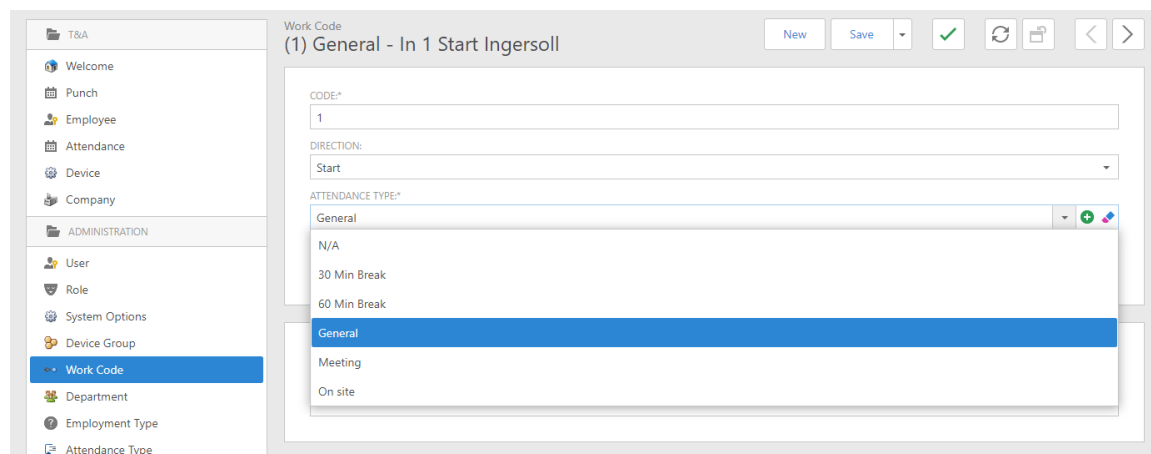


Figure 33: Linking Work Codes to Attendance Type

To link an Attendance Type with a Work Code, proceed as follows:

- Choose Work Code from the Navigation Menu
- Edit the required Work Code
- Choose the Attendance Type from the attendance type drop-down menu
- Choose Save and close



## 4.7 Site

The Site submenu allows you to define the physical locations where the readers are installed. This will allow you to manage readers by location and subsequently identify where your Employees have punched.

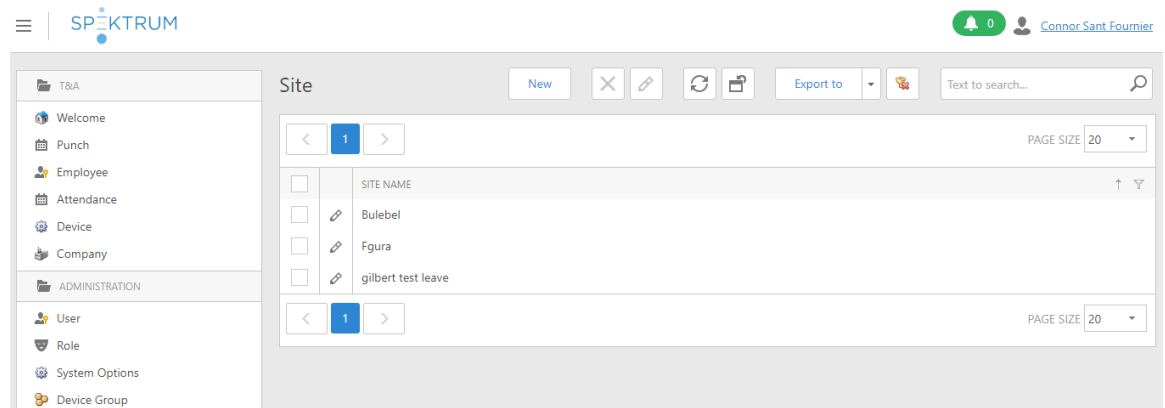


Figure 34: Site

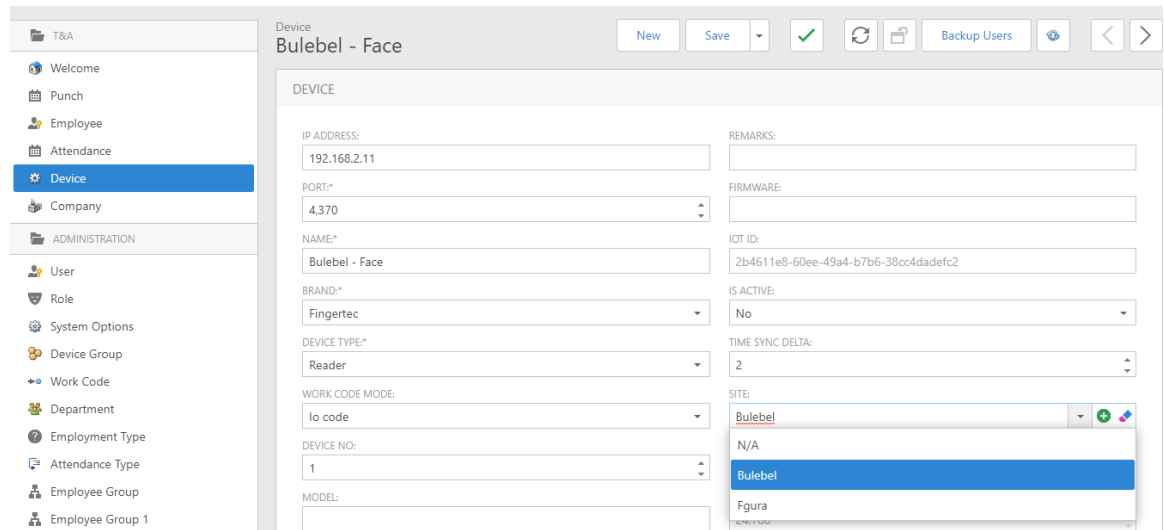
### 4.7.1 Define Multiple Sites

To define your Sites, proceed as follows:

- Choose Site
- Choose New
- Type a Site Name
- Save and close

### 4.7.2 Linking Devices to Sites

As shown in Figure 33 below, the list of Sites is available from the drop-down menu under the Device tab. Select a site to link your reader to that location.



The screenshot displays the 'Device' configuration page for a device named 'Bulebel - Face'. The left sidebar shows the navigation menu with 'Device' selected. The main form contains the following fields:

- IP ADDRESS: 192.168.2.11
- PORT: 4370
- NAME: Bulebel - Face
- BRAND: Fingertec
- DEVICE TYPE: Reader
- WORK CODE MODE: Io code
- DEVICE NO.: 1
- MODEL: (empty)
- REMARKS: (empty)
- FIRMWARE: (empty)
- IOT ID: 2b4611e8-60ee-49a4-b7b6-38cc4dadefc2
- IS ACTIVE: No
- TIME SYNC DELTA: 2
- SITE: A dropdown menu is open, showing 'N/A', 'Bulebel' (highlighted), and 'Fgura'.

Figure 35: Linking your Devices to your Sites

To link a Device to a Site, proceed as follows:

- Choose Device from the Navigation Menu
- Edit the required Device
- Choose the Site from the site type drop-down menu
- Choose Save and close

## 4.8 Department

Spektrum has the ability to replicate your organisational structure and thus, includes three built-in organisational levels. The first level is the Company level. This field can be used to determine the various companies in your organisation. The second level is the Department level. This level is used to determine the various departments which exist in your companies, and it also ties to the Manager Role (discussed in section 4.10 below). In Spektrum, you can create as many companies and departments as required.

Additionally, with Spektrum, your various managers and head of departments can be given visibility to their domain. Each department or section manager can login using his/her own credentials and access the data for the employees that fall under their command. An Employee can be assigned to one department only.

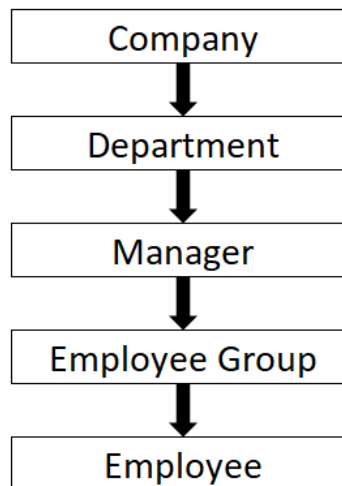
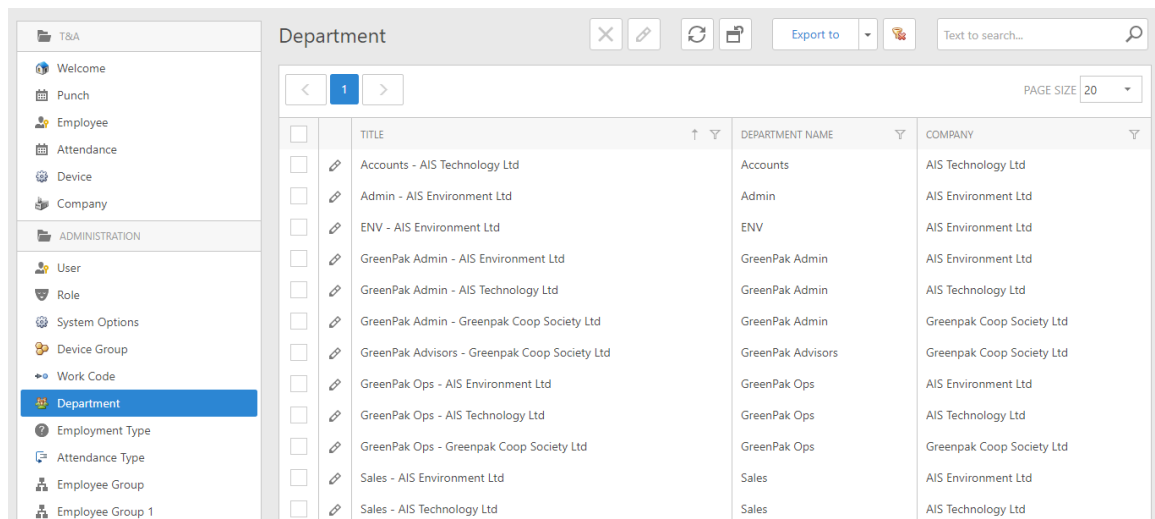


Figure 36: Organisational Chart - Department



	TITLE	DEPARTMENT NAME	COMPANY
<input type="checkbox"/>	Accounts - AIS Technology Ltd	Accounts	AIS Technology Ltd
<input type="checkbox"/>	Admin - AIS Environment Ltd	Admin	AIS Environment Ltd
<input type="checkbox"/>	ENV - AIS Environment Ltd	ENV	AIS Environment Ltd
<input type="checkbox"/>	GreenPak Admin - AIS Environment Ltd	GreenPak Admin	AIS Environment Ltd
<input type="checkbox"/>	GreenPak Admin - AIS Technology Ltd	GreenPak Admin	AIS Technology Ltd
<input type="checkbox"/>	GreenPak Admin - Greenpak Coop Society Ltd	GreenPak Admin	Greenpak Coop Society Ltd
<input type="checkbox"/>	GreenPak Advisors - Greenpak Coop Society Ltd	GreenPak Advisors	Greenpak Coop Society Ltd
<input type="checkbox"/>	GreenPak Ops - AIS Environment Ltd	GreenPak Ops	AIS Environment Ltd
<input type="checkbox"/>	GreenPak Ops - AIS Technology Ltd	GreenPak Ops	AIS Technology Ltd
<input type="checkbox"/>	GreenPak Ops - Greenpak Coop Society Ltd	GreenPak Ops	Greenpak Coop Society Ltd
<input type="checkbox"/>	Sales - AIS Environment Ltd	Sales	AIS Environment Ltd
<input type="checkbox"/>	Sales - AIS Technology Ltd	Sales	AIS Technology Ltd

Figure 37: The Departments

#### 4.8.1 Define Departments

To define your Departments, proceed as follows:

1. Select **Company** from the Navigation Menu on the left-hand side
2. Click on the **Edit** button of the Company you wish to add a department to
3. Scroll down to the **Departments** tab and click on **New**
4. Give the new department a name
5. At this point you have the option to link employees
6. Type the name of the employee(s) that you want to link to this department and tick the boxes of the employee(s) that you wish to link
7. Click on **Save and close**
8. Alternatively, you can link employees to the department under the Employee or Department sections.

## 4.9 Employee Group

Employee Groups can be considered as a 2<sup>nd</sup> level below the Departments, as shown in Figure 35 above. These fields add another layer of customisation to the employee profile. Employee groups can be used to facilitate searches, reports and data grouping.

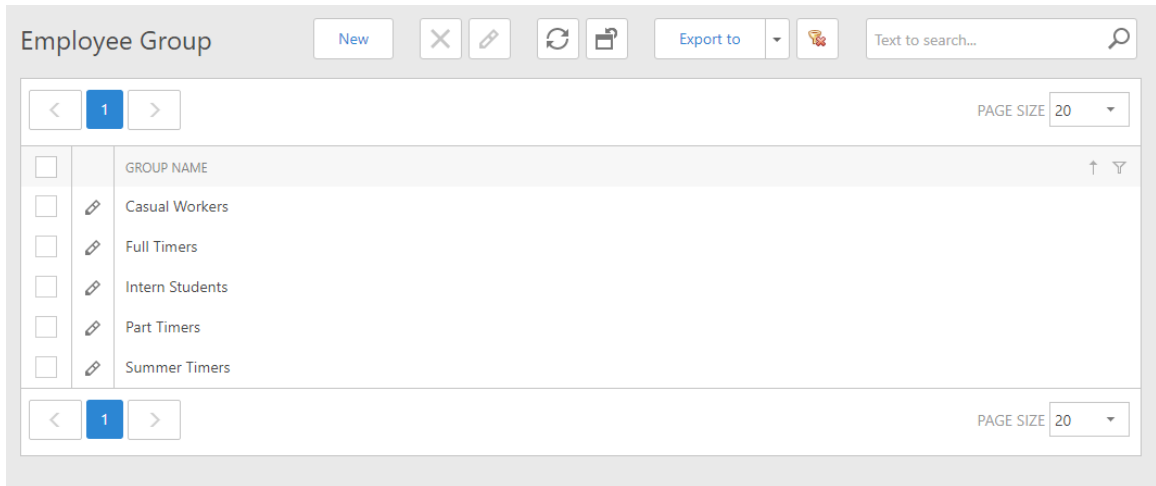


Figure 38: Employee Group

### 4.9.1 Define Employee Group

To define your Employee Groups, proceed as follows:

- New
- Type a Group Name
- Save and close

## 4.10 Roles

The scope of Roles is to grant portal users access to components within Spektrum with specific rights (read-only, can edit). Roles are pre-defined by AIS.

These Roles are:

- Administrators: full access to all components
- Default: This is the Employee Role or profile
- Enroller: gives the member the ability to create employees in Spektrum
- Manager: allowed to view punches and attendances of employees that are linked to their department

Role			
<div> <a href="#">New</a> <span>✕</span> <span>✎</span> <span>↺</span> <span>📄</span> <span>Export Security</span> <span>Export to</span> <span>🔑</span> <input type="text" value="Text to search..."/> </div>			
<div> <span>&lt;</span> <span>1</span> <span>&gt;</span> </div>		PAGE SIZE 20	
<input type="checkbox"/>	NAME	IS ADMINISTRATIVE	CAN EDIT MODEL
<input type="checkbox"/>	<a href="#">✎</a> Administrators	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">✎</a> Default	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">✎</a> Enroller	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<a href="#">✎</a> Manager	<input type="checkbox"/>	<input type="checkbox"/>
<div> <span>&lt;</span> <span>1</span> <span>&gt;</span> </div>		PAGE SIZE 20	

Figure 39: Roles

4.10.1 Administrator

The Administrator role is the highest level and grants access to all areas within Spektrum with full rights.

Role

Administrators

New

Save and Close

✖

✔

Create Employee Leave Defaults

↺

↻

⋮

NAME\*

Administrators

☒

Is Administrative

☐

Can Edit Model

Users

Type Permissions

Child Roles

Parent Roles

New

Link

Unlink

✖

✎

📄

Export to

<

1

>

PAGE SIZE 20

<input type="checkbox"/>	USER NAME	CHANGE PASSWORD ON FIRST LOGIN	IS ACTIVE
<input type="checkbox"/>	✎ connor	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<

1

>

PAGE SIZE 20

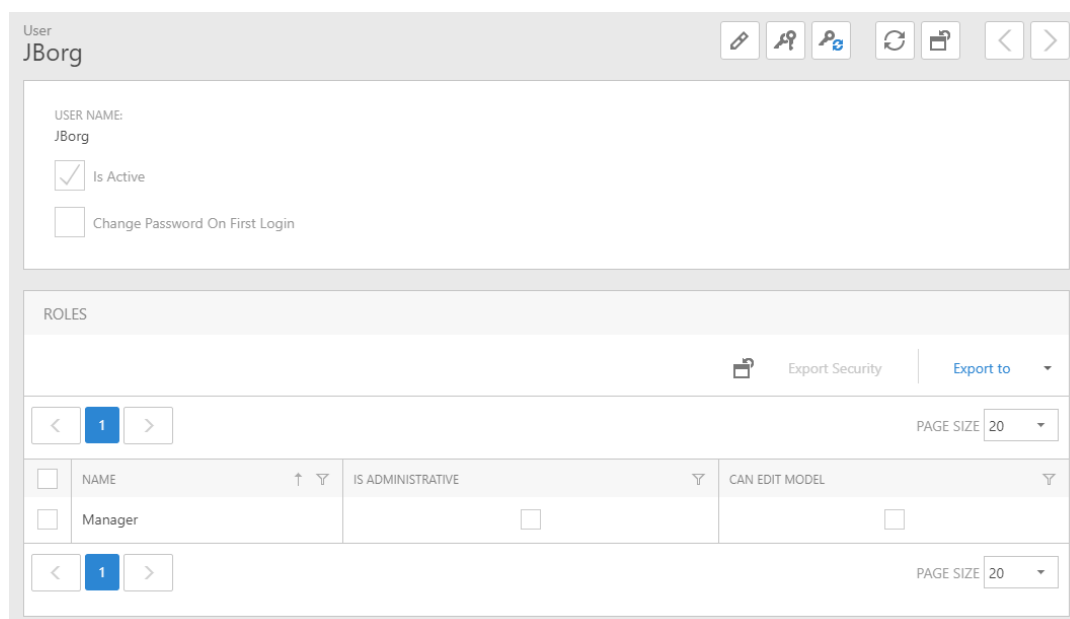
Figure 40: The Administrator Role

The Users tab allows you to view which employees are assigned to this Role. You can also create a new Employee, link to an existing employee (add the Employee to this Role) and unlink or remove an Employee from this Role.

### 4.10.2 Manager

Spektrum gives managers the ability to view the employee punches and attendance of their subordinates. When a user is defined as a Manager, the user will have access to all employee records that are linked to his/her Department.

In order to achieve this, you must set the identical Department for the members of each department, set the employees with Default Role and the leader with Manager Role. As shown below, the Manager (*Joe Borg*) is able to view the data pertaining to members of Department (*Sales - AIS Technology Ltd*) only.



User: JBorg

USER NAME: JBorg

☒ Is Active

☐ Change Password On First Login

ROLES

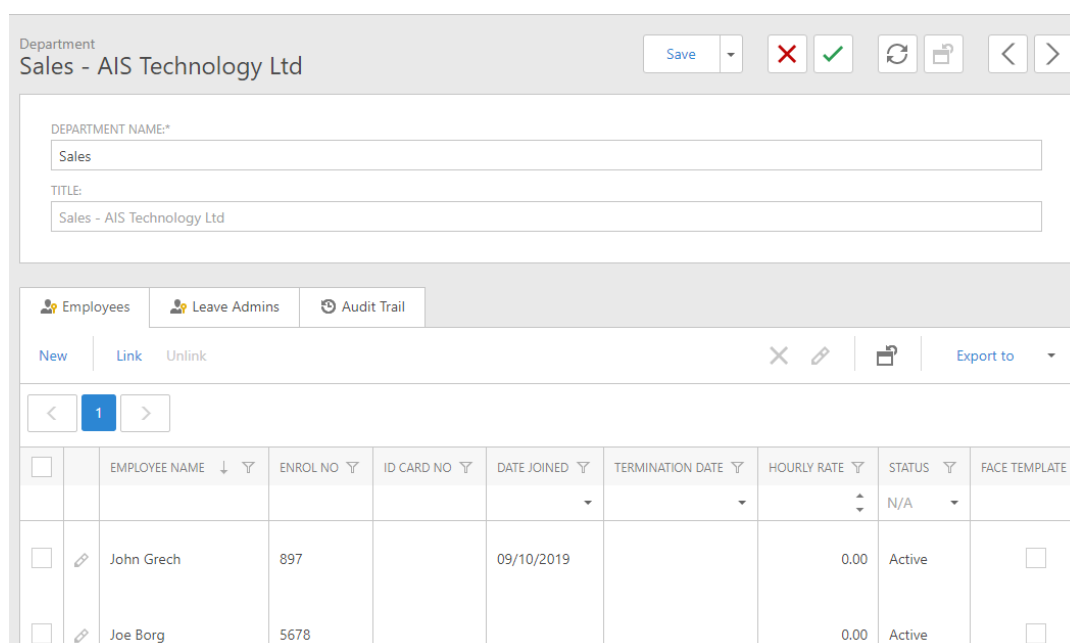
Export Security | Export to

PAGE SIZE 20

<input type="checkbox"/>	NAME	IS ADMINISTRATIVE	CAN EDIT MODEL
<input type="checkbox"/>	Manager	<input type="checkbox"/>	<input type="checkbox"/>

PAGE SIZE 20

Figure 41: The Manager Role link



Department: Sales - AIS Technology Ltd

DEPARTMENT NAME\*: Sales

TITLE: Sales - AIS Technology Ltd

Employees | Leave Admins | Audit Trail

New | Link | Unlink

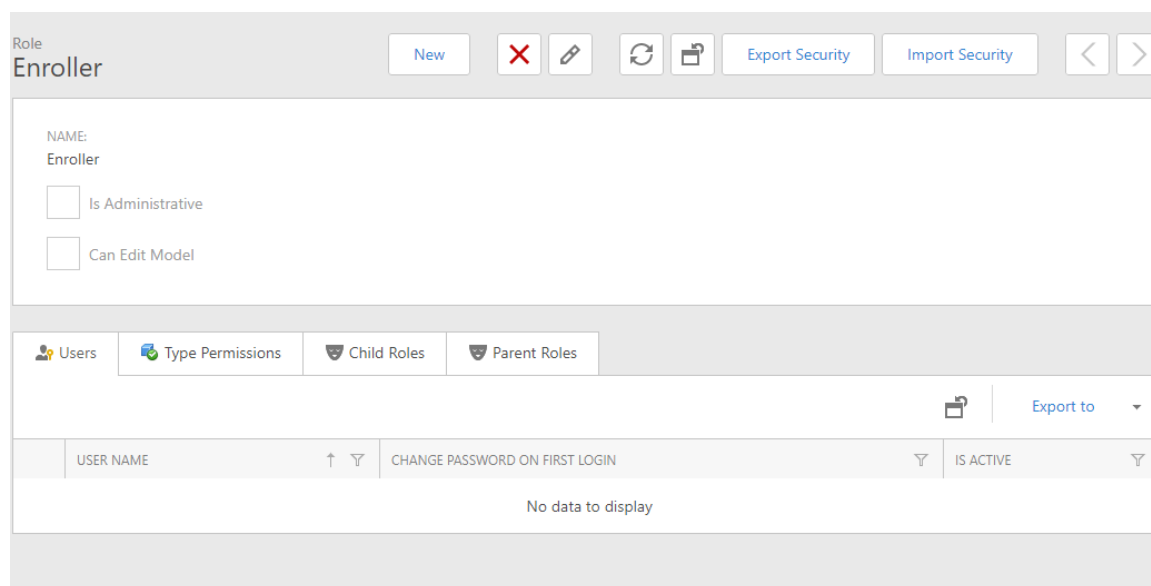
Export to

<input type="checkbox"/>	EMPLOYEE NAME	ENROL NO	ID CARD NO	DATE JOINED	TERMINATION DATE	HOURLY RATE	STATUS	FACE TEMPLATE
<input type="checkbox"/>	John Grech	897		09/10/2019		0.00	Active	<input type="checkbox"/>
<input type="checkbox"/>	Joe Borg	5678				0.00	Active	<input type="checkbox"/>

Figure 42: The Manager's Portal



### 4.10.3 Enroller



Role  
Enroller

NAME:  
Enroller

☐ Is Administrative

☐ Can Edit Model

Users | Type Permissions | Child Roles | Parent Roles

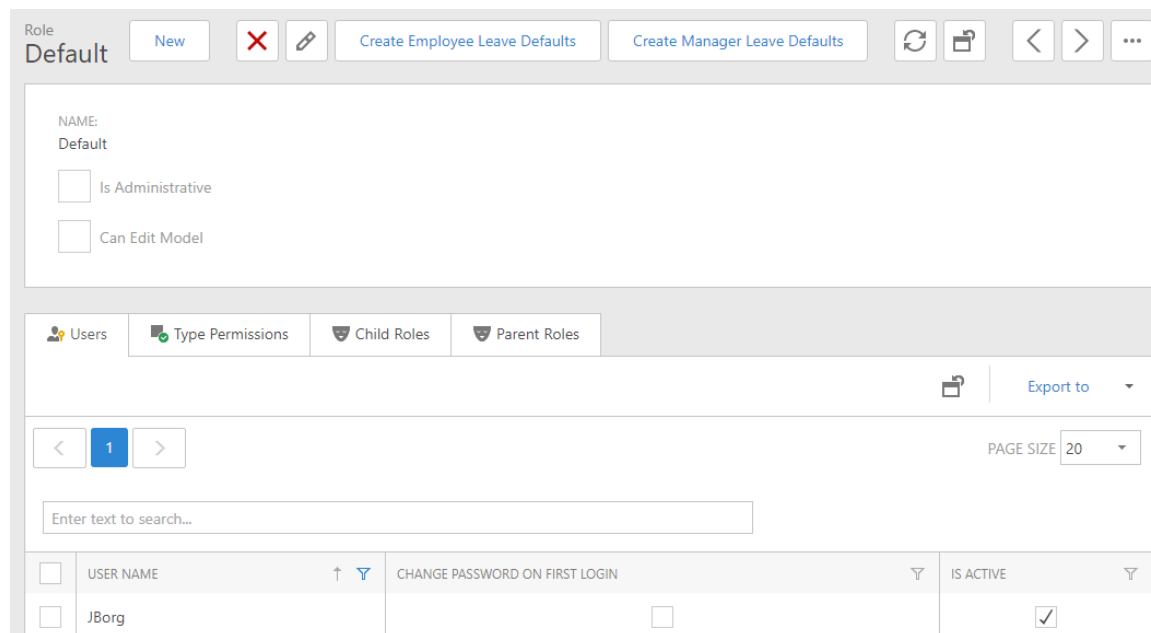
Export to

USER NAME	CHANGE PASSWORD ON FIRST LOGIN	IS ACTIVE
No data to display		

Figure 43: The Enroller

Users set as Enroller have the ability to create and amend Employees in Spektrum. An Enroller can enrol biometric patterns or RFID's on the reader(s). Once a User is linked to this Role, the user access control rights can be pushed on all linked devices to update the record.

### 4.10.4 Default / Employee



Role  
Default

NAME:  
Default

☐ Is Administrative

☐ Can Edit Model

Users | Type Permissions | Child Roles | Parent Roles

Export to

PAGE SIZE 20

Enter text to search...










USER NAME	CHANGE PASSWORD ON FIRST LOGIN	IS ACTIVE
JBorg	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 44: The Default or Employee



The Default Role can also be called the Employee Role. Standard employees who are only required to punch can be linked to this role.

## 4.11 Employee

The Employee function is used to create new Employees as well as to amend Employee data.









Employee New         

< 1 >

<input type="checkbox"/>		ENROL NO. ▾	EMPLOYEE NAME ▾	COMPANY ▾	DATE JOINED ▾	DEFAULT_DEPARTMENT ▾	STATUS ▾	TERMINATION DATE ▾	EMPLOYEE GROU
<input type="checkbox"/>		897	John Grech	AIS Technology Ltd	09/10/2019	Software - AIS Technology Ltd	Active		Intern Student
<input type="checkbox"/>		5678	Joe Borg	AIS Technology Ltd		Software - AIS Technology Ltd	Active		Intern Student

< 1 >

Figure 45: The Employees view



Employee Admin New Save and Close         < >



EMPLOYEE



ENROL NO:\*



EMAIL ADDRESS:\*

EMPLOYEE NAME:\*



ATTENDANCE POLICY:   

COMPANY:\*   

EMPLOYEE DESIGNATION:   

DEFAULT\_DEPARTMENT:   

OVERTIME:



DEVICE GROUP:\*   



HOURLY RATE:



STATUS:

ID CARD NO:

GROUPING

EMPLOYEE GROUP:   

EMPLOYEE GROUP 3:   

EMPLOYEE GROUP 1:   



EMPLOYEE GROUP 4:   

Figure 46: Employee options

Fields marked by an \* are compulsory. These are Enrol No., Employee Name, Company, Device Group, Email Address and User Name.

Optional Spektrum related fields are Default Department, Status, Attendance Policy, Employee Designation, Overtime, Hourly Rate, ID Card No., Employee Group, Employee Group 1, Employee Group 2, Employee Group 3, Employee Group 4, Employee Group 5, Privilege, Card No., Password and Reject Threshold.

To remove employees from Spektrum, one may either change an employee's status to terminated or delete them from Spektrum altogether. To terminate an employee, update the 'Status' dropdown to 'Terminated' from the employee edit menu, and click 'Save'. Changing employee status to terminated means that no further punches for this employee will be uploaded into Spektrum. Since the employee is terminated, Spektrum will give you back that one licence spot which you can use to create another employee.

Alternatively, you may delete an employee. To do so, hover over the table row which contains the employee you want to delete, and tick the 'Checkbox'. Hover over the 'Three Dots' icon from the top navigation menu and select 'Delete Employee' from the dropdown. When you delete an employee, Spektrum will look up the employee on all the configured Readers and will wipe out the record including biometrics. This means the employee can no longer punch on any device. Spektrum will also look up all the punches that were registered on the 'Enrol number' and will replace the employee name with a '<Blank>'. This will preserve the punch records for your convenience whilst being GDPR compliant. The record card in Spektrum will be erased. This means that technically the 'Enrol number' used can be recycled. Naturally this licence spot is available for another employee.

Another option would be to Revoke Reader Access. This removes a user record completely from all devices, without deleting them from Spektrum.

This is done by selecting the employee and clicking the Revoke Reader Access button.



Figure 47: The Revoke Reader Access option

### 4.11.1 Employee status

To help manage your employees, Spektrum offers you four Status fields, as shown in Figure 45 below. An Employee can be assigned to ONLY one of these options. An Employee that has been set to Terminated, Suspended or Resigned can be reset to Active in the future should the employment be resumed. In Spektrum, a re-activated employee will continue to build on the previous history and data.

STATUS:

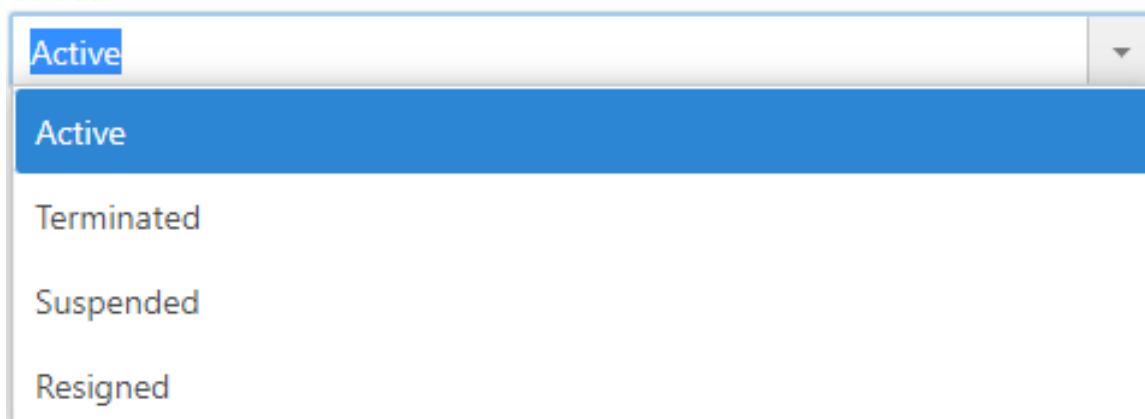


Figure 48: The Employee status

### 4.11.2 Link Employee to a Department

The first step is to choose a company from the drop-down menu of the Company field and, as shown in Figure 46 below, your list of Departments will be available by clicking on the 'Link' button available under the title 'Departments'. Choosing a Department will link your Employee to that specific section of your business. Click on 'Ok' and 'Save'.

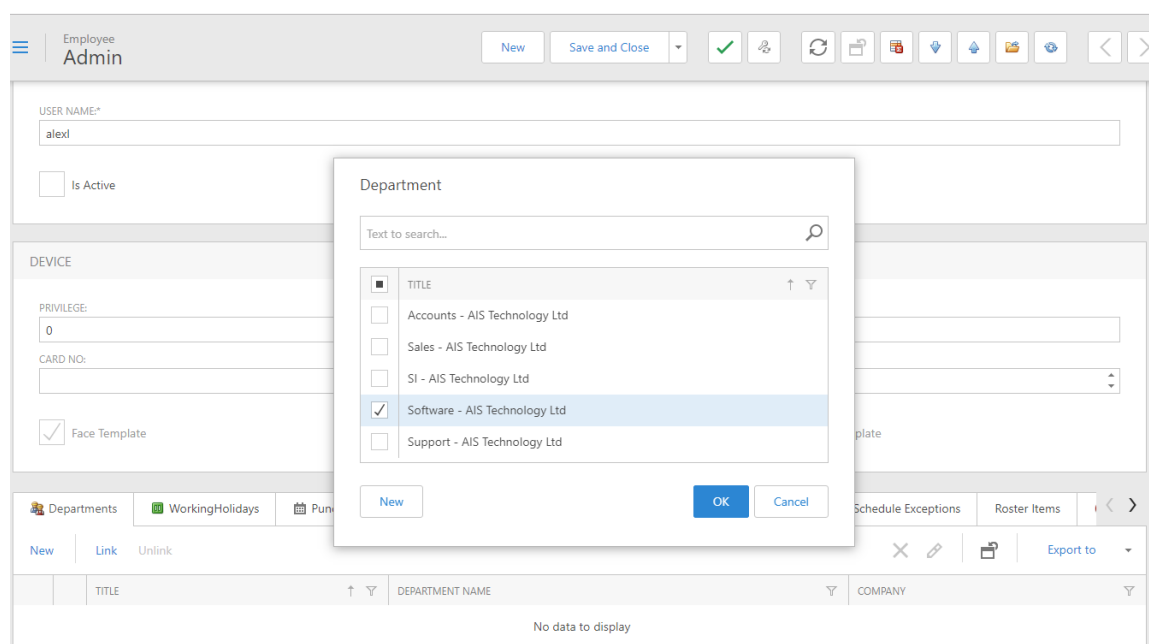
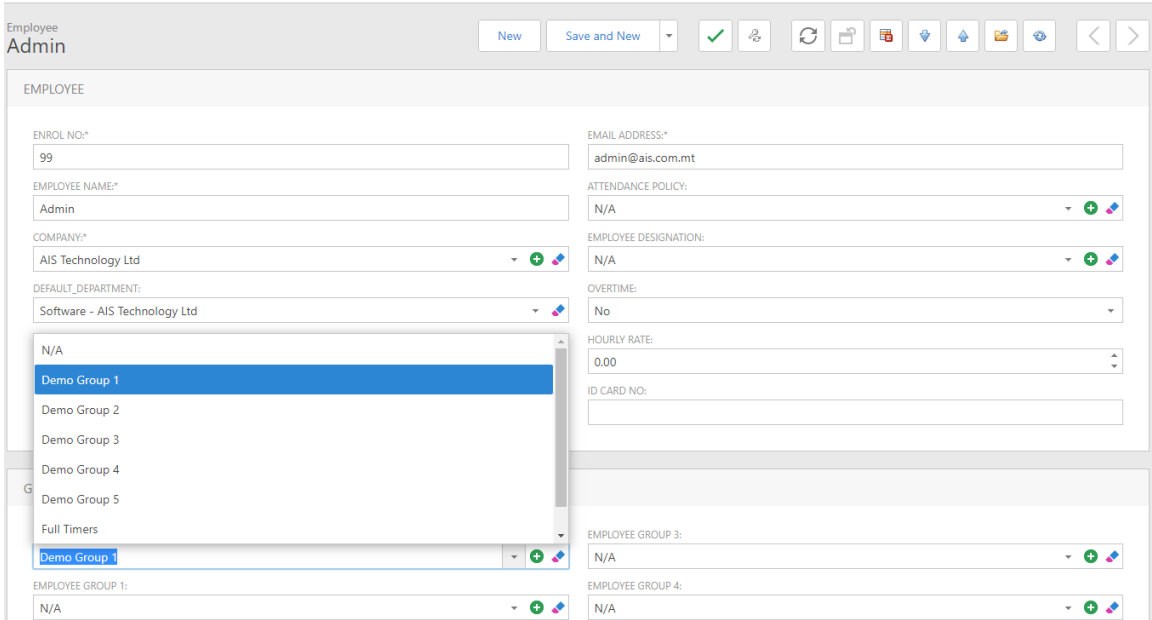


Figure 49: Link your Employee to a Department

4.11.3 *Link Employee to an Employee Group*

As shown in Figure 47 below, your list of Employee Groups is available from the drop-down menu under the Employee Group Tab available under the title ‘Grouping’. Choosing an Employee Group will link your Employee to that specific operations group.



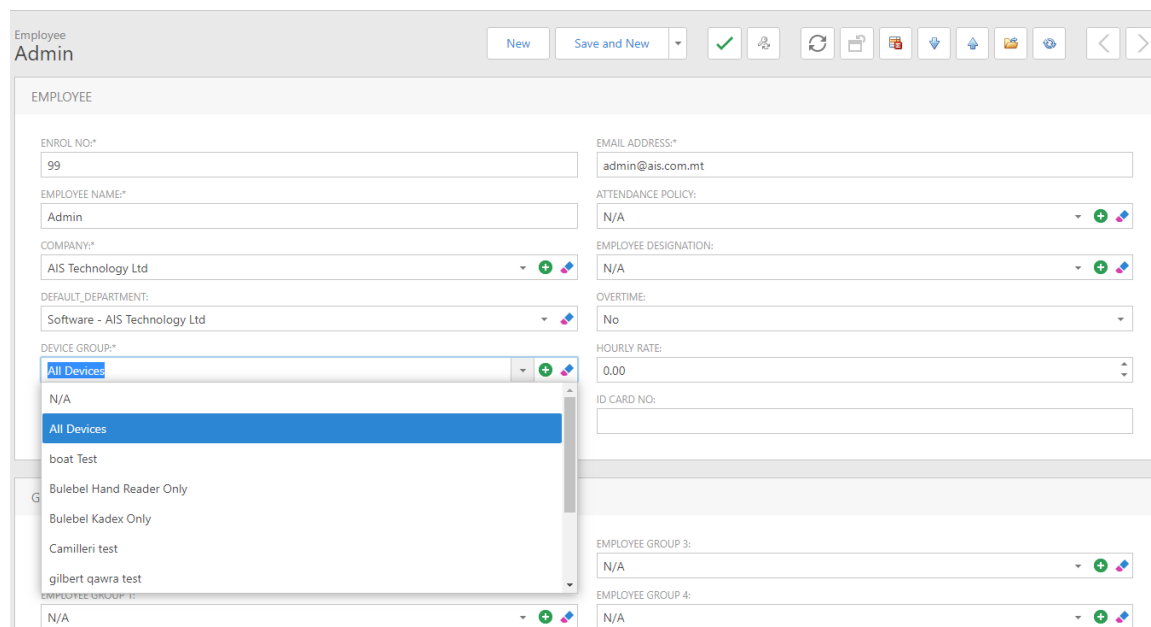
The screenshot displays the 'Employee Admin' interface with the 'EMPLOYEE' tab selected. The form contains the following fields and values:

- ENROL NO:** 99
- EMPLOYEE NAME:** Admin
- COMPANY:** AIS Technology Ltd
- DEFAULT DEPARTMENT:** Software - AIS Technology Ltd
- EMAIL ADDRESS:** admin@ais.com.mt
- ATTENDANCE POLICY:** N/A
- EMPLOYEE DESIGNATION:** N/A
- OVERTIME:** No
- HOURLY RATE:** 0.00
- ID CARD NO:** (empty)
- EMPLOYEE GROUP 1:** N/A (dropdown menu is open showing: Demo Group 1, Demo Group 2, Demo Group 3, Demo Group 4, Demo Group 5, Full Timers, Demo Group 1)
- EMPLOYEE GROUP 2:** N/A
- EMPLOYEE GROUP 3:** N/A
- EMPLOYEE GROUP 4:** N/A

Figure 50: Linking your Employee to an Employee Group

#### 4.11.4 Link Employee to a Device Group

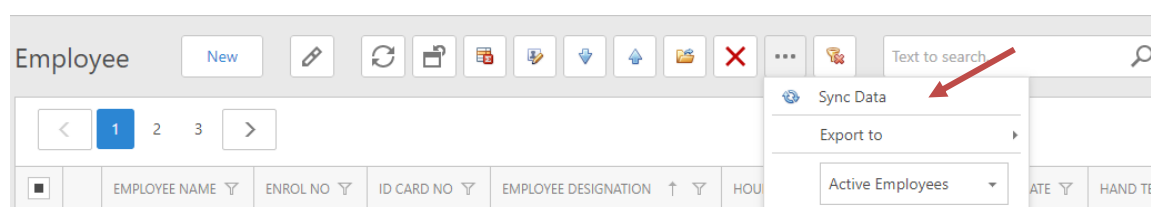
As shown in Figure 48 below, your list of Devices is available from the drop-down menu under the Device Group Tab available under the title 'Device'. Choosing a Device Group will link your Employee to that specific group of readers and the Employee's details can be manually updated on the reader(s) with a Pull and Push instruction to all the Devices linked to that group.



The screenshot shows the 'Employee Admin' form. The 'DEVICE GROUP' dropdown menu is open, displaying a list of device groups including 'All Devices', 'boat Test', 'Bulebel Hand Reader Only', 'Bulebel Kadex Only', 'Camilleri test', 'gilbert qawra test', and 'N/A'. The 'All Devices' option is highlighted. The form also includes fields for ENROL NO., EMPLOYEE NAME, COMPANY, DEFAULT DEPARTMENT, EMAIL ADDRESS, ATTENDANCE POLICY, EMPLOYEE DESIGNATION, OVERTIME, HOURLY RATE, ID CARD NO., and EMPLOYEE GROUP 3 and 4.

Figure 51: Linking your Employee to a Device Group

When creating a new employee in Spektrum it is advisable to sync the information with the local instance. Click on the three dots in the title bar and select Sync Data.



The screenshot shows the 'Employee' form with a dropdown menu open. The 'Sync Data' option is highlighted, indicated by a red arrow. The dropdown menu also includes 'Export to' and 'Active Employees'.

Figure 52: Sync Data

#### 4.11.5 Employee Submenu

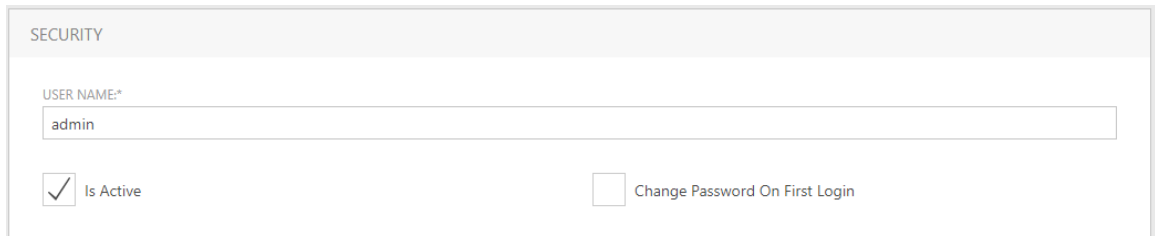
The Employee submenu allows you to:

- Push (User Data) to Device(s)
- Calculate attendances
- Batch Edit users
- Batch Import users via CSV (format) file
- Sync data between Spektrum and the local instance

To enable this additional functionality, you have to first select an employee, group of employees or all.

Individual employees are selected by the checking the box adjacent to them ☒ whilst the top left checkbox will select all the employees on the list.

As explained in Roles above, you can grant access to your department managers. This access is controlled by the Role and Department they are assigned to as well as the login credentials created by the administrator. Part of the Employee Tab is dedicated to this function, i.e. login credentials.

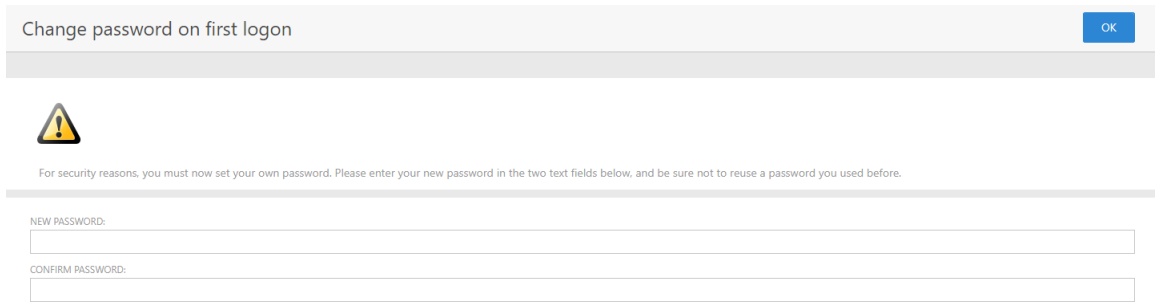


The screenshot shows a form titled "SECURITY". It contains a "USER NAME:" label followed by a text input field containing the text "admin". Below this, there are two checkboxes: "Is Active" which is checked with a blue checkmark, and "Change Password On First Login" which is unchecked.

Figure 53: Portal login credentials

### Login for the first time

Choose a username, ensure that the 'IS ACTIVE' box is checked and check 'Change Password on First Logon' box. Provide your manager with the Company, username and URL and let him/her login. The first time they login they must leave the password blank. As soon as they are given entry, Spektrum will ask them to provide a password which they will need to enter twice for validation reasons.




The screenshot shows a form titled "Change password on first logon" with an "OK" button in the top right corner. Below the title bar is a warning icon (a yellow triangle with an exclamation mark) and a message: "For security reasons, you must now set your own password. Please enter your new password in the two text fields below, and be sure not to reuse a password you used before." Below this message are two text input fields: "NEW PASSWORD:" and "CONFIRM PASSWORD:".

Figure 54: Password on the first login

It is important to note that if the password is entered wrongly three times, you will need to close all instances of your browser (as indicated below) and start over.

Login failed for 'JBorg'. User name or password is incorrect.



COMPANY:

USER NAME:

PASSWORD:

[Log In](#)

After three unsuccessful login attempts, the browser should be closed. Please consider contacting an administrator about your login details.

Figure 55: Wrong login credentials

## Reset Password

To reset a forgotten password, the administrator needs to select the employee by clicking on the record (in non-edit mode) and then selecting the 'Password reset' icon that is visible in the title bar at the top. This will generate a temporary password which will need to be passed on to the user (ideally by email). Once entered by the user, Spektrum will prompt him/her to set a new password.

## Password Conditions

Alpha Numeric, contains a capital letter, lower case letter and must contain of minimum 8 characters.

Also, the password must be unique and never used before.

### 4.11.6 Employee Status Filtering

In order to filter the status of an employee, first one has to make sure that from the menu or the submenu icon (Depending on your screen size) 'All' is selected, so that when clicking on the funnel icon for the 'Status' tab every status will be available, as shown in Figures 53 and 54 below.

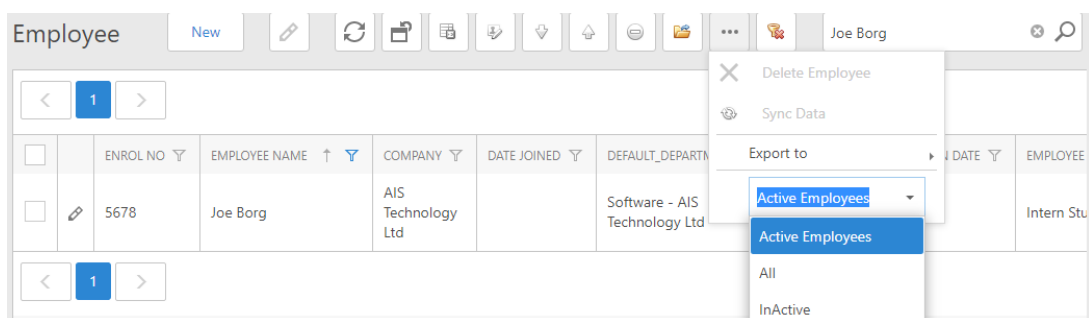


Figure 56: Filtering All, Active or InActive Employees



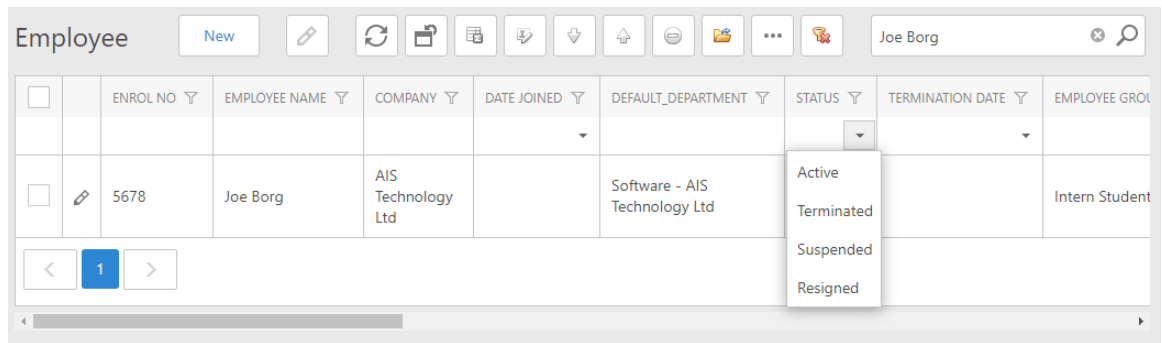


Figure 57: Status Filtering

#### 4.11.7 Pull and Push Biometrics

The concept in Spektrum is to keep a copy of the employees Biometrics in the Cloud. The two main reasons are the following. Should one need to replace the physical Reader, rather than re-enrol the employees, all that needs to be done is to copy (Push) the Bio from Spektrum to the Reader. Also, if the company has multiple Readers, rather than enrolling the employees on all the devices, one would simply capture the Bio on one Reader and then copy (through Pull and Push) to all the other Readers on the network.

##### 4.11.7.1 Pull Biometrics

You first need to identify where the physical Bio is located i.e. on which Reader. Then select your employee(s) and click on 'Pull Biometrics'. This will pull up the following wizard:

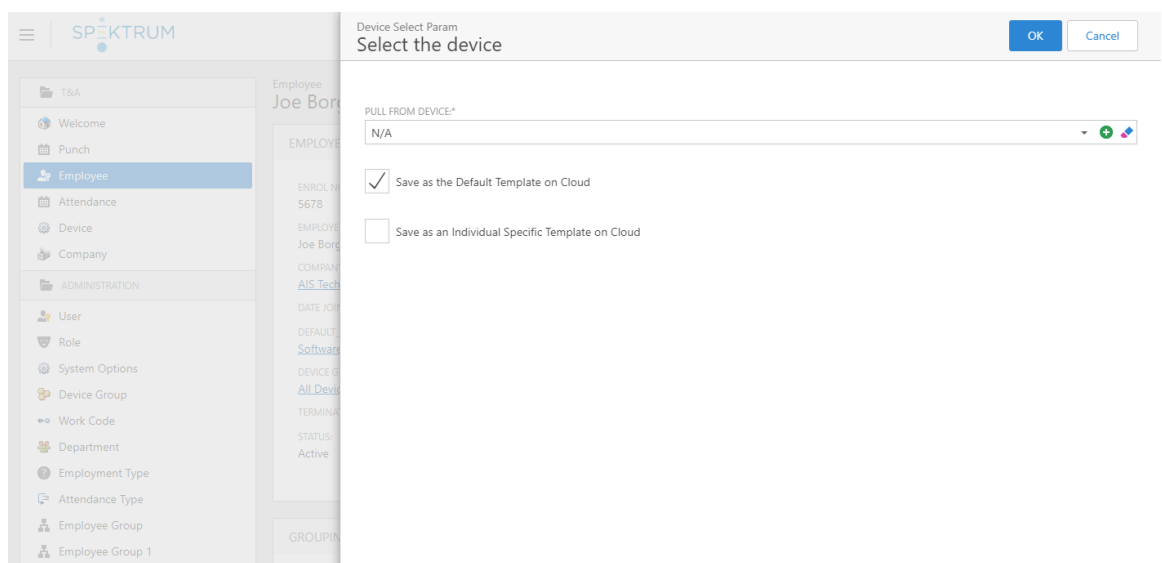


Figure 58: Pull Bio's

**Device**

You will first need to select the Reader that contains the Bio(s).

If you select (tick) 'Save as the Default Template on Cloud' this means that any stored Bio in the cloud will be replaced by this copy.

If you select (tick) 'Save as an Individual Specific Template on Cloud', this means that you wish to make an individual copy of the Bio that is stored on the specific Reader. This comes in handy when your employee(s) have Bio's across multiple Readers and you need to keep separate copies of each Bio that is kept on each Reader.

When you have made your choice and click on 'Ok' the Pull command will be scheduled to run in the background. This means that the effect is not instant. It will be activated and carried through according to the line of commands that the Service is dealing with at the current time.

If there is no Bio stored on the physical Reader that you are copying from, nothing will be pulled.

N.B. If you are dealing with a large number of Employees it is advisable to do this in batches rather than all in one go.

## Push Biometrics

Before you 'Push' you need to ensure that the Employee(s) is linked to the appropriate 'Device Group'. This could be linked to one, multiple or all Readers on the network.

Also, you should confirm that the employee does have the Bio stored in the Cloud since this will be the source that you are copying from. To do this look at the employee record card and check that the appropriate Bio is indeed stored.

Look for the tick boxes that illustrate whether the employee has Finger, Face on Hand Template stored.







FACE TEMPLATE 	HAND TEMPLATE 	FINGER TEMPLATE 
		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 59: Bio's saved in Spektrum

In the 'Employee' section, select one, multiple or all Employees. Next click on 'Push to Device(s)' which is located on the title bar. The following popup will appear:

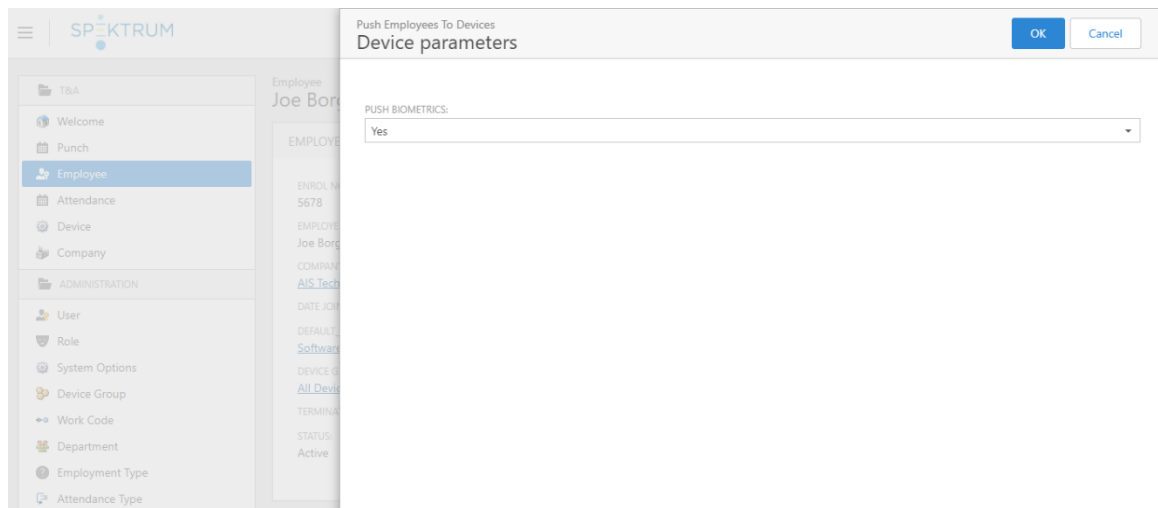


Figure 60: Push Bio's

Select 'Yes' in the 'Push Biometric' selection box and click on 'Ok'

This action will be scheduled within the service and will take place according to the line of commands that are being executed. If you push an employee's Bio that is not yet stored on the Cloud, nothing will be pushed.

If a certain number of Readers have an employee(s) Bio(s) pulled and a Device Template is created for each Bio, once these Bio(s) are pushed, they will replace the respective Bio(s). If three hand Bio(s) are pulled (H1, H2, H3), once these Bio(s) are pushed, H1 will replace H1, H2 will replace H2, and H3 will replace H3. If you want to replace the Bio(s) of all Readers with H1, make sure that H1's Bio is the only one with a copy on the Cloud. To do this, identify on which Reader H1 is, and when pulling the Bio, select **Save as the Default Template on Cloud** when asked. Refer to the previous section, *Pulling the Biometrics*, for further details.

### 4.11.8 Calculating Attendance

The scope of Attendance Calculation is to restructure the raw punches that have been downloaded from the reader(s) into formatted information that is comprehensible. This function will not only calculate the time elapsed between the punches of an Employee but will also:

- Highlight missed punches
  - Both Start and End
- Highlight days with no punches
  - Example weekend, public holidays
- Absence

It is also very important to note that the duration is calculated in decimal (or Base 100) to enable for further formulas and calculations to data that is exported into Excel.

To calculate the Employee attendance, follow these steps:

- Choose Employee(s), you can run this procedure for one, multiple or all employees
- Depending on your screen size access the Employee submenu (three dots)
- Point to Calc.Attendances
- Choose OK

The following wizard will appear:

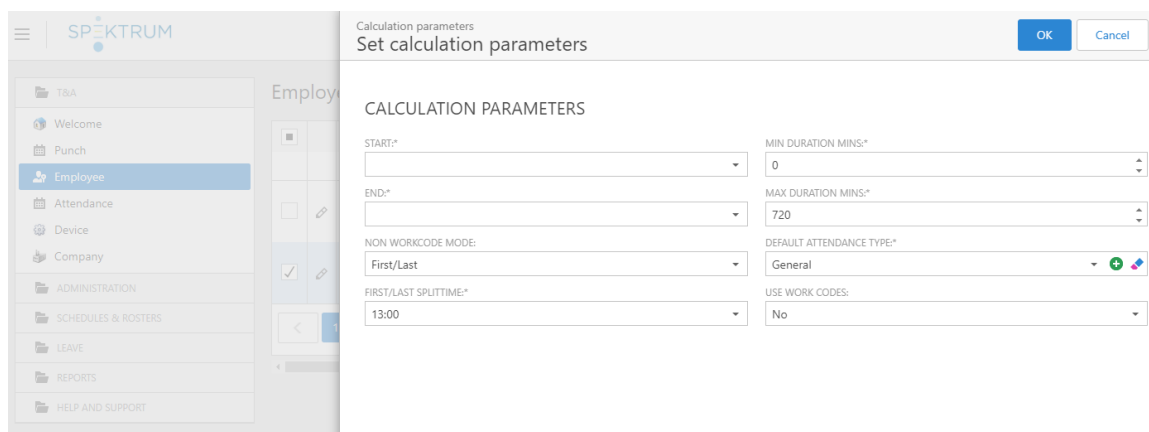


Figure 61: Calculate Attendance - Without Work Codes

#### 4.11.8.1 Generate Attendance without using Work Codes

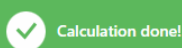
If your company does not use work codes, you need to follow the following steps to calculate the attendance:

- Specify the date bracket by choosing:
  - Start date
  - End Date
- Non WorkCode Mode  
Make sure that 'First/Last' option is selected. You can then define the mid-point of your working day. By default, this is set to 13:00.

This setting comes into play if whilst generating the attendance, Spektrum comes across a single punch rather than a pair. If the time of the recorded punch is earlier than the split time, the solitary punch will be marked as an 'In' punch. If the time of the recorded punch is later than the split time, the solitary punch will be marked as an 'Out' punch.

- Min Duration Mins**  
 This field specifies the number of minutes that must elapse in case of recorded multiple punches from an Employee on the same day. If, for example, this is set to 10, it means that should Spektrum encounter multiple punches from the same employee on the same date and spanning 10 minutes, then it will retain the first punch and ignore the rest. Spektrum will mark the extra punches as 'Error' in the punch type field.
- Max Duration Mins**  
 This field specifies the number of minutes that are considered as a full Work Day. Should Spektrum encounter a punch that is > Max Duration Mins, it will mark the punch as an 'Error'.
- Default Attendance Type**  
 This field specifies the wording to be used to describe the attendance. By default, it should be set to 'General'.
- Use Work Codes**  
 This should be set to 'No'.

Click on 'OK' and the process will start. Upon completion you will see the following banner at the top of your screen:



At this point, you can navigate to 'Attendance' and filter out the dates that you had previously selected when generating. You will see the listing of the attendance for the employees that were part of your selection together with the duration.

The next step is to return to the Attendance Tab to verify that the calculation process has been finalised and has been successful.

#### 4.11.8.2 Generate Attendance using Work Codes

If your company uses work codes, you need to follow the following steps to calculate the attendance:

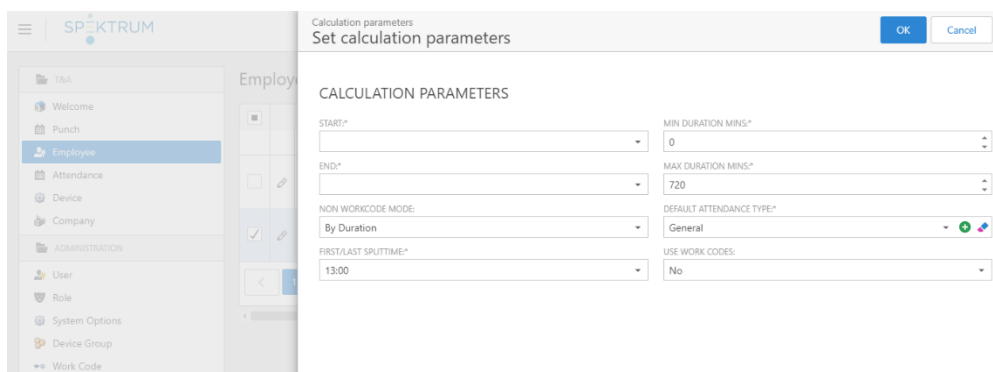
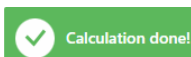


Figure 62: Calculate Attendance using Work Codes

- Specify the date bracket by choosing:
  - Start date
  - End Date
- Non WorkCode Mode  
Make sure that 'By Duration' option is selected.
- Min Duration Mins  
This field does not factor in this case.
- Max Duration Mins  
This field specifies the number of minutes that are considered as a full Work Day. Should Spektrum encounter a punch that is larger than the Max Duration Mins, it will mark the punch as though it belongs to the next day.
- Default Attendance Type  
This field specifies the wording to be used to describe the attendance. By default, it should be set to 'General'.
- Use Work Codes  
This should be set to 'Yes'.

Click on 'Ok' and the process will start. Upon completion you will see the following banner at the top of your screen:

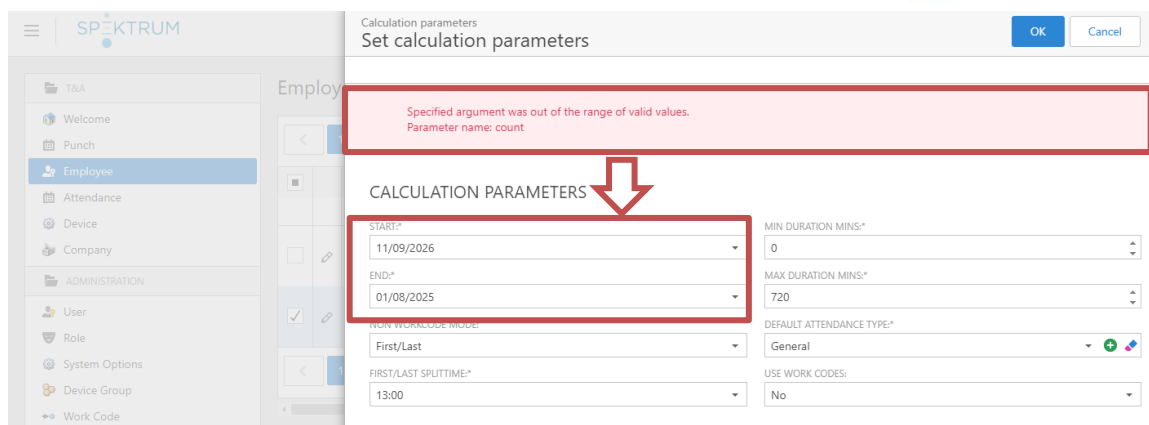


At this point, you can navigate to 'Attendance' and filter out the dates that you had previously selected when generating. You will see the listing of the attendance for the employees that were part of your selection together with the duration.

After a successful attendance generation, one will see the effect on the registered punches. You will need to click on 'Punch' in the navigation pane, filter out the dates and you will notice that the 'Punch Type' field is now marked as 'In', 'Out' or 'Error' instead of 'NA'.

Every time you generate the attendance, the results will overwrite the effect on the punches for the dates selected.

If any parameter is set wrongly; example: End date is set in the past to the start date as shown below, or any parameter has been omitted, Spektrum will return an error. Check your options and try again.



Calculation parameters  
Set calculation parameters

Specified argument was out of the range of valid values.  
Parameter name: count

CALCULATION PARAMETERS

START:\*  
11/09/2026

END:\*  
01/08/2025

MIN DURATION MINS:\*  
0

MAX DURATION MINS:\*  
720

WORK CODE MODEL:  
First/Last

FIRST/LAST SPLITTIME:\*  
13:00

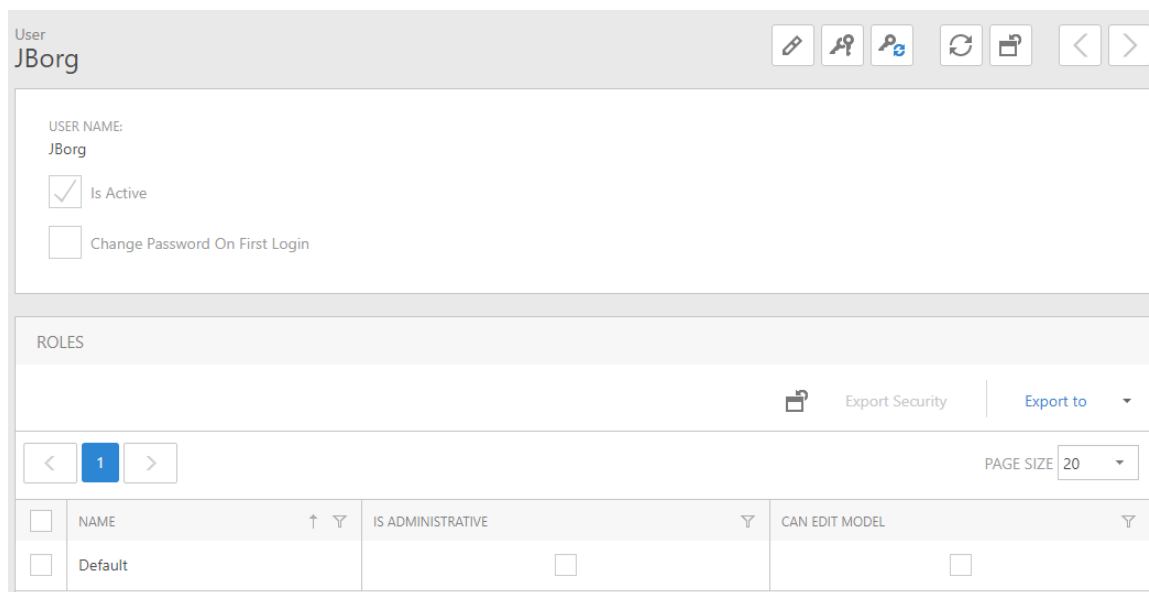
DEFAULT ATTENDANCE TYPE:\*  
General

USE WORK CODES:  
No

Figure 63: Error in Attendance Calculation

The parameters calculated in this option are available under the Attendance option on the Navigation menu.

## 4.12 My Details



User  
JBorg

USER NAME:  
JBorg

☒ Is Active

☐ Change Password On First Login

ROLES

Export Security | Export to

PAGE SIZE 20

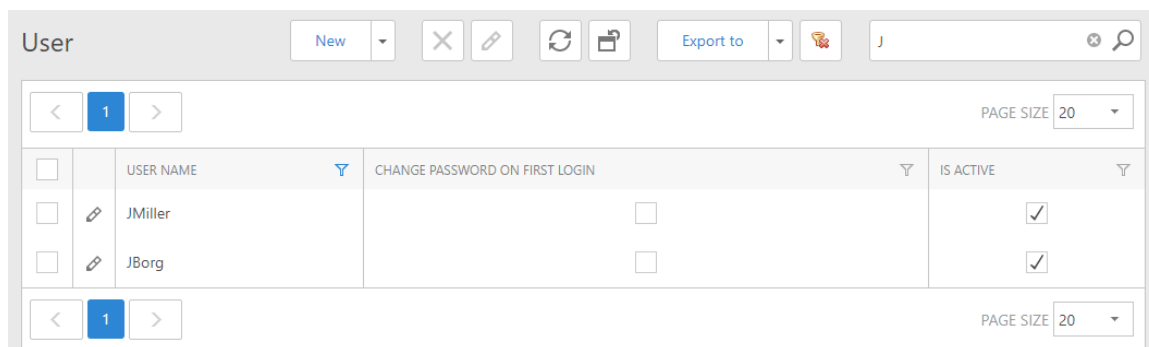
<input type="checkbox"/>	NAME	IS ADMINISTRATIVE	CAN EDIT MODEL
<input type="checkbox"/>	Default	<input type="checkbox"/>	<input type="checkbox"/>

Figure 64: My Details

The My Details section in Spektrum lists the current (logged in) user details.



## 4.13 User



	USER NAME	CHANGE PASSWORD ON FIRST LOGIN	IS ACTIVE
<input type="checkbox"/>	JMiller	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	JBorg	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 65: User

Users are the people who have access to the portal. Only users who are set AS ACTIVE will be able to log in using the credentials set in the User Logon section above. As shown in Figure 62 above, only 2 users are granted access to the Spektrum portal for this client.

### 4.13.1 Define User Access

To grant portal access to your Employees, proceed as follows:

- Edit a User
- Ensure that a username is supplied
- Tick the checkbox next to 'Is Active'
- Tap save and close

To revoke this right, repeat the above procedure and UNCHECK the 'IS ACTIVE' option before saving.

## 4.14 Punch

Punch									
<div> <span>New</span> <span></span> <span></span> <span></span> <span></span> <span></span> <span>Punch</span> <span></span> <span></span> <span></span> <span>Text to search...</span> </div>									
<div> <span>&lt;</span> <span>1</span> <span>2</span> <span>&gt;</span> </div>									
<input type="checkbox"/>		DEVICE USER ID	EMPLOYEE	PUNCH TIME	RAW WORK CODE	WORK CODE	PUNCH TYPE	DEVICE	PUNCH SOURCE
<input type="checkbox"/>		81	Connor Sant Fournier	13/07/2020 08:00		(1) General - In	In		Manual
<input type="checkbox"/>		81	Connor Sant Fournier	13/07/2020 16:00		(3) General - Out	Out		Manual
<input type="checkbox"/>		81	Connor Sant Fournier	14/07/2020 08:56	1		In	Bulebel Hand Reader	Device
<input type="checkbox"/>		81	Connor Sant Fournier	14/07/2020 16:04	3		Out	Bulebel Hand Reader	Device
<input type="checkbox"/>		81	Connor Sant Fournier	15/07/2020 07:54	1		In	Bulebel Hand Reader	Device
<input type="checkbox"/>		81	Connor Sant Fournier	15/07/2020 16:00	3		Out	Bulebel Hand Reader	Device

Figure 66: The Punch section

The punch option is a repository of the raw punches that have been downloaded from the reader(s) during the automated poll process. The information available here is unformatted, un-nominated and uncalculated, thus raw. The default cycle is set for every five minutes. This is an internal parameter that can be modified.

This section details all the transactions reported by the reader(s) both for successful and unsuccessful punch attempts. Successful punches will include the date and time stamp, site and reader ID together with the Enrol ID and Employee name details.

Unsuccessful attempts will be marked in **RED** and the reason behind this is one of the following:

- Reader was unable to identify the Employee
- Employee has been registered on the reader but not Spektrum

In both cases, the unsuccessful punch will also include the date and time stamp, site and reader ID and Enrol ID but no Employee name. If the reader was repeatedly unable to identify the Employee, simply re-enrol the person's biometrics. In the case that a new Employee was enrolled on the reader but not in Spektrum, simply create the Employee in Spektrum using the same Enrol number as entered in the reader.





































Punch										
<div> New     Punch <div>     </div> Text to search...  </div>										
<div> <div> 1 2 3 4 5 6 7 ... 1610 1611 1612 </div> <div> &lt; &gt; </div> </div>										
<input type="checkbox"/>		EMPLOYEE 	DEVICE 	PUNCH TIME 	PUNCH DATE 	PUNCH SOURCE 	HOUR 	MINUTE 	DEVICE USER ID 	PUNCH TYPE 
						N/A				N/A
<input type="checkbox"/>			Fgura - Face	10/08/2017 07:31	10/08/2017	Device	7	31	0	 NA
<input type="checkbox"/>			Bulebel - Face	10/11/2017 07:38	10/11/2017	Device	7	38		 NA
<input type="checkbox"/>			Bulebel - Face	16/03/2018 07:38	16/03/2018	Device	7	38		 NA
<input type="checkbox"/>			Bulebel Hand Reader	06/08/2018 12:40	06/08/2018	Device	12	40	255	 NA
<input type="checkbox"/>			Fgura - Kadex	19/12/2017 07:43	19/12/2017	Device	7	43	25	 NA
<input type="checkbox"/>			Bulebel - Face	17/01/2018 15:34	17/01/2018	Device	15	34		 NA
<input type="checkbox"/>			Bulebel - Face	03/08/2000 19:29	03/08/2000	Device	19	29	1141833728	 NA
<input type="checkbox"/>			Bulebel - Face	03/08/2000 19:35	03/08/2000	Device	19	35	604962816	 NA
<input type="checkbox"/>			Bulebel - Face	10/05/2018 16:26	10/05/2018	Device	16	26		 NA

Figure 67: The unknown Punches

## Link Punches

The next step is to manually link the punches to the newly created user in Spektrum.

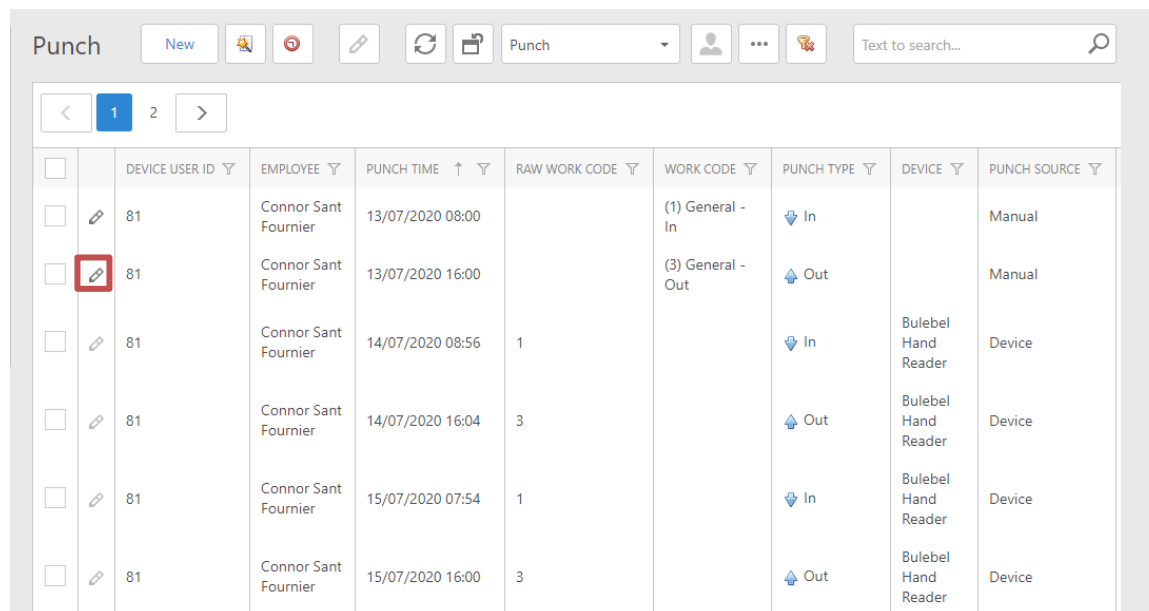
Identify and list the punches and select them with the available tick-box. On the title bar select the three dots and then select 'Set Employee'. You will then be prompted to search for the employee in question, once located click on 'OK' and all the marked punches will be linked to this employee.

Apart from identifying punches and data export, the Punch option offers more functions mainly

- Amend a Punch
- Create a Punch

#### 4.14.1 Amending a Punch

The punch in question must first be located before it is amended. This search can be done via fields filtering or via field sorting. Once found enter Edit mode by choosing the Edit function adjacent to the punch, as shown in Figure 65 below.

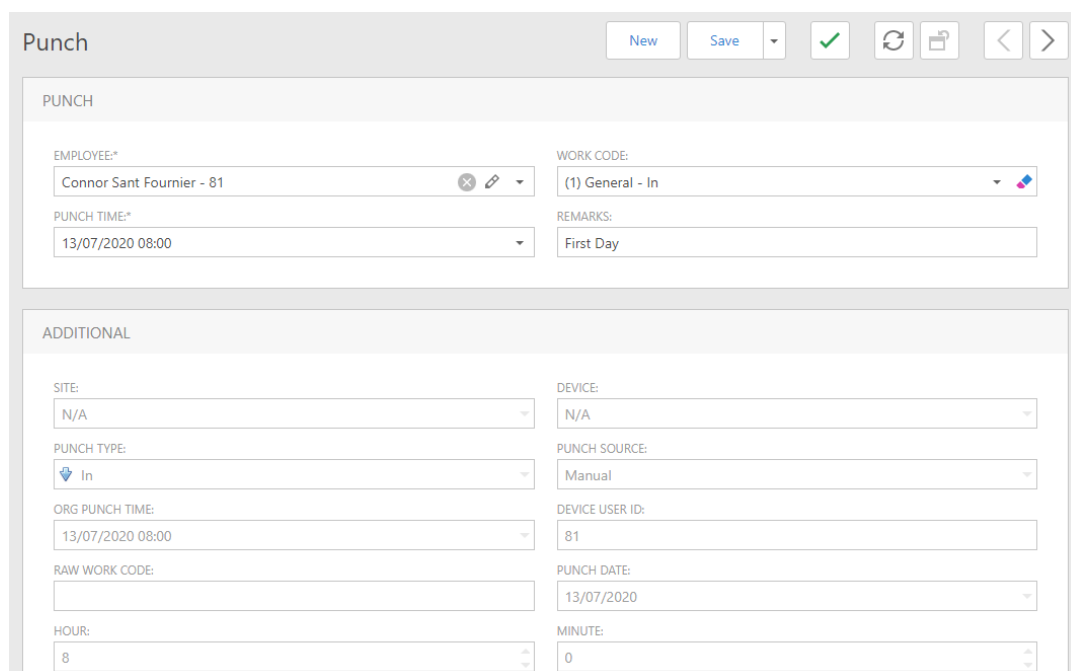


	DEVICE USER ID	EMPLOYEE	PUNCH TIME	RAW WORK CODE	WORK CODE	PUNCH TYPE	DEVICE	PUNCH SOURCE
<input type="checkbox"/>	81	Connor Sant Fournier	13/07/2020 08:00		(1) General - In	In		Manual
<input checked="" type="checkbox"/>	81	Connor Sant Fournier	13/07/2020 16:00		(3) General - Out	Out		Manual
<input type="checkbox"/>	81	Connor Sant Fournier	14/07/2020 08:56	1		In	Bulebel Hand Reader	Device
<input type="checkbox"/>	81	Connor Sant Fournier	14/07/2020 16:04	3		Out	Bulebel Hand Reader	Device
<input type="checkbox"/>	81	Connor Sant Fournier	15/07/2020 07:54	1		In	Bulebel Hand Reader	Device
<input type="checkbox"/>	81	Connor Sant Fournier	15/07/2020 16:00	3		Out	Bulebel Hand Reader	Device

Figure 68: Amending a Punch

In Edit mode the fields available for editing are: Employee | Punch Time | Work Code | Remarks | Site

In the case of manually entered punches, it is important to note that they will be marked as 'Manual' under the Punch Source, as shown in Figure 66 below and posted to the audit log.



Punch

New

Save

✓

↺

↻

↷

PUNCH

EMPLOYEE\*

Connor Sant Fournier - 81

WORK CODE:

(1) General - In

PUNCH TIME\*

13/07/2020 08:00

REMARKS:

First Day

ADDITIONAL

SITE:

N/A

DEVICE:

N/A

PUNCH TYPE:

In

PUNCH SOURCE:

Manual

ORG PUNCH TIME:

13/07/2020 08:00

DEVICE USER ID:

81

RAW WORK CODE:

PUNCH DATE:

13/07/2020

HOURL:

8

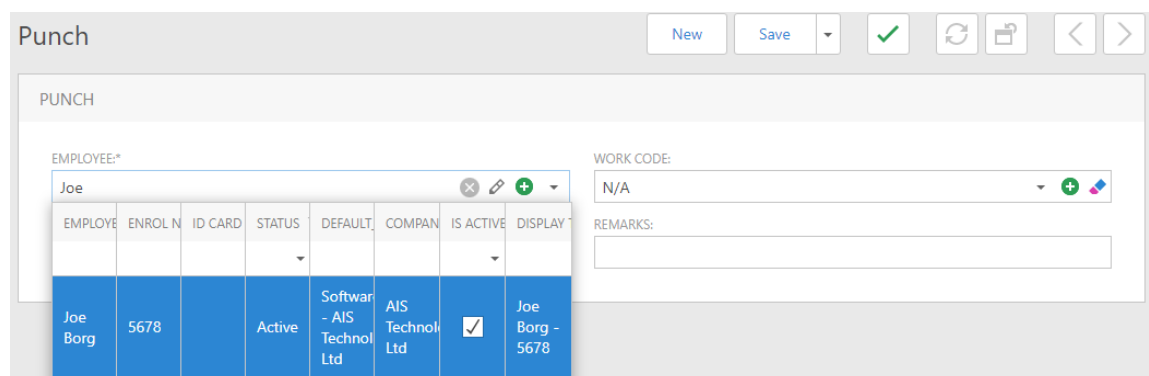
MINUTE:

0

Figure 69: Amend a Punch Menu

### 4.14.2 Creating a Punch

To create a manual punch, select 'Punch' from the Navigation Menu on the left-hand side and click on the 'New' button. In the 'Employee' field, type in and select the employee's name:



EMPLOYEE	ENROL N	ID CARD	STATUS	DEFAULT	COMPAN	IS ACTIVE	DISPLAY
Joe Borg	5678		Active	Software - AIS Technol Ltd	AIS Technol Ltd	<input checked="" type="checkbox"/>	Joe Borg - 5678

Figure 70: Employee Search

Specify the date and time of the punch in the 'Punch Time' field. After specifying the date and time, if you company uses Work Codes, fill in the 'Work Codes' field depending on the type of punch i.e. IN, OUT, Lunch In, Lunch Out. Specify the Site at which the punch is going to be created and click on 'Save'.

Alternatively, you may insert punches or even import punches by using the 'Punch Quick Entry' option. To import punches, click the 'Quick Entry' button, which is situated next to the 'New' button. You may click the 'Get Template' button in order to download a spreadsheet template that stores punches. Compile the document by entering the data under each compulsory field. From the quick entry menu, click 'Browse', navigate to the location where the template is saved, and click 'Import'. Click 'OK' to import the punches.

Punch Quick Entry

OKCancel

IMPORT FILE:\*  
[Punch.xlsx](#)

Get TemplateImport

IMPORT LOG:

RowIndex:1  
RowIndex:1 Values : 123, 11/10/2020, 21:00, (1) General - In,  
RowIndex:2  
RowIndex:2 Values : 123, 12/10/2020, 09:00, (3) General - Out,

PUNCHES TO CREATE:

1

PUNCH DATE:

REMARKS:

EMPLOYEE:

N/A

WORK CODE:

N/A

Add Items to list

PUNCHES

Remove Selected

Export to

		PUNCH TIME	EMPLOYEE	WORK CODE	REMARKS
<input type="checkbox"/>		11/10/2020 21:00		(1) General - In	
<input type="checkbox"/>		12/10/2020 09:00		(3) General - Out	

<1>

PAGE SIZE 20

Help

Figure 71: The Punch Quick Entry Menu

#### 4.14.3 Punch Period Filtering

In order for one to filter the period of a punch, one has to make sure that from the menu or the submenu icon (Depending on your screen size) 'All' is selected, as shown in Figure 68 below.

Punch

New

Punch

Connor

	DEVICE USER ID	EMPLOYEE	PUNCH TIME	RAW WORK CODE	WORK CODE	PUNCH SOURCE
<input type="checkbox"/>	81	Connor Sant Fournier	22/07/2020 08:00		(1) General In	Manual
<input type="checkbox"/>	81	Connor Sant Fournier	22/07/2020 16:00		(3) General Out	Manual

<1>

Mark as N/A  
Link to Employee  
Export to  
Export CSV to TXT

All  
Today  
Yesterday  
This week  
Last week  
This month

Figure 72: Filtering All, Today, Yesterday, This week, Last week or This month Punches

## 4.15 Attendance

Attendance

Export to

Text to search...

<

1

2

3

4

5

>

PAGE SIZE 20

	EMPLOYEE NAME	START	END	DURATION MINS	MISSED IN	MISSED OUT	DURATION	ATTENDANCE TYPE
	Joe Borg	24/07/2020 00:00	24/07/2020 00:00	0.00			0.00	General
	Joe Borg	18/10/2020 00:00	18/10/2020 00:00	0.00			0.00	General
	Joe Borg	08/10/2020 00:00	08/10/2020 00:00	0.00			0.00	General
	Joe Borg	24/09/2020 00:00	24/09/2020 00:00	0.00			0.00	General
	Joe Borg	03/08/2020 00:00	03/08/2020 00:00	0.00			0.00	General
	Joe Borg	11/07/2020 00:00	11/07/2020 00:00	0.00			0.00	General
	Joe Borg	12/08/2020 00:00	12/08/2020 00:00	0.00			0.00	General
	Joe Borg	05/10/2020 00:00	05/10/2020 00:00	0.00			0.00	General
	Joe Borg	23/10/2020 00:00	23/10/2020 00:00	0.00			0.00	General

## 4.16 Export Punches

One may want to simply export the Punches to Excel or as commonly required, as a CSV file which will be imported into a third-party application like Payroll.

Once the administrator has generated the attendance records for the employees and has checked that all the transactions are correct (adjustments for missed punches), then the Punches will be labelled correctly (In, Out, Break Out, Break In) and are ready for export.

To start the process, one must click on 'Punch' in the Navigation Pane and change the view from 'Punch' to 'Export' in the title bar:

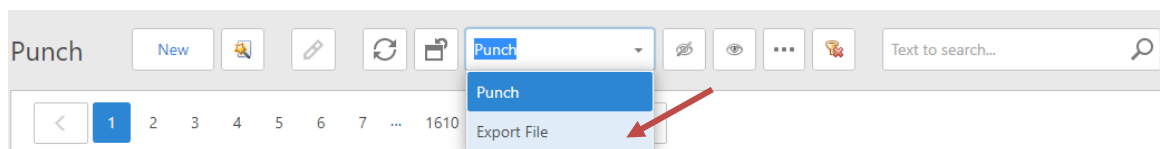


Figure 74: Export File

Once selected, the view will change and by default, the following fields will be displayed:

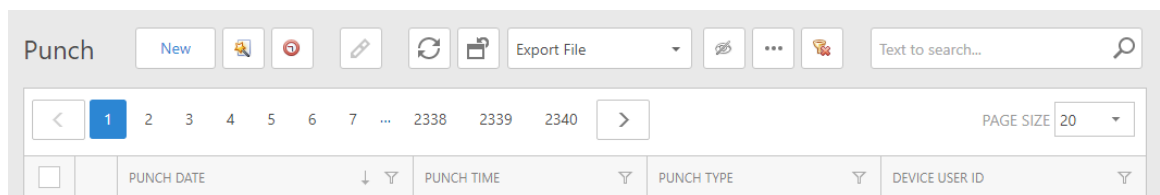


Figure 75: Export Punch Fields

Essentially, the fields and order that they are placed in (Punch Date – Punch Time – Punch Type – Device User ID) will be the way the file will be exported. This means that one needs to pay attention to what exactly and in which order the fields will be exported.

To help with the selection (of attendance records) one may need to filter the data by other fields. To obtain the available additional fields, right-click on any field name and select 'Column Chooser'. This will open up a box containing the optional fields. These are currently the following:

DEVICE | EMPLOYEE | HOUR | MINUTE | OID | PUNCH SOURCE | RAW WORK CODE | REMARKS | SITE | WORK CODE

To add one of these items, one would need to drag the field out (left-click mouse, keep pressed) and place on the field bar in the required place (Order).

Once the records required have been filtered (through the additional fields), one should remove them prior to exporting. To do this, one must evoke the 'Column Chooser' box again and this time drag the extra fields from the field bar to the box. Failing to do this will result in the additional fields being part of the export routine and this might lead to an import failure since these fields would not be expected.

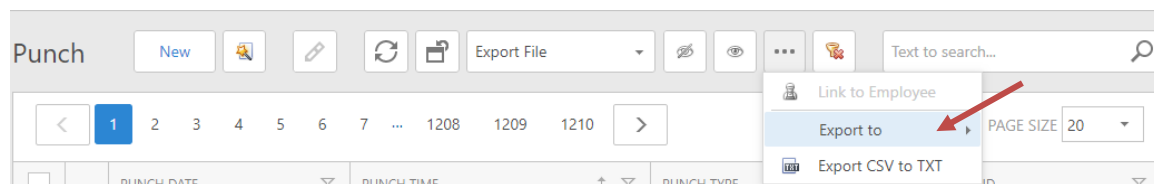


Next step is to enter the date range that was used to generate the latest attendance:

PUNCH DATE	PUNCH TIME	PUNCH TYPE	DEVICE USED
14/06/2020	11:30		
14/06/2020	10:00		
13/06/2020	15:30		
13/06/2020	07:30		
12/06/2020	16:30		
12/06/2020	13:30		
12/06/2020	15:15		
12/06/2020	08:30		
12/06/2020	14:04		
12/06/2020	16:57		
12/06/2020	14:30		

Figure 76: Export Date Range

Once entered, the list of entries that match the date range will be shown. Simply click on the three dots and then on 'Export to':



By default, the filename used for this import is Punch.csv and the administrator will have the opportunity to rename it accordingly and to save it in a specific location.

## 5.0 Schedules & Rosters

If you have access to Schedules and Rosters, then in the navigation pane you will see the following features enabled (not greyed out) and available:

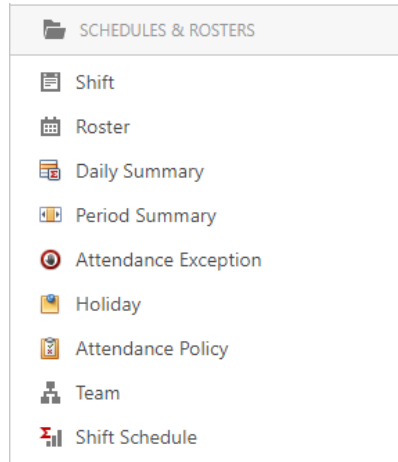


Figure 77: Schedules & Rosters

If the features above are greyed out, then it means that you are not subscribed to this module.

Contact AIS for information on enabling this module.

## 5.1 Teams

Ideally one of the first items to deal with when setting up your Scheduling & Rostering module is the feature called 'Team'.

One must first think of organizing their workforce in a way that is structured and that follows the same patterns. In a nutshell the primary parameters that one needs to address are the Shift times and conditions, together with Allowed Breaks.

With these in mind, one can link employees that follow the exact same parameters together and this is done by means of Teams. Think of Teams as a container that houses the employees that normally work the same shift times, have the same break allowances and conditions.

To create a Team simply click on 'Team' in the navigation pane and on the 'New' button.

The administrator will first need to provide a Team Name. Supplying a name that make sense is beneficial since later on one will link said Teams to Rosters.

The last step is to select the employee(s) to make up the group.

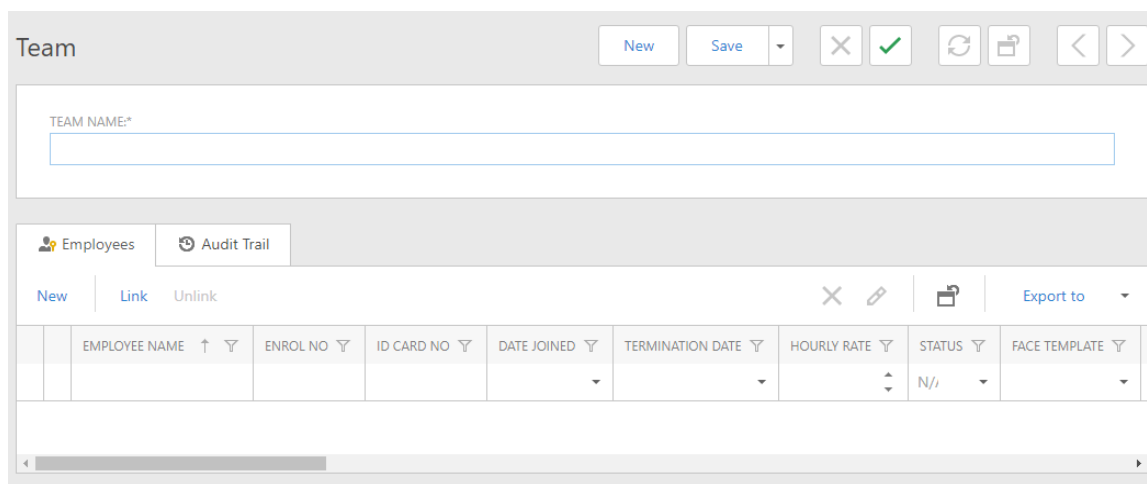


Figure 78: Create Team

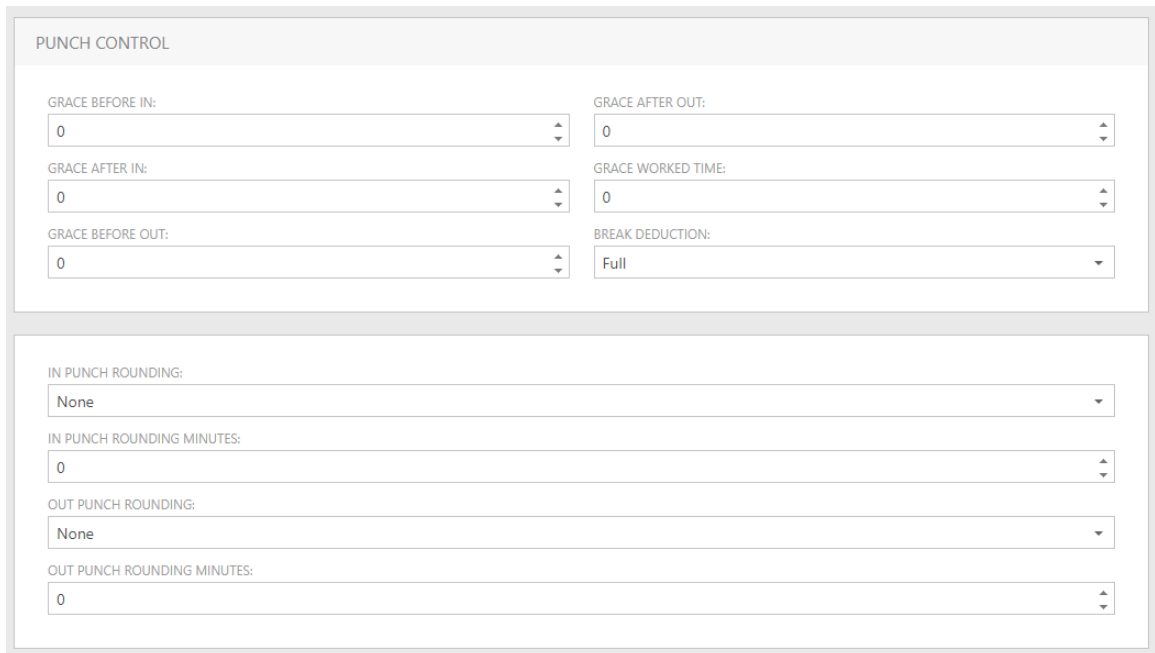
When completed, one must click on 'Save & Close'.

## 5.2 Parameters

There are essentially two sets of parameters that require attention to setup accordingly.

The first set of parameters are at company level. This means that one could have different scenarios according to the business model of the company.

Click on 'Company' in the Navigation Pane and edit the record (select the edit button which is located next to the company name). The following Punch Control settings will be available:



The screenshot shows the 'PUNCH CONTROL' settings form. It is divided into two main sections. The top section contains six input fields: 'GRACE BEFORE IN:' (0), 'GRACE AFTER OUT:' (0), 'GRACE AFTER IN:' (0), 'GRACE WORKED TIME:' (0), 'GRACE BEFORE OUT:' (0), and 'BREAK DEDUCTION:' (Full). The bottom section contains four input fields: 'IN PUNCH ROUNDING:' (None), 'IN PUNCH ROUNDING MINUTES:' (0), 'OUT PUNCH ROUNDING:' (None), and 'OUT PUNCH ROUNDING MINUTES:' (0). Each input field has a small up/down arrow icon next to it.

Figure 79: Company Parameters

Grace Before In	Allowed number of minutes for employee to punch in earlier than the shift start time and which will not trigger an exception.
Grace After In	Allowed number of minutes for employee to punch in later than the shift start time and which will not trigger an exception.
Grace Before Out	Allowed number of minutes for employee to punch out earlier than the shift end time and which will not trigger an exception.
Grace After Out	Allowed number of minutes for employee to punch out later than the shift end time and which will not trigger an exception.
Grace Worked Time	Total allowed number of minutes that employee is allowed to work without triggering an exception.
Break Deduction	Full – Break control is defined at shift level. Stepped – If employee work time is > half the Shift Expected Work and => 'Break Deduction Min Work' (parameter defined in Shift), then full Break Deduction will be carried out. If employee work time is < half the Shift Expected Work and < 'Break Deduction Min Work', then half the Break Deduction will be carried out.
In Punch Rounding	None – No rounding is performed on an In Punch record. Up – Round up to the nearest defined minutes. Down – Round down to the nearest defined minutes.
In Punch Rounding Minutes	Defined In Punch minutes to round up or down. E.g. if In Punch Time is 7:55 and In Punch Rounding Minutes is set to 5, then the Attendance Start Punch will be rounded up to 8:00.

Out Punch Rounding	None – No rounding is performed on an Out Punch record. Up – Round up to the nearest defined minutes. Down – Round down to the nearest defined minutes.
Out Punch Rounding Minutes	Defined Out Punch minutes to round up or down. E.g. if In Punch Time is 8:05 and Out Punch Rounding Minutes is set to 5, then the Attendance Start Punch will be rounded up to 8:00.

There are additional 'Punch Control' settings that are available at Shift Level. This means that each defined shift can have varying settings which affect Breaks and Overtime.

These supplementary controls are explained in the next section labelled 'Shifts'.

The second set of parameters will normally affect all the employees irrespective of Company or shift employed. In the navigation pane, under 'Schedule & Rosters', one will find set default settings in the option called 'Attendance Policy' as follows:

Policy Name	Default Policy.
Early In Bring Forward	Y/N. If employee 'In Punch Time' is earlier than the 'Start Shift time', then set the 'Start Attendance In Time' equal to the 'Start Shift Time'.
Late Out Move Back	Y/N. If employee 'Out Punch Time' is later than the 'End Shift Time', then set the 'End Attendance Out Time' equal to the 'End Shift Time'.
Check for Absence	If ticked, then when comparing attendance records to rostered records, trigger an exception if expected work > 0 and worked hours = 0.
Check for Extra Attendance	If ticked, then when comparing attendance records to rostered records, trigger an exception if expected work = 0 and worked hours > 0.
Check for Late In	If ticked, then when comparing attendance records to rostered records, trigger an exception if 'In Punch Time' is > 'Shift Start Time'.
Check for Early In	If ticked, then when comparing attendance records to rostered records, trigger an exception if 'In Punch Time' is < 'Shift Start Time'.
Check for Early Out	If ticked, then when comparing attendance records to rostered records, trigger an exception if 'Out Punch Time' is < 'Shift End Time'.
Check for Late Out	If ticked, then when comparing attendance records to rostered records, trigger an exception if 'Out Punch Time' is > 'Shift End Time'.
Check for Less Work	If ticked, then when comparing attendance records to rostered records, trigger an exception if worked hours < expected hours.

If changes are made to any of these settings, they will affect all the employees.

If you require that certain conditions are different for specific employees, then one can define a separate Attendance Policy (saved with a different name) and applied at employee level.

If multiple employees require a second Attendance Policy that would differ from the first, one could use the 'Batch Edit' feature available in the Employee section to swiftly link the second Attendance Policy to a group of employees.

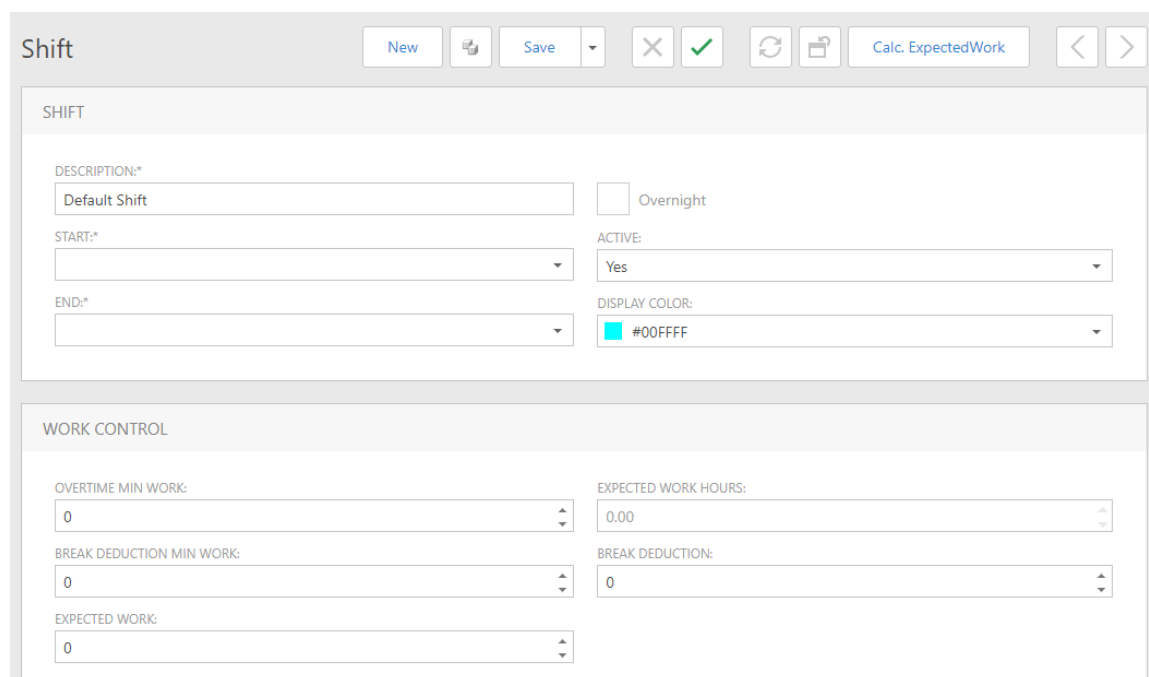
### 5.3 Shifts

Once the Teams have been completed it is time to define all the different shifts that are employed in the company or companies that fall under the Spektrum subscription. You can define a shift that can be utilized across the listed companies.

For example, 8:00 to 16:30 Monday to Friday, including 30 mins break and Overtime which will only kick in if the employee has worked for more than 30 minutes after normal working time.

Another example is a split shift that sees employees working on Mon to Fri, from 11:00 to 15:00 then again from 18:00 to 23:30. Then Sat and Sun from 11:00 to 16:00

Simply put together all the different shifts that the company operates with and begin creating them one by one. To create a shift, click on 'Shift' in the navigation button and click on the 'New' button:



**Shift**

DESCRIPTION:\*  
Default Shift

START:\*  
[Empty]

END:\*  
[Empty]

Overnight

ACTIVE:  
Yes

DISPLAY COLOR:  
#00FFFF

**WORK CONTROL**

OVERTIME MIN WORK:  
0

EXPECTED WORK HOURS:  
0.00

BREAK DEDUCTION MIN WORK:  
0

BREAK DEDUCTION:  
0

EXPECTED WORK:  
0

Figure 80: Create Shift

The following are the fields and parameters that are available for the creation of a shift:

#### Shift Fields:

Description	E.g. 40hr, 8-16:30, with OT
Start	The start time of the shift e.g. 08:00
End	The end time of the shift e.g. 16:30
Overnight	Read only tick box that is automatically populated once you have defined the Start and End Times for this shift. If the time period spans after midnight then it will be automatically labelled as an overnight shift.
Active	Define shift as an active or inactive one
Display Color	The color which identifies the shift

N.B. If any of the set Work Control Fields are surpassed then an exception could be flagged and will be posted in the Attendance Exception report. More on this later.

#### Work Control Fields:

Overtime Min Work	Minimum required minutes after the defined end work time that will enable overtime to start clocking. The initial x minutes will also be calculated as overtime if surpassed.  N.B. The administrator must enable each employee that has OT benefits by editing their record card and selecting 'Yes' for overtime.
Break Deduction Min Work	Break time for this shift, in minutes is only allowed for a minimum working time.
Expected Work	This will be automatically calculated. Timing is in minutes.
Expected Work Hours	This will be automatically calculated. Timing is in hours.
Break Deduction	The allowed break time for this shift, in minutes
Break Deduction Min Work	Minimum required minutes that the employee must work in their shift before the Break Deduction figure is automatically deducted.

N.B. If the break deduction is set to, for example, 30 minutes and the reader in the company is also set to accept work codes defined for Break-Out and Break-In, then Spektrum will deduct the larger value for the break.

Examples (Break Deduction in Shift is set to 30mins)

- Employee punches in at 08:00, Break-Out at 13:00, Break-In at 13:25, Out at 16:30  
→ Spektrum will deduct 30 mins and not 25 mins.
- Employee punches in at 08:00, Break-Out at 13:00, Break-In at 13:45, Out at 16:30  
→ Spektrum will deduct 45 mins and not 30 mins.


If work codes are not being used for the breaks then the 'Break Deduction' in the Shift will dominate.

When completed, press 'Save & Close' to save the new shift for the company.

## 5.4 Rosters

### 5.4.1 Creating a Roster

The third item to deal with when setting up your Scheduling module is the item called 'Roster'.

To create a Roster simply click on 'Roster' in the navigation pane and the 'New Roster'  button.

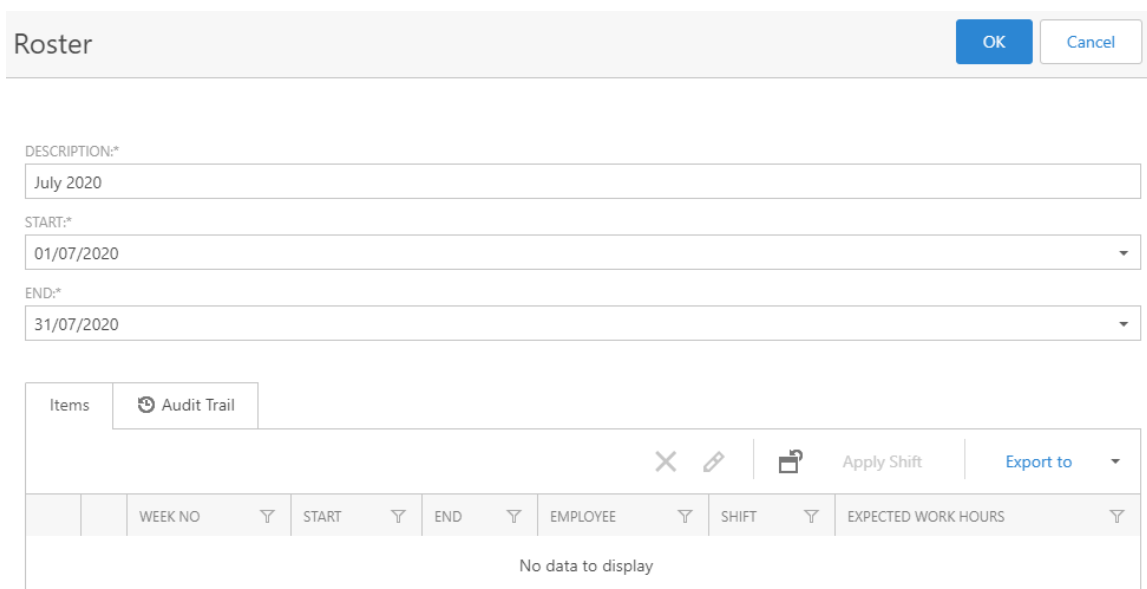


Figure 81: Create Roster

Fields marked by an \* are compulsory. These are Description, Start and End.

When completed, one must click on 'Ok' and you will be navigated to the Roster Designer, as shown in Figure 78 below.





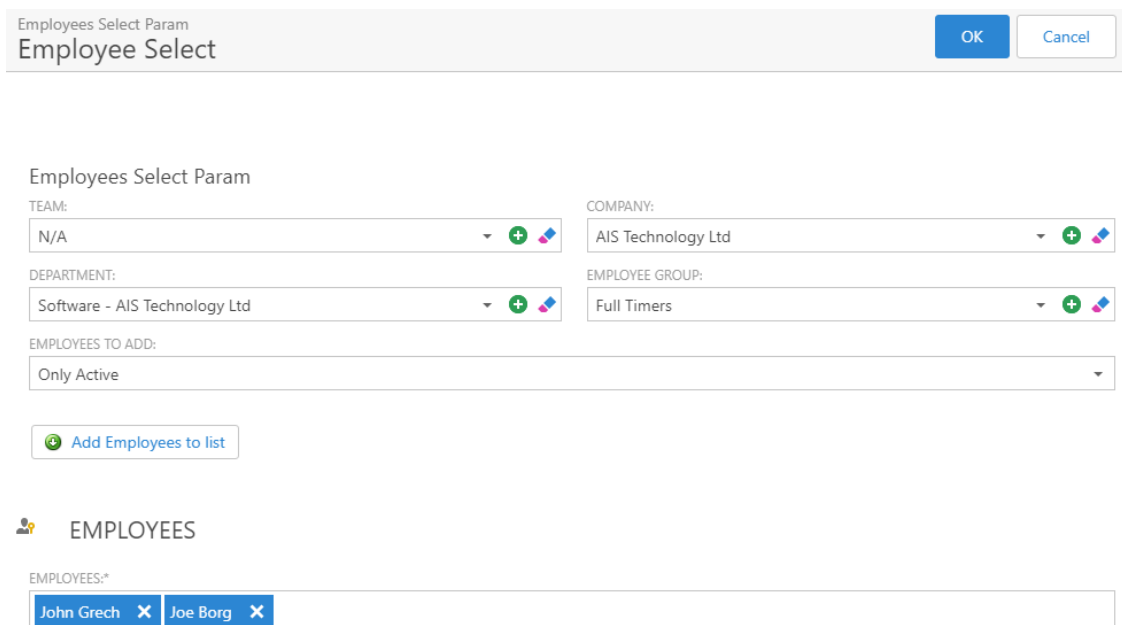
Figure 82: Roster Designer



### 5.4.2 Selecting Employees

Once the necessary Rosters have been set up it is time to select the employees, so that later on you will be able to assign shifts.

To select employees, click on 'Add Employees'  button, and you will be navigated to the Employee Selection window, as shown in Figure 79 below.



Employees Select Param

Employee Select

OK Cancel

Employees Select Param

TEAM: N/A

COMPANY: AIS Technology Ltd

DEPARTMENT: Software - AIS Technology Ltd

EMPLOYEE GROUP: Full Timers

EMPLOYEES TO ADD: Only Active

Add Employees to list

EMPLOYEES

EMPLOYEES:\*

John Grech X Joe Borg X

Figure 83: Employee Selection

The following are the fields and parameters that are available for the selection of employees: 'Team', 'Department', 'Company', 'Employee Group' and 'Employees To Add'.

One can have a combination of all the options available to select the employees.

When completed, press 'Add Employees to List' and 'OK' to add employees in the Roster Designer view, as shown in Figure 80 below.



Roster Employee Daily

July 2020 [ 01/07/2020 - 31/07/2020 ]

Close

Export to


EMPLOYEE	HOURS	01/07/2020(WED)	02/07/2020(THU)	03/07/2020(FRI)	04/07/2020(SAT)	05/07/2020(SUN)	06/07/2020(MON)
John Grech	0.00	---	---	---	---	---	---
Joe Borg	0.00	---	---	---	---	---	---
Sum=0.00		0.00	0.00	0.00	0.00	0.00	0.00

PAGE SIZE 20

Figure 84: Roster Designer populated with Employees

One will notice that there is no 'Save' button here. This is because within the Roster everything is automatically saved.

Note that when you click 'Close', the roster will be saved **only if you have allocated at least one shift to one employee**. When you select 'Close' you will be navigated back to the Roster page, as shown in Figure 81 below.

Rosters can be filtered by clicking the submenu  button. The filters available are 'All Rosters', 'Current Rosters', 'Future Rosters' and 'Past Rosters'. These will be viewed according to the date set for the roster, as shown in Figure 81 below.

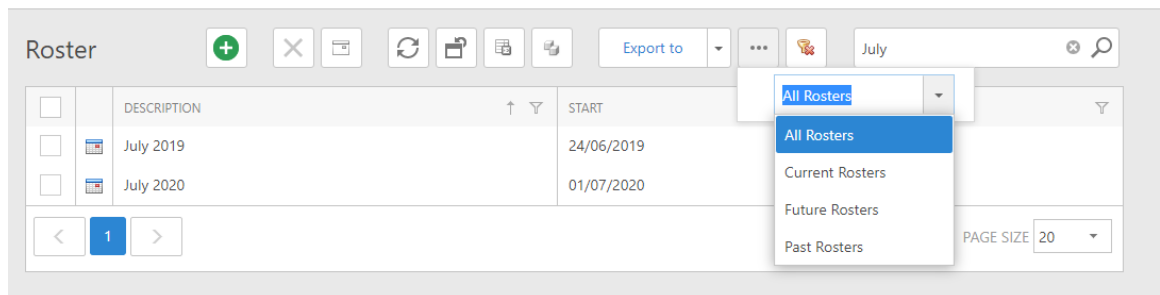


Figure 85: Filtering Rosters

### 5.4.3 Allocating Shift

In order to edit a roster, click on the calendar icon from the Roster page, as shown in Figure 82 below.

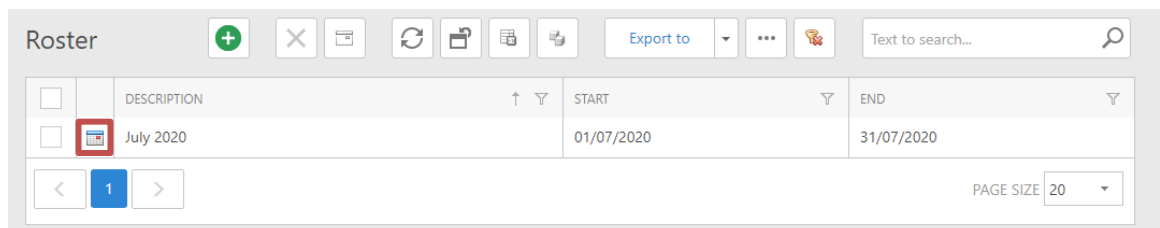



Figure 86: Edit Roster

As long as employees exist in the Roster Designer view, you will be able to start planning the roster. In order to do this, you have to click on the submenu  button, which allows you to use different functions to plan the roster.

As shown in Figure 83 below, navigate to 'Add Shift' which enables you to select what shift you are going to assign to the employee.

Roster Employee Daily  
July 2020 [ 01/07/2020 - 31/07/2020 ] Close

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	EMPLOYEE	HOURS	01/07/2020(WED)	02/07/2020(THU)	03/07/2020(FRI)	04/07/2020(SAT)	05/07/2020(SUN)	06/07/2020(MON)
<input type="checkbox"/>	Joe Borg	0.00	...	...	...	...	...	...
<input type="checkbox"/>	John Grech	0.00	...	...	...	...	...	...
Sum=0.00			01/07/2020(Wed)	02/07/2020(Thu)	03/07/2020(Fri)	04/07/2020(Sat)	05/07/2020(Sun)	06/07/2020(Mon)

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Add Shift  
 Repeat  
 Remove  
 Edit  
 Add Absence Entry

0500-2300-b00 05:00-23:00  
 0730-1330-B00 07:30-13:30  
 0730-1500-b15 07:30-15:00  
 0730-1500-b30 07:30-15:00  
 0800-1400-b00 08:00-14:00  
 0800-1500-b00 08:00-15:00  
 0800-1600-b30 08:00-16:00  
 0800-1615-b30 08:00-16:15  
 0800-1630-b30 08:00-16:30  
 0800-1700-b30 08:00-17:00

Figure 87: Add Shift

#### 5.4.4 Repeating Shift

As shown in Figure 84 below, click on the shift you want the employee to work during the next days, navigate to 'Repeat' and select how much days to repeat. This will save time, as you do not have to assign the same shift per day.

Roster Employee Daily  
July 2020 [ 01/07/2020 - 31/07/2020 ] Close

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	EMPLOYEE	HOURS	01/07/2020(WED)	02/07/2020(THU)	03/07/2020(FRI)	04/07/2020(SAT)	05/07/2020(SUN)	06/07/2020(MON)
<input type="checkbox"/>	Joe Borg	22.50	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	...	...	...
<input type="checkbox"/>	John Grech	0.00	...	...	...	...	...	...
Sum=22.50			01/07/2020(Wed)	02/07/2020(Thu)	03/07/2020(Fri)	04/07/2020(Sat)	05/07/2020(Sun)	06/07/2020(Mon)

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PAGE SIZE 20

Add Shift  
 Repeat  
 Remove  
 Edit  
 Add Absence Entry

Next 1 day  
 Next 2 days  
 Next 3 days  
 Next 4 days  
 Next 5 days  
 Next 6 days  
 Next 7 days  
 Next 8 days  
 Next 9 days  
 Next 10 days



Figure 88: Repeat Shift

### 5.4.5 Duplication Pattern

When a number of employees are going to work the same shifts for a number of days, one could use the cloning feature which is called 'Duplicating Pattern'. This will save time, as you do not have to assign or repeat every shift for each employee and/or per day.

As shown in Figure 85 below, the first thing you have to do is assign shifts to an employee (this is going to be the source employee).


Roster Employee Daily  
July 2020 [ 01/07/2020 - 31/07/2020 ] Close



Export to


EMPLOYEE	HOURS	01/07/2020(WED)	02/07/2020(THU)	03/07/2020(FRI)	04/07/2020(SAT)	05/07/2020(SUN)	06/07/2020(MON)
<input checked="" type="checkbox"/> Joe Borg	22.50	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	...	...	...
<input checked="" type="checkbox"/> John Grech	0.00	...	...	...	...	...	...
Sum=22.50		01/07/2020(Wed) 7.50	02/07/2020(Thu) 7.50	03/07/2020(Fri) 7.50	04/07/2020(Sat) 0.00	05/07/2020(Sun) 0.00	06/07/2020(Mon) 0.00

PAGE SIZE 20

Figure 89: Source Employee

The next step is to select the employees that are going to work with the same pattern of shifts, as shown in Figure 84 above, by checking the box adjacent to them ☒. If the top left checkbox is selected, then all the employees on the page are selected. After you have selected the employees, click on the 'Duplicate Pattern'  button, and the Duplicate Roster Pattern window will appear, as shown in Figure 86 below.

Duplicate Roster Items Param  
Duplicate roster pattern OK Cancel

Joe Borg - 5678 

Duplicate ROSTER PARAM

APPLY HOLIDAYS: Yes


SOURCE RANGE START:\* 01/07/2020

SOURCE RANGE END:\*

TARGET RANGE START:\* 01/07/2020

TARGET RANGE END:\* 31/07/2020

TARGET EMPLOYEES

New Link Unlink  Export to

EMPLOYEE NAME	ENROL NO	ID CARD NO	DATE JOINED	TERMINATION DATE	HOURLY RATE	STATUS
<input type="checkbox"/> Joe Borg	5678				0.00	Active

Figure 90: Duplicate Roster Pattern

The following are the fields and parameters that are available for the duplication pattern:

**Source Employee** Source employee which will contain the shift and pattern for a defined period (Roster).

#### Duplicate Roster Param:

**Apply Holidays** If a holiday exists within the 'Target Range Start' and the 'Target Range End', do you want to apply shifts on that particular holiday? (Yes or No)

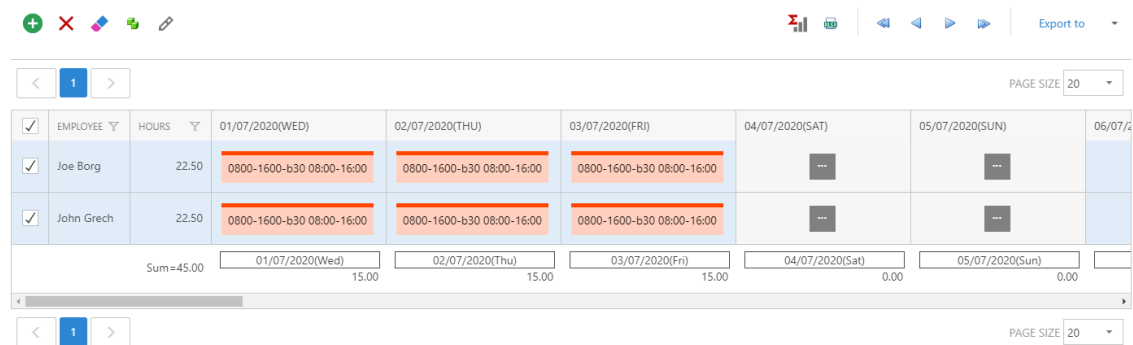
**Source Range Start** The Source's start date within the Roster that one will be cloning from.

**Source Range End** The Source's end date within the Roster that one will be cloning to.

**Target Range Start** The Target's start date within the Roster that one will be cloning from.

**Target Range End** The Target's end date within the Roster that one will be cloning to.

When completed, press 'Ok' to duplicate the pattern for all the selected employees.



	EMPLOYEE	HOURS	01/07/2020(WED)	02/07/2020(THU)	03/07/2020(FRI)	04/07/2020(SAT)	05/07/2020(SUN)	06/07/2020(MON)
<input checked="" type="checkbox"/>	Joe Borg	22.50	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	---	---	
<input checked="" type="checkbox"/>	John Grech	22.50	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	0800-1600-b30 08:00-16:00	---	---	
Sum=45.00			15.00	15.00	15.00	0.00	0.00	

Figure 91: Final result Roster Pattern

#### 5.4.6 Roster: Export to Excel

Once the Roster is defined with all employees, shifts and patterns, the administrator has the choice of either exporting the information of all employees into one Excel file or otherwise exporting to an Excel file containing separate tabs for all employees.

To export all employees into one Excel file, the administrator needs to select the employees in the Roster (tick-box) and then click on the 'Export to' button and selecting XLSX file at the bottom of the list as illustrated below:

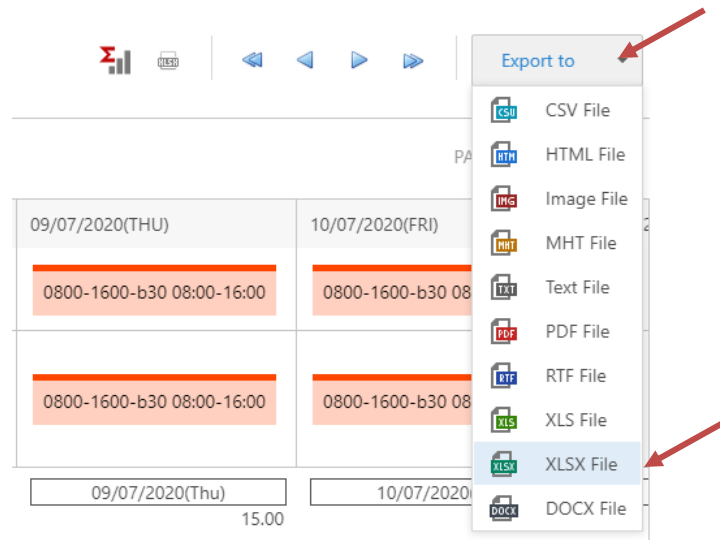




Figure 92: Export Roster

To export to an Excel file containing separate tabs for all employees, the administrator needs to select the employees in the Roster (tick-box) and then click on the  button found in the title bar.

### 5.4.7 Roster: Chart by Employee Designation

If the field called 'Employee Designation', if the Employee Record card is populated with valid information, then one can issue a chart on a daily basis that illustrates the types of employees that are present on an hourly basis.

This is a very useful feature and as an example can be used to check that the Roster has placed the required number of specific employees to cover a shift.

Once defined, simply click on the  button found on the title bar and select the day you wish to view. Refer to the sample below which clearly highlight the number of Technicians and Chief Engineers that are rostered for a specific day:

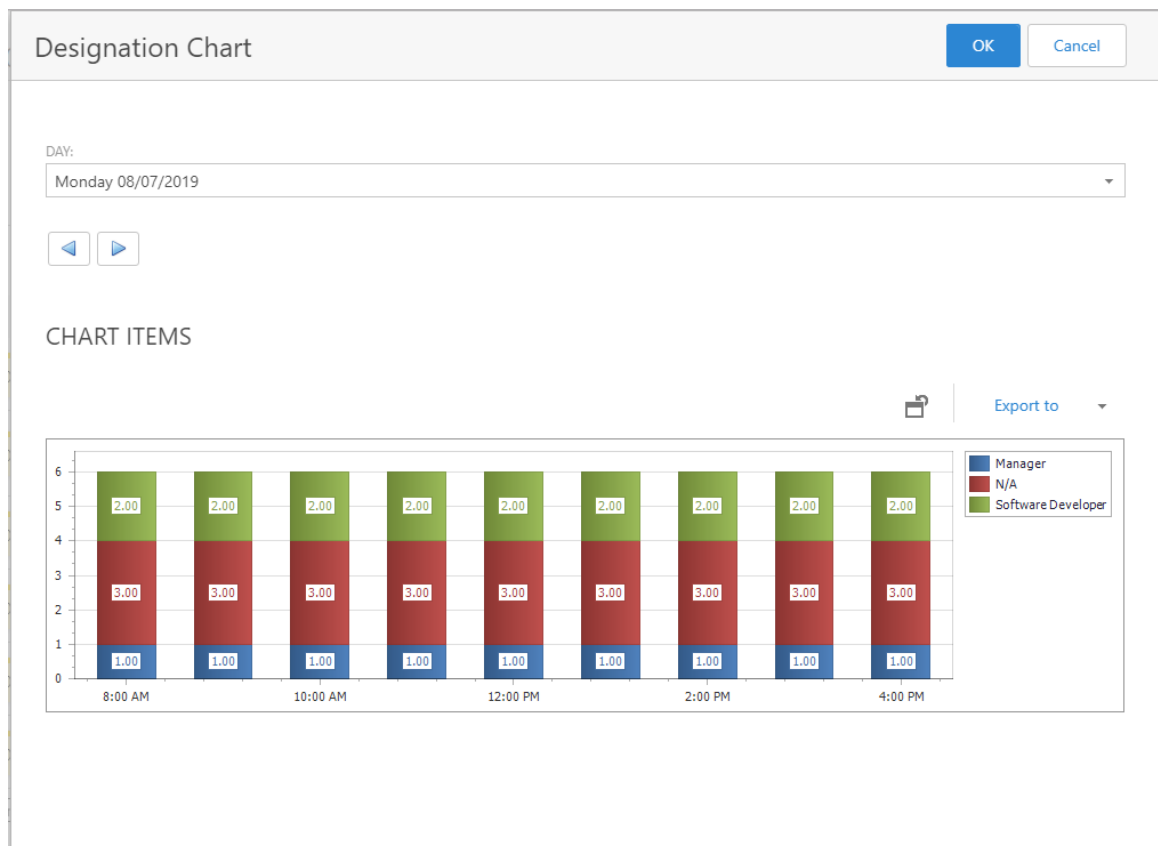
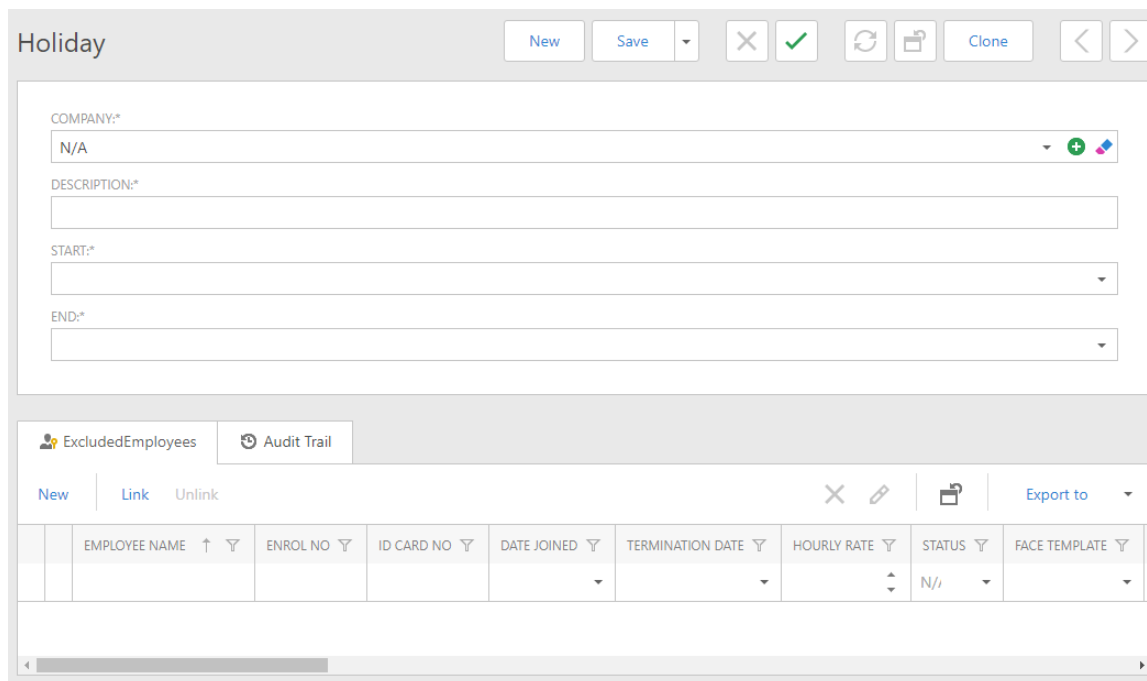


Figure 93: Employee Designation Chart

### 5.4.8 Holidays

To define public holidays and shut down periods per company, the administrator needs to click on 'Holiday' in the 'Schedules & Rosters' section.

Click on the 'New' button and the wizard in the below figure 90 will be displayed:



The screenshot shows the 'New Holiday' wizard interface. At the top, there's a toolbar with buttons: 'New', 'Save', a dropdown arrow, a close button (X), a checkmark, a refresh button, a clone button, and a 'Clone' button. Below the toolbar, the form has four main input fields: 'COMPANY:\*' with a dropdown menu showing 'N/A', 'DESCRIPTION:\*' with a text input field, 'START:\*' with a date picker, and 'END:\*' with a date picker. Below these fields are two tabs: 'ExcludedEmployees' (active) and 'Audit Trail'. Under the 'ExcludedEmployees' tab, there's a table with columns: 'EMPLOYEE NAME', 'ENROL NO', 'ID CARD NO', 'DATE JOINED', 'TERMINATION DATE', 'HOURLY RATE', 'STATUS', and 'FACE TEMPLATE'. The table has a 'New' button and a 'Link' button above it. The 'STATUS' column shows 'N/'.

Figure 94: New Holiday

The following fields need to be inputted:

Company	Select the Company from the drop-down list
Description	Enter the description of the Holiday
Start	The Start Date of the Holiday
End	The End Date of the Holiday

It may also be noted that there exists the option to exclude particular employees from a given Holiday. This means that the excluded employees will continue to work as normal and will not be affected by the specified holiday.

Click on 'Save & Close'.

Once the administrator has defined all the holidays/shutdown periods for one company, he/she can use the cloning tool to copy the records over to other companies under the same subscription if they apply.

To clone, the administrator must select all the holidays (select tick-box next to Holiday) and then click on the 'Clone' button. Next, link to the company or companies which need to have the same defined holidays. Click on 'Ok' and all the holidays will be replicated for the linked companies.



### 5.4.9 Apply for Leave through the Roster.

It is possible to submit a new Leave request through the 'Roster' page. Begin by clicking 'Roster' in the Navigation Pane and selecting 'Edit Roster' for the roster you wish to review.

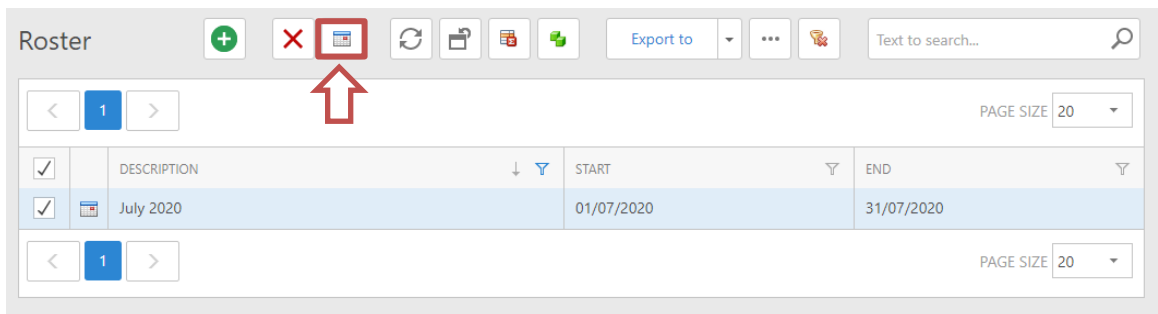


Figure 95: Roster list

Once you have entered the Roster view, click on the icon within a given date and click 'Add Absence Entry'.

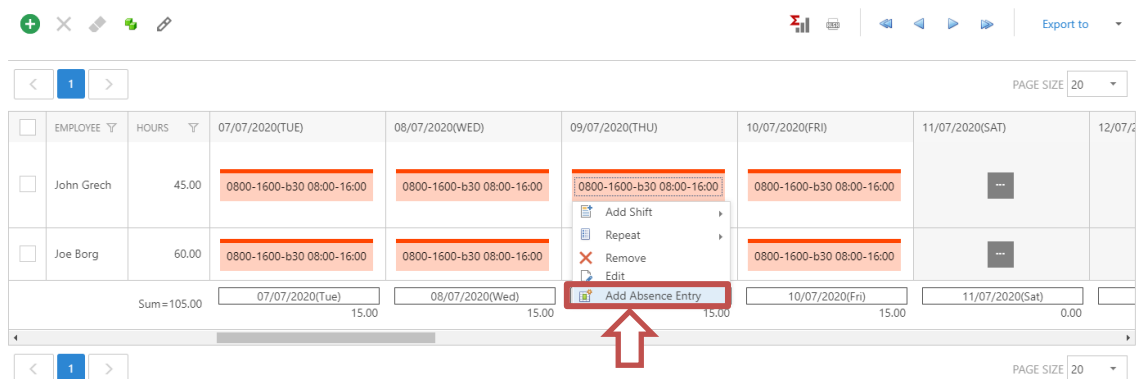


Figure 96: New Absence Entry

Upon selecting 'Add Absence Entry', you are provided with the form for creating a new Leave request. This form is just like the other Leave request forms discussed in the 'Leave' section, allowing you to carry out the Leave request submission directly from the Roster.

#### 5.4.10 Calc. Summaries

Once all the rosters have been defined and the employee punches (actual) are being recorded in Spektrum, one will need to run a comparison between the actual punches and the forecast (Rosters).

This means that Spektrum will essentially convert all the raw punches to attendance records whilst paying special attention to the parameters defined in the Company and Shift Punch Control records.

Apart from these attendance records, 'Calc. Summaries' will also generate the Daily Summary, Period Summary and Exception Report for the period defined within the Roster.

To run this functionality, one would have to select a Roster or multiple Rosters, ideally within the same date range by selecting the tick-box next to said Roster.

Then click on the 'Calc Summaries' button, as shown in Figure 94 below.



Figure 97: Calc. Summaries

This will bring up the following wizard:

Calculation parameters

Attendance Summary Generation

OK

Cancel

CALCULATION PARAMETERS

START:\*

01/07/2020

END:\*

31/07/2020

MIN DURATION MINS:\*

0

MAX DURATION MINS:\*

720

USE WORK CODES:

No

DEFAULT ATTENDANCE TYPE:\*

General

OT PERIOD COMPUTATION:\*

7

NON WORKCODE MODE:

First/Last

FIRST/LAST SPLITTIME:\*

13:00

EMPLOYEES

New

Link

Unlink

X

Export to

Figure 98: Calculation Parameters

Start	The start date of the Roster period.
End	The end date of the Roster period.
Min Duration Mins	The accepted minimum time in minutes between one punch and another. Used to curb for example multiple 'In' punches for an employee. Spektrum will accept the first punch as valid and will mark the remaining punches as errors.
Max Duration Mins	The maximum number of minutes that an employee works in a single day. Spektrum will be expecting a series of punches, per employee, within this time frame.
Use Work Codes	<p>'Yes' if employees are selecting 'In' and/or 'Out' on the physical Reader. This is a must especially if employees work on night shifts.</p> <p>'No' if the employees are simply authenticating themselves without choosing a code to denote their action.</p>
Default Attendance Type	Normally set to 'General'. If one has different defined work codes on the reader to depict say 'Break-Start', 'Break-End', 'Meeting-Start', 'Meeting-End', then one could define different Attendance types to map these codes.
OT Period Calculation	The number of days that Overtime and Short Hours should be calculated on. For example, daily (1), weekly (7), fortnightly (14).
Non Workcode Mode	<p>If the Readers are not set with Word codes, then one will need to use these options to calculate the attendance records:</p> <p>By Duration – Find and report all the punches per employee and mark as 'In' and 'Out' according to the time stamps. Naturally an even number of punches is expected.</p> <p>First/Last – Simply calculate and report the first recorded employee punch as 'In' and the last recorded employee punch as 'Out' Ignore all other punches found in between, if available.</p>
First/Last Split Time	Used in conjunction with Non Workcode Mode. If only one employee punch is found on a specific date, then mark as an 'In' punch if < mid-point defined or mark as an 'Out' punch if > defined mid-point.

By default, all the employees linked to the Roster will be selected for the 'Calc Summaries' routine.

The operator then needs to click on 'Ok' button situated on the top-right and the process will run. Once completed Spektrum will inform the user.

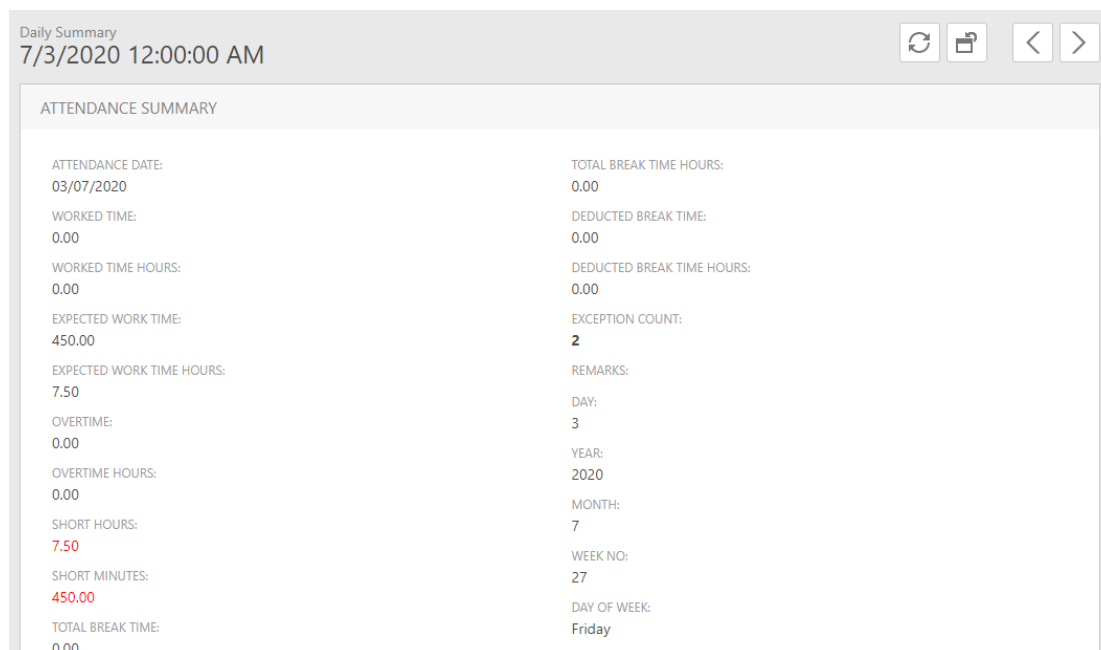
### 5.4.11 Daily Summary

Once the 'Calc Summaries' has been run, then one has access to the Daily and Period Summaries for the Date range that has been calculated.

The Daily Summary presents the operator with a list view containing the following fields:

Attendance Date	Date of Attendance
Enrol No	Employee Punch Clock number
Employee	Employee Name and Surname
Expected Work Time Hours	Expected Shift Hours to work on the day
Worked Time Hours	Actual hours worked on the day
Deducted Break Time Hours	Decimal format of Break Reduction on the day
Short Hours	Number of hours worked less than expected hours
Overtime Hours	Number of hours worked above the total shift hours
Exception Count	Number of attendance exceptions flagged on the day
Remarks	General Remarks

Furthermore, the administrator can click on any record in the list to obtain detailed attendance information:



Daily Summary  
7/3/2020 12:00:00 AM

ATTENDANCE SUMMARY

ATTENDANCE DATE: 03/07/2020	TOTAL BREAK TIME HOURS: 0.00
WORKED TIME: 0.00	DEDUCTED BREAK TIME: 0.00
WORKED TIME HOURS: 0.00	DEDUCTED BREAK TIME HOURS: 0.00
EXPECTED WORK TIME: 450.00	EXCEPTION COUNT: <b>2</b>
EXPECTED WORK TIME HOURS: 7.50	REMARKS:
OVERTIME: 0.00	DAY: 3
OVERTIME HOURS: 0.00	YEAR: 2020
SHORT HOURS: <b>7.50</b>	MONTH: 7
SHORT MINUTES: <b>450.00</b>	WEEK NO: 27
TOTAL BREAK TIME: 0.00	DAY OF WEEK: Friday

Figure 99: Daily Summary

Additionally, there are two tabs at the bottom labelled 'Attendances' and 'Attendance Exceptions'.

'Attendances' lists all the recorded 'Attendance Start' and 'Attendance End' entries for the employee for the specific day.

'Attendance Exceptions' will list any shortcomings (worked less, absence) or benefits (Overtime) for the employee and specific day.

### 5.4.12 Period Summary

The Period Summary is similar to the Daily Summary with the following additional features:

The date ranges illustrated in the list view are grouped according to the 'OT Period Computation' figure that was used when calculating the Summaries for the Rosters.

For example, if the number 7 was used, then the Period Summary Report will be grouped on a weekly basis for the entire defined Roster period.

Secondly, in-built in this Report is the ability to approve and/or reject overtime hours for the employees.

### 5.4.13 Period Summary – Overtime Approval

The fields available within the Period Summary to handle the Overtime Approval Feature are the following:

OT Minutes	Total overtime minutes for the employee
OT Hours	Total overtime hours for the employee
Approved OT	Approved overtime in minutes
Unapproved OT	Balance pending of overtime in minutes
OT Approved By	Username of Person approving the overtime (Signed-in User)
OT Approval Status	Pending, Approved, Rejected

Within Period Summary, the administrator can partly approve a number of minutes, leaving a balance, can approve the whole number of minutes declared as overtime or simply reject the overtime balance for an employee.

For approval and rejection, the administrator will use the controls at the top of the screen:

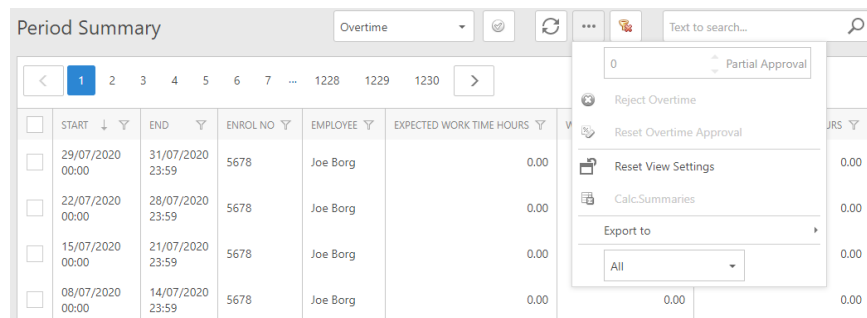




Figure 100: Period Summary

To approve the whole balance, the administrator needs to select one or more records (using the tick-boxes) and simply click on the  button.

If this was performed by mistake, the administrator can undo the approval by re-selecting the record or records and then click on the  button. This will reset the overtime back to its original state i.e. pending approval.

To approve for example 1 hour out of 2 hours declare overtime, the administrator would key in 60 (minutes) in the space next to 'Partial Approval' and click on the Partial Approval button. The remaining balance of 60 minutes will then appear in the field called 'Unapproved OT'.

## 6.0 Reports

### 6.1 Attendance Report

This report is provided as a standard template and is used to generate the attendance records, primarily sorted by Enrol number and then by date. The report will show the “In” and “Out” punch times, as well as the duration, per employee.

Click on ‘Reports’ in the Navigation Pane and the report ‘Attendance by Employee’ will be displayed on the main screen. Now click on the file and a wizard will appear, prompting one to enter the desired date range:

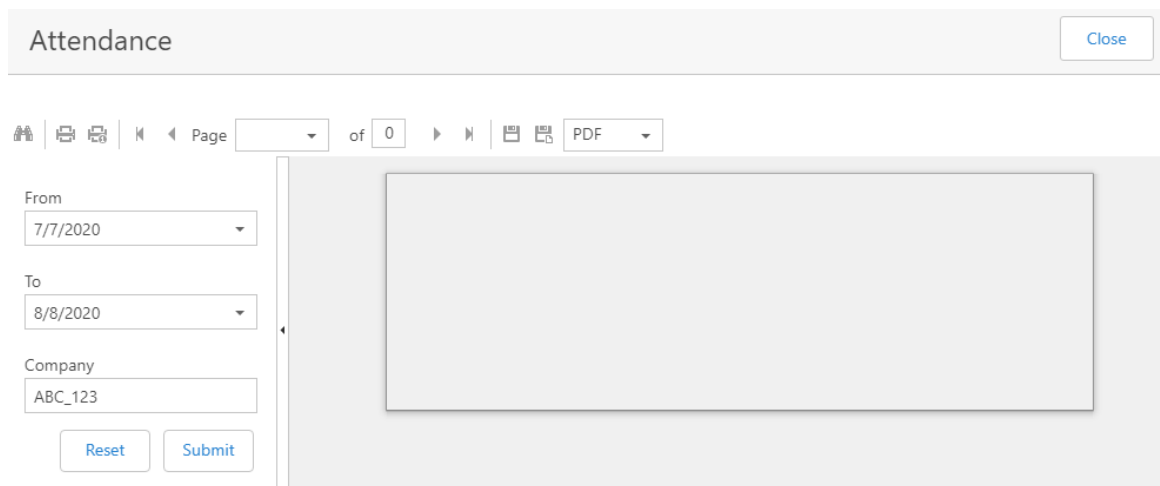


Figure 101: Attendance Report Date Range

Click on the ‘Submit’ button to confirm details entered and generate a report. Reports may be exported by selecting the format from the dropdown (PDF by default) and clicking the first floppy disk save icon.

### 6.2 Who’s In Report

This report allows you to check for employees that have punched in from 00:00 of the current day and have not yet punched out, or rather employees who are currently at work.

Click on ‘Who’s In Report’ under the ‘Reports’ tab in the left hand side navigation menu.

You then have the functionality to export the report by using the ‘Export To’ button at the top. In order for this report to function properly, you have to be using work codes and employees have to adhere to punch in and out policies.

## 7.0 Leave

If you have access to Leave, then in the Navigation Pane you will see the following features enabled (not greyed out) and available:

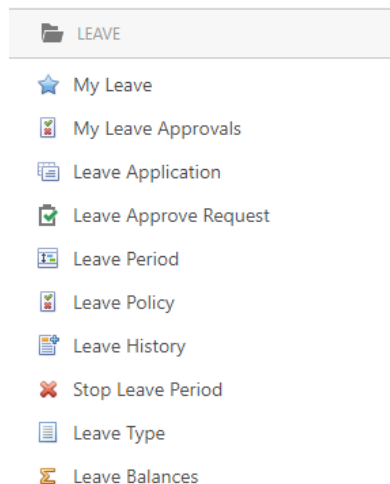


Figure 102: Leave

If the features above are greyed out, then it means that you are not subscribed to this module. Contact AIS for information on enabling this module.

### 7.1 Set up Leave

#### 7.1.1 Leave types.

It proves ideal to begin with the setting up of 'Leave Types', being one of the first items involved in the management of Leave.

One must first consider the types of Leave that may be taken by employees of the company. By means of creating Leave types that appropriately coordinate with company structure, the optimal set of Leave types may be added for Leave management. The number of possible Leave types is not limited, therefore as many Leave types as is necessary may be added.

To create a Leave Type simply click on 'Leave Type' in the Navigation Pane and click on 'New'.

The administrator will need to provide a reason for Leave. Supplying a reason that makes sense proves beneficial as a means of allowing employees to properly express their need for Leave through each request.

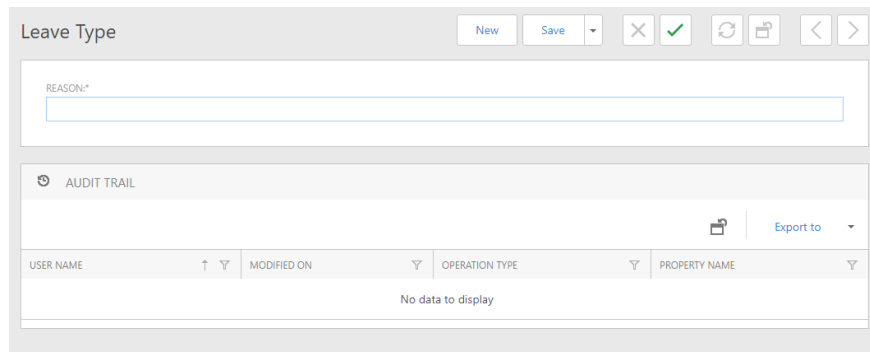


Figure 103: Create Leave Type

When completed, one must click on 'Save and Close'.

### 7.1.2 Define Leave Admins.

It is essential to define Leave admins before moving on to setting up the remaining parts for Leave Management.

Leave Admins may be defined at three levels:

- Company Level
- Department Level
- Employee Level

To begin with Company level, this means that a Leave admin will be able to manage Leave requests across an entire company.

Start by clicking on 'Company' in the Navigation Pane and editing the company you would like to assign with a Leave Admin. Scroll to the bottom and you will see 'Leave Admins' as a section of the table found at the bottom of the page. Click 'Link' to add an existing employee as a Leave Admin or 'New' to create a new employee who will serve as a Leave Admin at company level.

Next is Department level, implying that a Leave admin will be permitted to manage Leave requests throughout a given department.

To set a department Leave admin, click 'Department' in the Navigation Pane and edit the department you would like to assign to a Leave Admin. Scroll to the bottom and you will once again find a 'Leave Admins' section within the bottom most table on the page. Click 'Link' to add an existing employee as a Leave Admin or 'New' to create a new employee who will serve as a Leave Admin at department level.

Lastly, it is possible to directly assign an employee to a Leave Admin. Linking an employee directly to a Leave Admin will give a particular Leave Admin permission to manage the Leave requests of a linked employee.

This is done by clicking on 'Employee' in the Navigation Pane and editing the employee to be linked. Once again, scroll to the bottom and you will find the 'Leave Admins' section in the bottom most table. From this section you may link the employee to another employee who is to serve as a Leave admin.



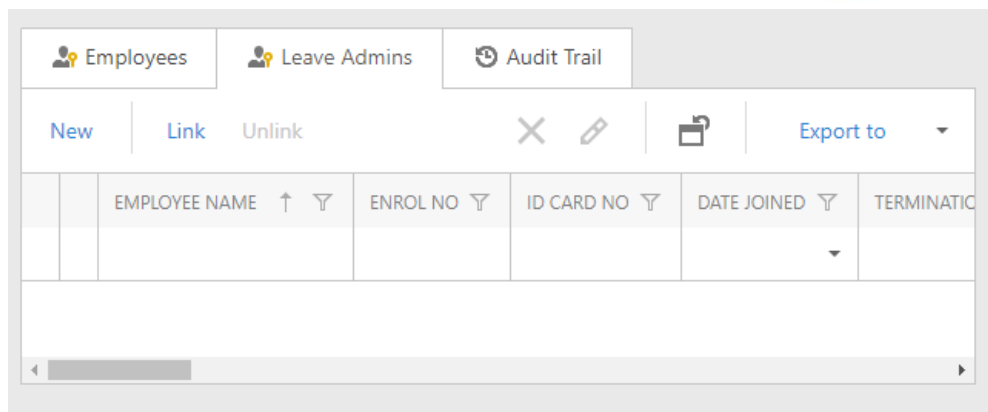


Figure 104: Leave Admins

### 7.1.3 Create a Leave Policy.

To create a Leave Policy, click on 'Leave Policy' in the Navigation Pane and click 'New'.

Firstly, enter a policy name, specify the Leave type to be added to for time in lieu and the Leave type hours to be deducted if less hours are worked.

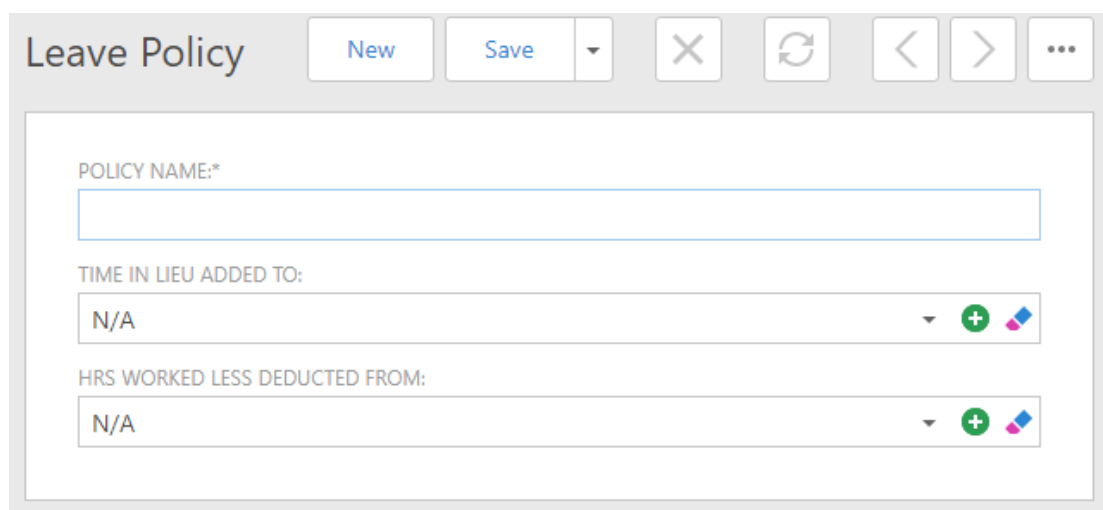


Figure 105: Leave Policy

Secondly, click 'New' under Leave Type Policies to open the Leave Type Policy form.

Leave Policy  
Default Leave Policy

POLICY NAME:\*  
Default Leave Policy

TIME IN LIEU ADDED TO:  
Vacation Leave

HRS WORKED LESS DEDUCTED FROM:  
Vacation Leave

LEAVE TYPE POLICIES

Figure 106: New Leave Type Policies

Leave Type Policy

LEAVE TYPE POLICY

LEAVE TYPE:\*  
N/A

MAX DAYS IN ADVANCE:  
0

APPROVER:  
Any

CANCELLATION ALLOWED:  
No

MAX LEAVE ENTITLEMENT:  
0

CANCELLATION DAYS BEFORE:  
0

MIN LEAVE ENTITLEMENT:  
0

CARRY OVER:  
No

MIN DAYS IN ADVANCE:  
0

CARRY OVER MAX AMOUNT:  
0

MIN DAYS IN ADVANCE AMOUNT:  
0

CARRY OVER EXPIRY DAYS:  
0

Figure 107: Add Leave Type Policy

Fields marked by an \* are compulsory. The only compulsory field being Leave Type.

**Approver**

The application can be approved by any defined Leave Admins or all defined Leave Admins.

**Max Leave Entitlement**

The maximum number of hours that can be applied for.

**Min Leave Entitlement**

The minimum number of hours that can be applied for. Cannot be less than 1.

**Min Days in Advance**

The minimum number of days in advance that an employee can apply for leave.

**Min Days in Advance Amount**

The minimum block amount of leave (in hours) that an employee can apply for.

**Max Days in Advance**

The maximum number of days in advance that an employee can book leave for.

Cancellation Allowed	Certify if an employee is allowed to cancel a leave application.
Cancellation Days Before	If cancellation is allowed, up to how many days before the leave is due to commence, can the employee cancel?
Carry Over	Certify if unutilized leave can be carried forward to next year's balance.
Carry Over Max Amount	If allowed, the maximum number (in hrs.) that can be transferred over to next year's entitlement.
Carry Over Expiry Days	If permitted, the maximum number of days allowed for this carried-over balance to be utilized.

If you set 'Carry Over' to 'Yes' and add a value in 'Carry Over Expiry Days', the carried over balance will be recorded as a separate entitlement, and be consumed first, before moving on to the main entitlement for a Leave Period. It is important that you add an amount other than 0 for the 'Carry Over Expiry Days' if you want carried forward and new entitlement to be displayed separately, otherwise these will be combined into one total balance.

When completed, press 'OK' to add the new Leave Type policy. This process is to be done for each of the necessary Leave types, meaning that there should be at least one Leave type policy for a given Leave type.

Once you are done, click 'Save and Close' to exit.

#### 7.1.4 Configure a Leave Period.

In order to view Leave Balances, it is necessary for a Leave Period to be defined. Begin by clicking 'Leave Period' in the Navigation Pane and 'New'.

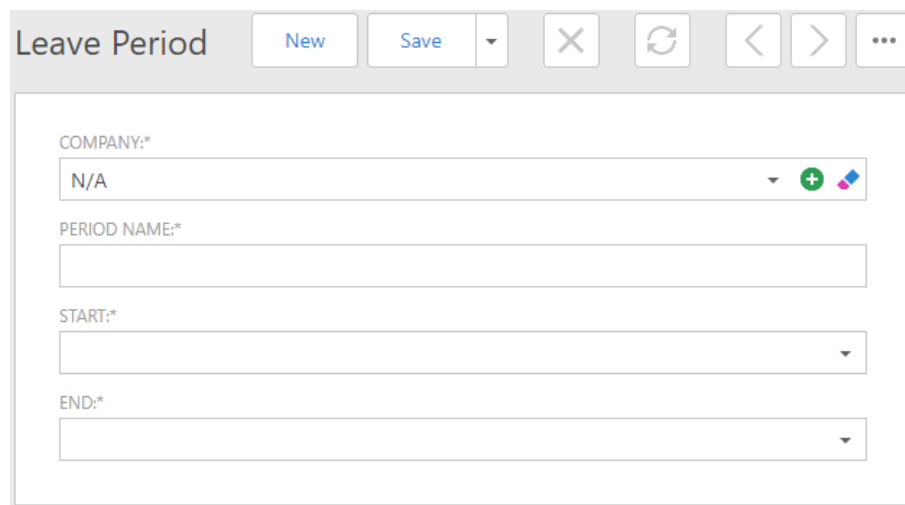










Figure 108: Leave Period

Fields marked by an \* are compulsory. These are Company, Period Name, Start and End.

Next click 'New' under Employment Type Options to add Employment Type Leave Period Options.

Leave Period  
2020 Leave Period

New Save   Validate Leave Setup CreateAll    






COMPANY:\*  
AIS Technology Ltd  

PERIOD NAME:\*  
2020 Leave Period

START:\*  
01/01/2020

END:\*  
31/12/2020

EMPLOYMENT TYPE OPTIONS

   CalculateSchedules  Export to 



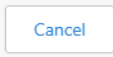






Figure 109: New Employment Type Leave Period Options

Employment Type Leave Period Options  





ABSENCE TYPE:\*  
N/A  

EMPLOYMENT TYPE:\*  
N/A  

LEAVE HOURS:\*  
0.00

SCHEDULE TYPE:\*  
Beginning of period

SCHEDULES

New    Export to 

	EFFECTIVE DATE	LEAVE HOURS
No data to display		

Figure 110: Employment Type Leave Period Options

All four fields in the form are compulsory being, Absence type, Employment type, Leave Hours, and Schedule type.

If you set the 'Schedule Type' to 'Each Month', you must also add a Leave Period Accrual Schedule Item. This is done to apply the Leave hours set as the starting total at the beginning of each period.

Important to note, if you are going to set each employee's Leave balance based on the hours brought forward from a previous period, the field Leave Hours for the Employment Type Option

and Accrual Schedule item are to be left as zero. Importing of previous Leave Balances is explained in a later sub-section under the Leave History section.

Leave Period Accrual Schedule Item

OK
Cancel

EFFECTIVE DATE:\*

LEAVE HOURS:\*

0.00

Figure 111: Leave Period Accrual Schedule Item

It is important that for each Leave type and Employment type, an Employment Type Leave Period Option is created. Therefore, if there exists an Employment type named “Full Time” and five Leave types, then you must include five Employment Type Leave Period Options with each Leave type linked to the Employment type “Full Time”.

Once you are done, select the schedules and click ‘Calculate Schedules’ to add the new entitlements to the leave periods.

EMPLOYMENT TYPE OPTIONS

New
✕
✎
CalculateSchedules
📄
Export to ▾

<
1
>

PAGE SIZE 20 ▾

		ABSENCE TYPE ▾	EMPLOYMENT TYPE ▾	LEAVE HOURS ▾	SCHEDULE TYPE ▾
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Vacation Leave	FullTime40	216.00	Beginning of period
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sick Leave	FullTime40	96.00	Beginning of period

<
1
>

PAGE SIZE 20 ▾

Figure 112: Calculate Schedules

Click ‘Save and Close’ to exit.

You also have the functionality to clone a leave period from one year to the next. In order to do this, select the leave period you want to clone, and click the 'Clone' button from the top nav.

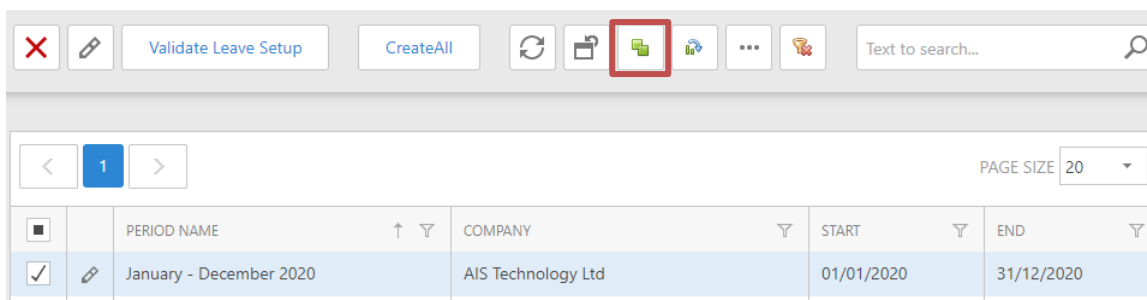


Figure 113: Clone Leave Period

You can also carry over Leave Balances to new periods. To do so, select the leave period you want to carry over from and click on the 'Balance Carry Over' button from the top nav.

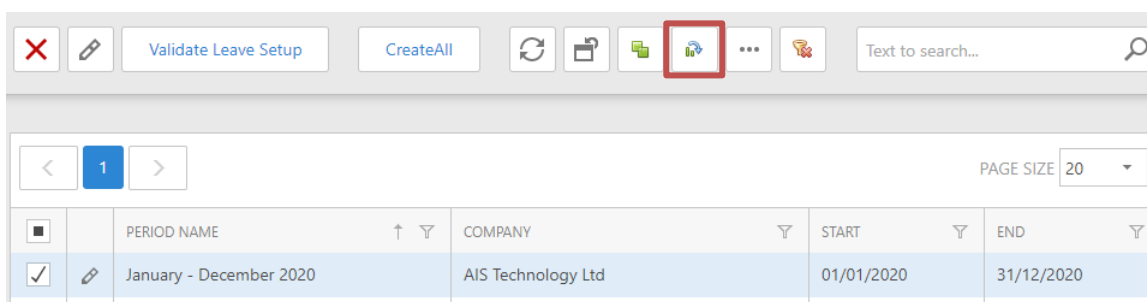


Figure 114: Balance Carry Over

Doing so will open the Leave Carry Over screen. Here you can select employees you would like to carry over leave for using the add and remove employee functions. Click 'Ok' to create the carry forward to the next leave period, starting on the next day following the end date of the previous period. If balance carry over is not working, make sure carry over is allowed for the desired leave type in your Leave Policy.

## Leave Carry Over

OK

Cancel

PREV PERIOD:

January - December 2020

LEAVE TYPE:

Vacation Leave

## EMPLOYEE BALANCES



Remove Selected



Export to

PAGE SIZE 20

<input type="checkbox"/>	AS AT	LEAVE TYPE	EMPLOYEE	EXPIRY	HOURS
<input checked="" type="checkbox"/>	31/12/2020	Vacation Leave	Leave Admin		0.00
<input type="checkbox"/>	31/12/2020	Vacation Leave	Leave Test		0.00

PAGE SIZE 20

Help

Figure 115: Leave Carry Over Menu

## 7.1.5 Adding a Stop Leave Period.

Once the Leave period, policy and admins have been set up, you may additionally add one or multiple Stop Leave Periods. A 'Stop Leave Period' consists of date/s where Leave is not allowed. Therefore, any employees applying for Leave in this period will be prevented from doing so.

To add a Stop Leave Period, click on 'Stop Leave Period' in the Navigation Pane and click 'New'.

All field are compulsory being, Company, Period Name, Start, and End.

Stop Leave Period

New

Save

COMPANY:\*

N/A

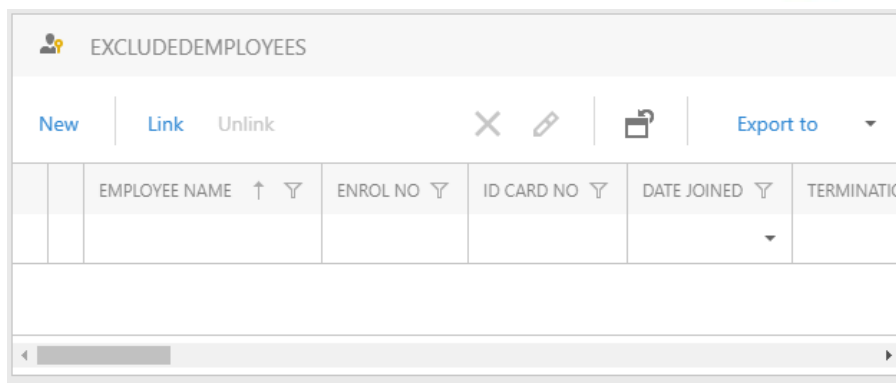
PERIOD NAME:\*

START:\*

END:\*

Figure 116: Stop Leave Period

Additionally, there is the option to exclude employees from this Stop Leave Period, allowing them to apply for Leave during this period.



The screenshot shows a web interface titled 'EXCLUDEDEMPLOYEES'. At the top, there are buttons for 'New', 'Link', and 'Unlink', followed by icons for delete (X), edit (pencil), and a document icon. To the right is an 'Export to' dropdown menu. Below these is a table with the following columns: 'EMPLOYEE NAME' (with up/down arrows), 'ENROL NO' (with a down arrow), 'ID CARD NO' (with a down arrow), 'DATE JOINED' (with a down arrow), and 'TERMINATION'. The table is currently empty. A scrollbar is visible at the bottom of the table area.

	EMPLOYEE NAME ↑ ↓	ENROL NO ↓	ID CARD NO ↓	DATE JOINED ↓	TERMINATION
--	-------------------	------------	--------------	---------------	-------------

Figure 117: Excluded Employees

The above figure shows the table from which employees may be excluded from the Stop Leave Period. This may be done by clicking the 'Link' button and selecting the employee/s to be excluded.

Once the form is completed, click 'Save and Close' to exit.

## 7.2 Leave Request.

### 7.2.1 Add Leave Request

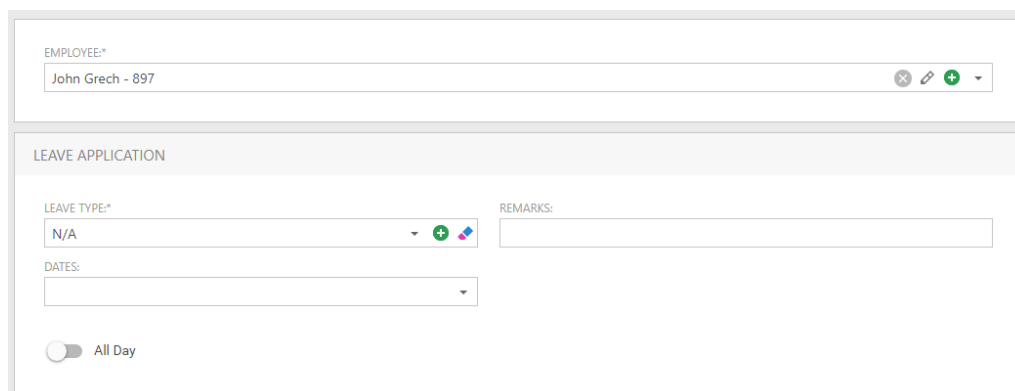
Click 'Leave Application' in the Navigation Pane and click 'New'.

An admin user may select any employee from the leave dropdown and request leave on their behalf.

Select a Leave Type you wish to request. This may be done by selecting an existing Leave type from the drop-down menu.

Provide the date/s you wish to request for Leave. Requested Leave may range from hours taken on a single day to multiple days of Leave.

Optionally, add any remarks that may serve as reasoning for your Leave request.



The screenshot shows a 'LEAVE APPLICATION' form. At the top, there is a field for 'EMPLOYEE\*' with the value 'John Grech - 897' and icons for delete, edit, and a dropdown arrow. Below this is the 'LEAVE APPLICATION' section. It contains a 'LEAVE TYPE\*' dropdown menu with 'N/A' selected and a '+' icon. To the right of this is a 'REMARKS:' text area. Below the 'LEAVE TYPE' dropdown is a 'DATES:' dropdown menu. At the bottom left, there is a toggle switch labeled 'All Day' which is currently turned off.

Figure 118: Leave Application



Leave Application  
Leave Admin/Vacation Leave|21/12/2020

OK Cancel

« < December 2020 January 2021 > »

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
49	30	1	2	3	4	5	53				1	2	3
50	7	8	9	10	11	12	01	4	5	6	7	8	9
51	14	15	16	17	18	19	02	11	12	13	14	15	16
52	21	22	23	24	25	26	03	18	19	20	21	22	23
53	28	29	30	31			04	25	26	27	28	29	30
01							05	1	2	3	4	5	6

Start Time: Not set

End Time: Not set

Clear Accept

21/12/2020

☒ All Day

DURATION

TOTAL HOURS: 8.00

DAYS: 1 HOURS: 0 MINUTES: 0

Help

Figure 119: Booking a single leave day

Leave Application  
Leave Admin/Vacation Leave|21/12/2020-24/12/2020

OK Cancel

« < December 2020 January 2021 > »

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
49	30	1	2	3	4	5	53				1	2	3
50	7	8	9	10	11	12	01	4	5	6	7	8	9
51	14	15	16	17	18	19	02	11	12	13	14	15	16
52	21	22	23	24	25	26	03	18	19	20	21	22	23
53	28	29	30	31			04	25	26	27	28	29	30
01							05	1	2	3	4	5	6

Start Time: Not set

End Time: Not set

Clear Accept

21/12/2020-24/12/2020

☒ All Day

DURATION

TOTAL HOURS: 32.00

DAYS: 4 HOURS: 0 MINUTES: 0

Help

Figure 120: Booking multiple leave days

Leave Application

Leave Admin|Vacation Leave|21/12/2020 14:00-15:00

OK Cancel

« < December 2020 January 2021 > »

Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
49 30	1	2	3	4	5	6	53				1	2	3
50 7	8	9	10	11	12	13	01 4	5	6	7	8	9	10
51 14	15	16	17	18	19	20	02 11	12	13	14	15	16	17
52 21	22	23	24	25	26	27	03 18	19	20	21	22	23	24
53 28	29	30	31				04 25	26	27	28	29	30	31
01							05 1	2	3	4	5	6	7

Start Time: 14:00

End Time: 15:00

Clear Accept

21/12/2020 14:00-15:00

☐ All Day

DURATION

TOTAL HOURS: 1.00


DAYS: 0 HOURS: 1 MINUTES: 0

Help

Figure 121: Book leave by Start and End Time

Once you have completed the form, click 'Save and Close' to exit. Two emails will then be sent, one to the leave requester, and another the leave admin, who has the ability to approve or deny the request.

### 7.2.2 Cancel a Leave Request.

To cancel a Leave request, simply click 'Leave Application' in the Navigation Pane and click the  icon found on the row of the Leave request you would like to cancel and click 'OK' to confirm cancellation.






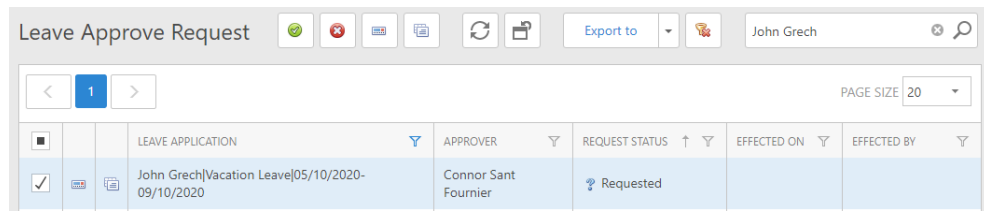
<input type="checkbox"/>					EMPLOYEE ▾	COMPANY ▾	DEFAULT_DEPARTMENT ▾	REQUEST STATUS ↑ ▾	LEAVE TYPE ▾	START TIME ▾
<input type="checkbox"/>					John Grech	AIS Technology Ltd	Software - AIS Technology Ltd	 Requested	Vacation Leave	01/07/2020 00:00

Figure 122: Cancel Leave Request

### 7.2.3 Approve or Deny a Leave request.

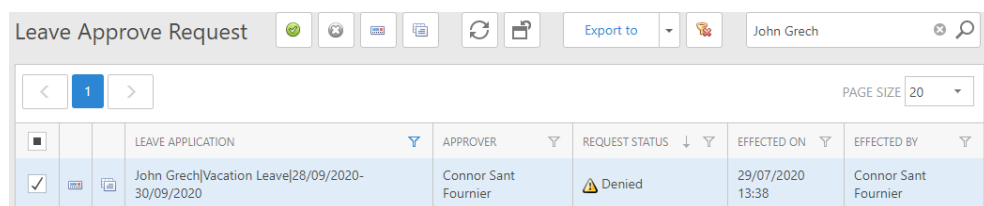
In order for a Leave admin to manage employee Leave requests, click 'Leave Approve Request' in the Navigation Pane. Select the request you wish to manage and the Approve or Deny icons will become available.



Leave Approve Request						
		LEAVE APPLICATION	APPROVER	REQUEST STATUS	EFFECTED ON	EFFECTED BY
<input checked="" type="checkbox"/>		John Grech Vacation Leave 05/10/2020-09/10/2020	Connor Sant Fournier	Requested		

Figure 123: Leave Approve Requests

After selecting whether to approve or deny the request, your selection may be changed by repeating the same process. The selected option is now greyed out whilst the alternative is available. By selecting the alternative choice, the new selection overwrites the old, changing the request status of the Leave application.



Leave Approve Request						
		LEAVE APPLICATION	APPROVER	REQUEST STATUS	EFFECTED ON	EFFECTED BY
<input checked="" type="checkbox"/>		John Grech Vacation Leave 28/09/2020-30/09/2020	Connor Sant Fournier	Denied	29/07/2020 13:38	Connor Sant Fournier

Figure 124: Changing Leave Request status

### 7.2.4 Export Leave Requests

Click on 'My Leave' in the Navigation Pane and scroll to the Leave requests table. Now select a file type from the drop-down menu Export to.

Figure 125: Export Leave Requests

Once clicked, the selected file type will commence download, with the result being a table with the same data as what is shown on the web application table.

## 7.3 Leave Approvals.

### 7.3.1 View Leave Approvals

If a Leave admin wishes to view the Leave requests they have affected, they may do so by means of accessing 'My Leave Approvals'.

Start by clicking 'My Leave Approvals' in the Navigation Pane. Next, enter the Start Date, End Date, and specify the Request Status from a drop-down menu.

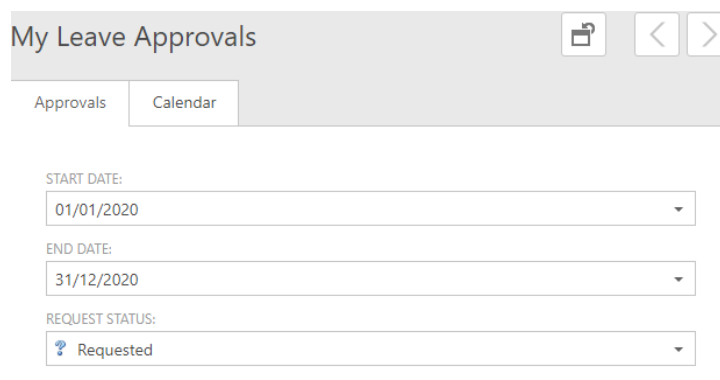
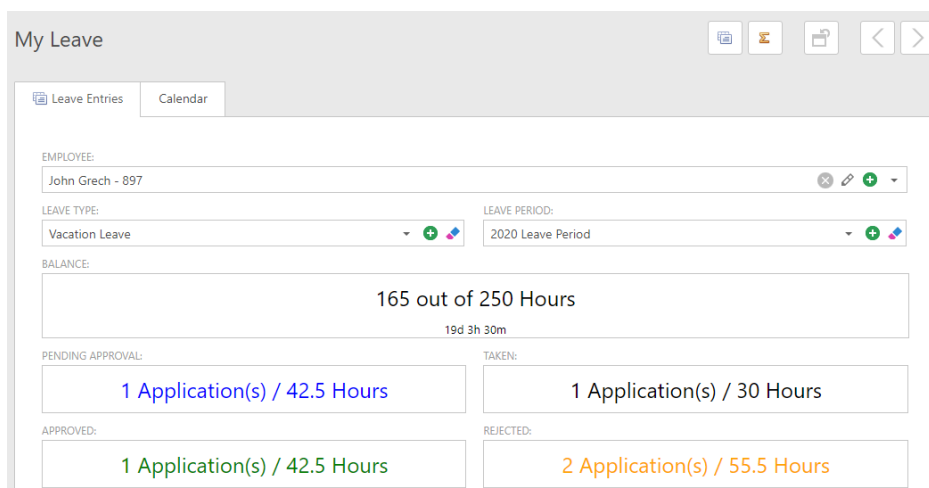


Figure 126: My Leave Approvals

Once completed, a table will be generated containing all the Leave requests of the specified request status that the Leave admin has affected.

## 7.4 My Leave

There exists a page from which an employee may view their Leave balance for Vacation Leave, along with having Leave requests categorized by Pending, Taken, Approved, and Rejected. As an admin, you will have access to the balances for all employees and their leave types, whereas a default role employee will be only able to see their own vacation leave balance.



**My Leave**

Leave Entries | Calendar

EMPLOYEE: John Grech - 897

LEAVE TYPE: Vacation Leave

LEAVE PERIOD: 2020 Leave Period

BALANCE: 165 out of 250 Hours  
19d 3h 30m

PENDING APPROVAL: 1 Application(s) / 42.5 Hours

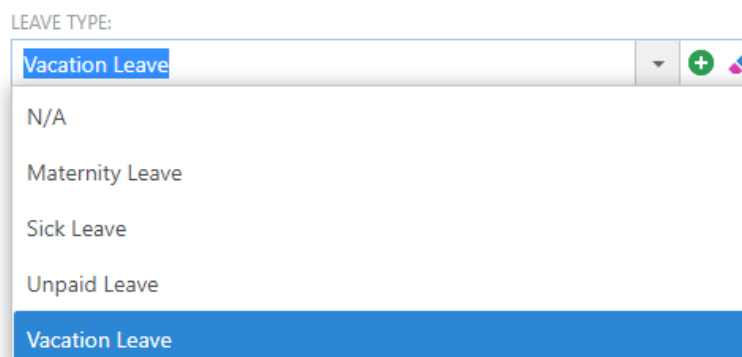
TAKEN: 1 Application(s) / 30 Hours

APPROVED: 1 Application(s) / 42.5 Hours

REJECTED: 2 Application(s) / 55.5 Hours

Figure 127: My Leave

From 'My Leave', you may select a Leave Type from the drop-down menu.



LEAVE TYPE:

Vacation Leave

N/A

Maternity Leave

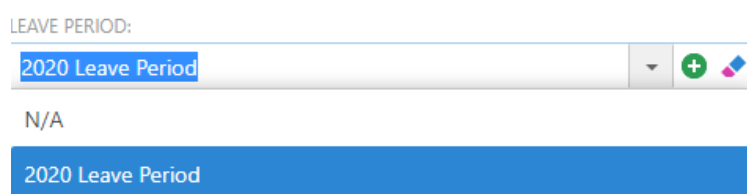
Sick Leave

Unpaid Leave

Vacation Leave

Figure 128: My Leave Type

A Leave Period is to be selected from a drop-down menu. The requests associated with the selected Leave type are then displayed for the chosen Leave period.



LEAVE PERIOD:

2020 Leave Period

N/A

2020 Leave Period

Figure 129: My Leave Period

Pending approvals are requests made that have yet to be handled by a Leave Admin.

PENDING APPROVAL:

1 Application(s) / 17 Hours

Figure 130: Pending Approvals

Taken consists of any Leave that has been successfully carried out in the past.

TAKEN:

1 Application(s) / 30 Hours

Figure 131: Taken

Approved includes Leave requests that have been approved and confirmed by Leave admins.

APPROVED:

1 Application(s) / 10 Hours

Figure 132: Approved

If Leave has been denied by Leave admins, it is therefore invalid and falls under the Rejected category.

REJECTED:

1 Application(s) / 17 Hours

Figure 133: Rejected

Apart from the balances display, there are also two icons that you may select on the top right of the page.

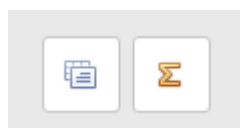


Figure 134: My Leave Icons, New Leave Application (Left) and Balance Details (Right)

The first, left-most icon allows you to move directly to a new Leave application. This means that you may create a Leave request straight from 'My Leave'.



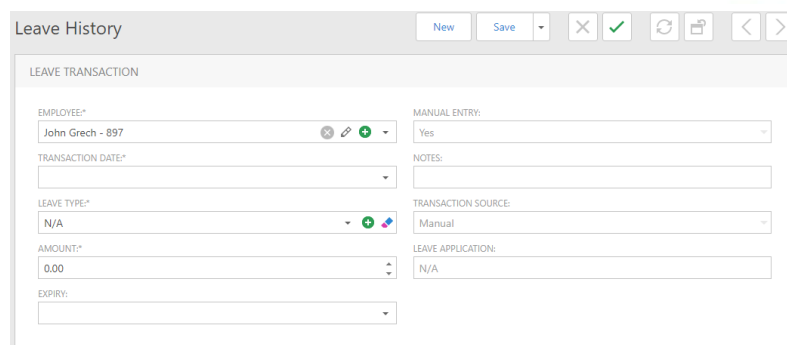


Figure 137: New Leave History

There also exists the option to edit each Leave transaction.

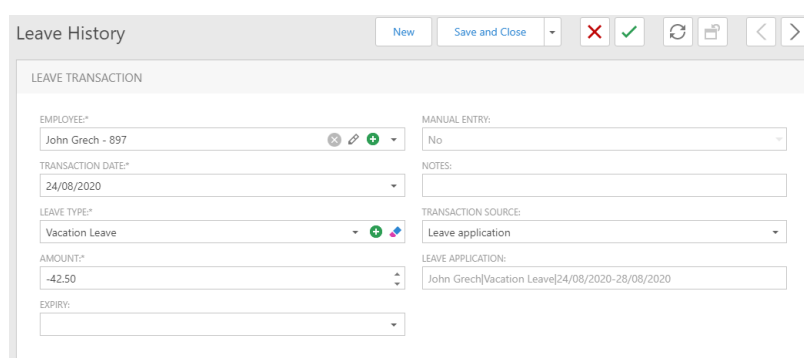


Figure 138: Edit Leave Transaction

The following fields are compulsory: Employee, Transaction Date, Leave Type and Amount.

Once complete, the changes made will overwrite the current Leave transaction with the new data provided.

### 7.5.2 Import Leave Balances.

In order to utilise Leave Balances that may have been in use prior to obtaining the Leave management module, you are to make use of the Import function in 'Leave History'.

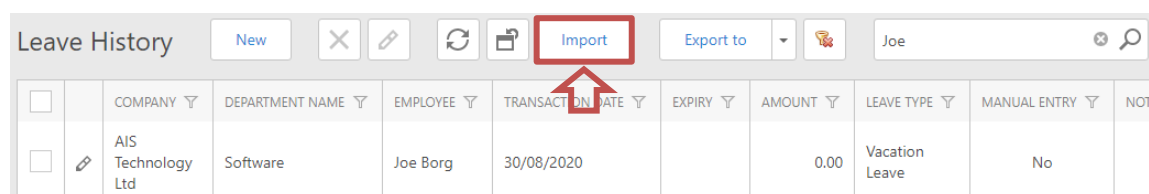


Figure 139: Leave History Import

Click 'Import' and you will be taken to a form. From this form select an input file that must be of CSV format. Also, the CSV file must have columns with headers in the following order:

- **Enrol No:** The unique punch clock number assigned to each employee through Spektrum.
- **TransactionDate:** The cut-off date for your Leave balances (Vacation, Sick).



- **LeaveType:** The type of Leave that is used in the transaction. E.g. Vacation Leave, Sick Leave. This has to match the descriptor defined within Spektrum.
- **Notes:** Any notes you would like to add as a reference to the transaction. E.g. Initial Balance.
- **Amount:** This is the remaining amount of Leave hours (in decimal) left from the cut-off date to the end of the period.

	1	2	3	4	5
1	Enroll No	TransactionDate	LeaveType	Notes	Amount
2	123	17/07/2020	Vacation Leave	Initial Balance	12

Figure 140: Template for Leave History Import

After selecting a CSV file, click 'OK' in order to confirm the import and save. Important to note is that the Amount field must be a quantity measured in hours. For example, a Leave balance of 1 day 4 hours with 8-hour shifts should be translated to 12 hours in the Amount field.

Your imported transactions are now uploaded and have been recorded as Leave transactions. The imported balances may be checked by performing a search in the 'Leave Balances' page. Instructions on how to perform such a search may be found in a dedicated section.

## 7.6 Leave Balances.

### 7.6.1 Check Employee Leave Balances

Click 'Leave Balances' in the Navigation Pane, enter a date in the 'As At' field, and select a Leave type.

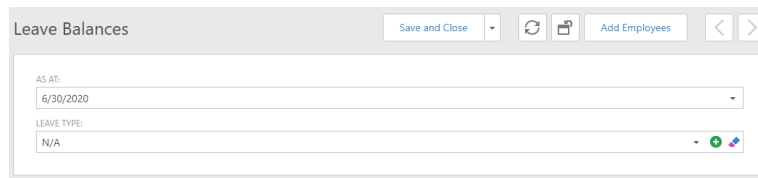


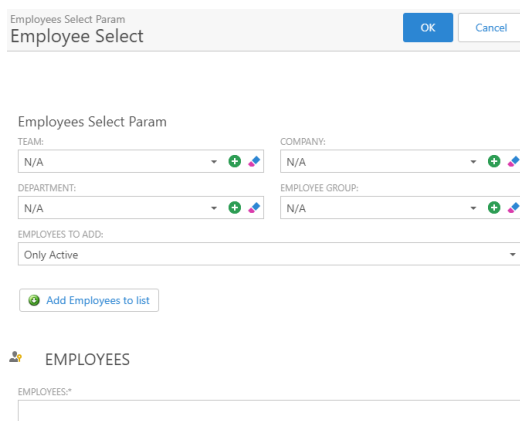
Figure 141: Leave Balances

In order to select which employees are to be shown on the balances table, click 'Add Employees'.

Now select which criteria to use in order to filter out employees, with the criteria being:

- Team.
- Company.
- Department.
- Employee Group.
- Whether to only select employees who are active or all employees.
- Employee name.

Once you have completed the list of employees you wish to add, click 'OK' and the employee balances should now be displayed.



Employees Select Param  
Employee Select

Employees Select Param

TEAM: N/A

COMPANY: N/A

DEPARTMENT: N/A

EMPLOYEE GROUP: N/A

EMPLOYEES TO ADD: Only Active

Add Employees to list

EMPLOYEES

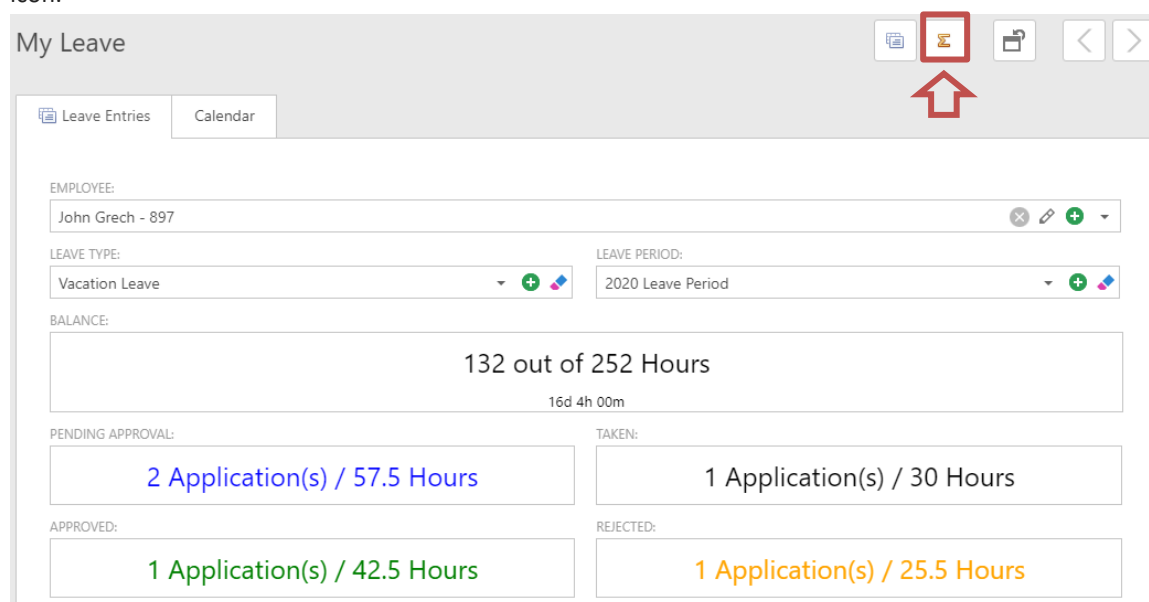
EMPLOYEES\*

Figure 142: Employee Select

Click 'Save and Close' to exit 'Leave Balances'.

### 7.6.2 Check Leave Balance from My Leave.

This can be done by first clicking 'My Leave' in the Navigation Pane, followed by clicking the 'Balance Details' icon.



My Leave

Leave Entries Calendar

EMPLOYEE: John Grech - 897

LEAVE TYPE: Vacation Leave

LEAVE PERIOD: 2020 Leave Period

BALANCE: 132 out of 252 Hours  
16d 4h 00m

PENDING APPROVAL: 2 Application(s) / 57.5 Hours

TAKEN: 1 Application(s) / 30 Hours

APPROVED: 1 Application(s) / 42.5 Hours

REJECTED: 1 Application(s) / 25.5 Hours

Figure 143: Balance Details icon in My Leave

Depending on the Leave type selected in 'My Leave', your Leave balance transactions will be shown for the given Leave type.

Leave Balance

OK Cancel

EMPLOYEE:  
John Grech - 897

LEAVE TYPE:  
Vacation Leave

AS AT:  
12/31/2020

HOURS:  
167.00

LEAVE TRANSACTIONS

Export to

PAGE SIZE 20

TRANSACTION DATE	EXPIRY	AMOUNT	PENDING AMOUNT	EMPLOYEE	SOURCE
01/01/2020	31/12/2020	252.00	167.00	John Grech	Accrual
24/08/2020		-42.50	0.00	John Grech	Leave application

Figure 144: Leave Balance Transactions

Click 'OK' or 'Cancel' in order to exit 'Leave Balance' and return to 'My Leave'.

## 7.7 Calendar

### 7.7.1 View Leave with Calendar

Apart from the conventional view, employees may opt for a Calendar view in order to view and manage their Leave.

In order to access this feature, click on 'My Leave' in the Navigation Pane and click on the 'Calendar' tab.

Leave Entries

Calendar

EMPLOYEE:  
John Grech - 897

LEAVE TYPE:  
Vacation Leave

LEAVE PERIOD:  
2020 Leave Period

BALANCE:  
132 out of 252 Hours  
16d 4h 00m

Figure 145: Calendar tab in My Leave

Once clicked, you will be able to see a number of options. Firstly, you may select dates on the calendar itself. By selecting a date, the below view is filled with any Leave that may exist on the chosen date.

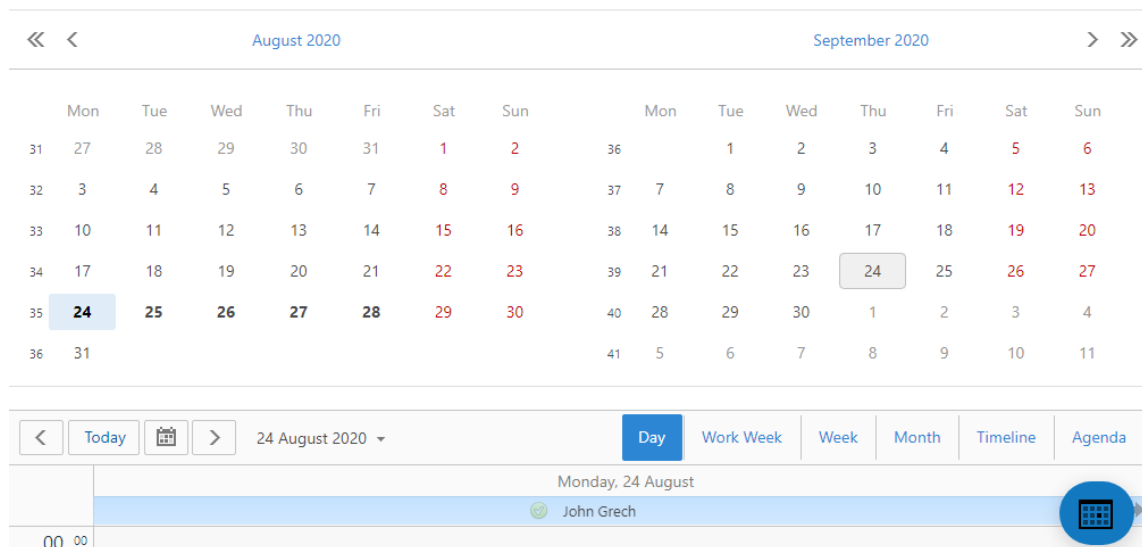


Figure 146: Calendar View

The display for Leave below the calendar may be organized in a number of ways, all that is required is to click on which of the options you would like to set.



Figure 147: Viewing options

The options for viewing Leave are categorized by:

- Day.
- Work Week.
- Week.
- Month.
- Timeline.
- Agenda.

Starting with Day, this option allows you to view Leave on a daily basis. Therefore, you are able to view Leave that may have been taken by the hour or for the entire day.

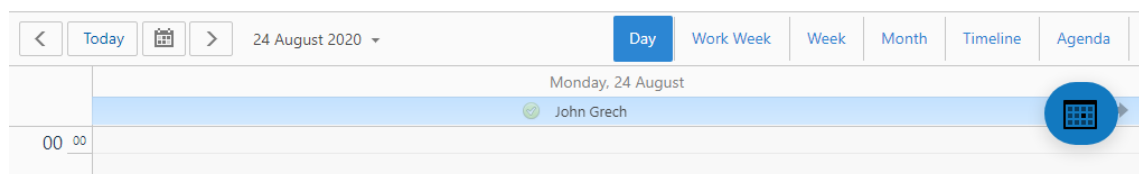


Figure 148: Calendar by Day

Next is Work Week, meaning that you are able to view Leave requested on working days for any given week on the Calendar.

<	Today	>	24 August – 28 2020 ▾	Day	Work Week	Week	Month	Timeline	Agenda
	Monday, 24 August	Tuesday, 25 August	Wednesday, 26 August	Thursday, 27 August	Friday, 28 August				
00 <sup>00</sup>			John Grech						
01 <sup>00</sup>									

Figure 149: Calendar by Work Week

The following is the Week option. This is similar to Work Week, however in this case the entire week is displayed, including non-working days.

<	Today	>	24 August – 30 2020 ▾	Day	Work Week	Week	Month	Timeline	Agenda
Monday, 24 August					Thursday, 27 August				
John Grech					John Grech				
Tuesday, 25 August					Friday, 28 August				
John Grech					John Grech				
Wednesday, 26 August					Saturday, 29 August				
John Grech									
					Sunday, 30 August				

Figure 150: Calendar by Week

You may also view the calendar by Month. This allows you to view Leave across a month-long period.

<	Today	>	August – September 2020 ▾	Day	Work Week	Week	Month	Timeline	Agenda
Monday	Tue	Wed	Thursday	Friday	Saturday	Sunday			
24 August	25	26	27	28	29				
		John Grech							
31	01 September	2	3	4	5	6			
7	8	9	10	11	12	13			
14	15	16	17	18	19	20			

Figure 151: Calendar by Month

Timeline permits the viewing of Leave over a ten-day period. Leave data is displayed spanning the period specified.



Once you have clicked the blue calendar icon, you will see a second icon appear below the blue icon. Click on this new icon to begin a new Leave Application.

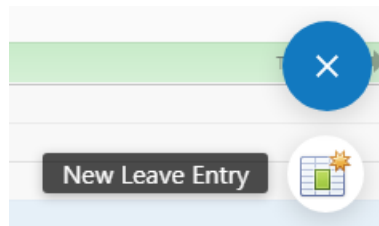


Figure 155: New Leave Entry from Calendar

## 8.0 Additional Help

### 8.1 The Help Widget

Spektrum offers a help widget which you can see on the bottom-right of every screen.

You can search and browse through the FAQ articles and get in touch through our ticketing system.

Please use it for your everyday needs as this is our first level of support.

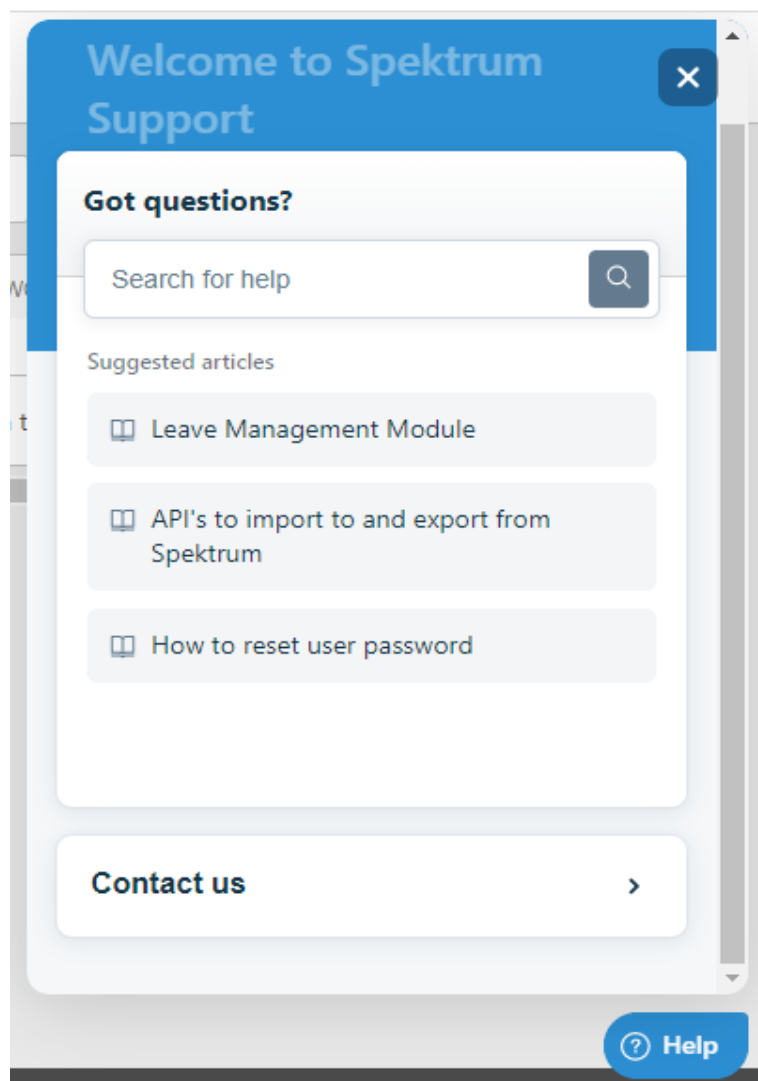


Figure 156: The Help Widget

Other ways to contact us:

Spektrum Support - [support@ais.com.mt](mailto:support@ais.com.mt)