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ORTEC Workforce Scheduling 7

User Manual



April 2026

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Table of Contents

| | | |
|----------|---------------------------------|------------|
| 1 | Overview | 1 |
| 1.1 | OWS Client | 1 |
| 1.2 | Settings Manager | 1 |
| 1.3 | System Configuration (CSCS) | 2 |
| 1.4 | Access Control | 2 |
| 2 | General | 3 |
| 2.1 | Options | 3 |
| 2.2 | Plan board settings | 3 |
| 2.3 | Data Management View | 22 |
| 2.4 | Application Management | 23 |
| 2.5 | Mailbox management | 24 |
| 2.6 | Messages | 26 |
| 3 | Maintenance | 27 |
| 3.1 | Locations and workstations | 27 |
| 3.2 | Cost center | 27 |
| 3.3 | Organizational data | 28 |
| 3.4 | Salary codes | 53 |
| 3.5 | Employment conditions | 54 |
| 3.6 | Illness types | 87 |
| 3.7 | Period types | 89 |
| 3.8 | Special duties | 90 |
| 3.9 | Public holidays | 90 |
| 4 | Employee | 92 |
| 4.1 | View employees | 92 |
| 4.2 | Employee management | 93 |
| 4.3 | Requests | 102 |
| 4.4 | Personal schedule | 102 |
| 4.5 | Time and attendance | 103 |
| 5 | Planning | 104 |
| 5.1 | Work with plan board | 104 |
| 5.2 | Schedule management | 115 |
| 5.3 | Scheduling | 138 |
| 5.4 | Master schedule | 180 |
| 6 | Accounts | 181 |
| 6.1 | Create accounts | 181 |
| 6.2 | Work with accounts | 200 |
| 6.3 | Leave requests | 204 |
| 7 | Overview | 209 |
| 7.1 | Overview shift reassignments | 209 |
| 7.2 | Clock times | 209 |
| 7.3 | Search concept planned shifts | 209 |
| 7.4 | Workstation occupation analysis | 209 |

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|-----|--|-----|
| 8 | Central and decentral departments | 210 |
| 8.1 | Permissions | 210 |
| 8.2 | Define central and decentral departments | 211 |
| 8.3 | Send shift(s) to central department | 213 |
| 8.4 | Use of central schedule | 213 |
| 8.5 | Example use case | 217 |

1 Overview

The **ORTEC Workforce Scheduling (OWS)** suite offers a comprehensive solution for efficient workforce management. At its core is the "**OWS Client**" on page 1. Behind the scenes, several processes and programs run concurrently to support the **OWS Client**:

- The **ORTEC WS Settings Manager** provides control over modules, enabling users to toggle features on or off and configure various settings and menu options within the OWS suite.
- The **ORTEC System Configuration (CSCS)** facilitates tasks such as monitoring processes, configuring networks, applying patches, and managing queries, ensuring smooth operation of the system.
- **Access Control** allows administrators to assign permissions to users or user groups. Different user groups may have varying levels of access, enabling some to modify schedule statuses while others can generate payroll exports.

Specialized modules enhance functionality: For example, **FlexPool** streamlines subcontracting of shifts, **Optimizer** automates shift planning for optimal efficiency, and **Self-Scheduling** empowers employees to have greater control over their schedules while still accommodating organizational needs.

The **OWS client** interacts with **Team Schedulers**, **Employee Self-Service (ESS)**, **Ad Hoc Planner**, and **OWS for Managers (MSS)**, enabling seamless communication and collaboration across different levels. Team Schedulers and ESS not only interact with the OWS client, but also with each other.

1.1 OWS Client

The **OWS Client**, also known as **ORTEC WS for Windows**, is at the core of the **ORTEC Workforce Scheduling (OWS)** suite. After ORTEC consultants have configured the scheduling process (including labor-time and compensation rules) and desired analytics, planners use it to create and manage schedules for employees.

Since the **OWS Client** is designed to be highly customizable, it's possible that not all the features outlined in this user manual will be relevant to your specific situation.



Instead of using the **OWS Client**, it's also possible for planners to use **Team Schedulers** to create and manage schedules.

1.2 Settings Manager

The **ORTEC WS Settings Manager** provides control over modules, enabling consultants to toggle features/modules on or off and configure various settings and menu options within the OWS suite. After making changes, it's always required to restart the processes in **ORTEC System Configuration (CSCS)**.

1.3 System Configuration (CSCS)

The **ORTEC System Configuration (CSCS)** facilitates tasks such as monitoring processes, configuring networks, applying patches, and managing queries, ensuring smooth operation of the system.

1.4 Access Control

The secured **Access Control** web application is used for user authentication, permissions and accountability in **ORTEC Workforce Scheduling (ORTEC WS)**.

- **Authentication:** to confirm the identity of a user.
- **Permissions:** to specify whether a user (group) has access to specific parts of the system.



- Not all permissions might be applicable to your system. This depends on the system configuration for your organization and the permissions granted to you.
- It's also possible to grant permissions for the **Access Control** application itself.

- **Accountability:** to keep track of what parts of the system has been accessed by which user. This information can be used for auditing purposes.

Example
Access Control application.

| Granted | Caption | Description | Access mode name |
|-------------------------------------|------------------------------------|-------------|------------------|
| <input checked="" type="checkbox"/> | Employee Self Service (deprecated) | | Execute |
| <input checked="" type="checkbox"/> | Employee Self Service App | | Execute |
| <input checked="" type="checkbox"/> | Manager Self Service (deprecated) | | Execute |
| <input checked="" type="checkbox"/> | ORTEC WS for Employees | | Execute |
| <input checked="" type="checkbox"/> | ORTEC WS for Managers | | Execute |
| <input checked="" type="checkbox"/> | 0 (13) | | 0 (13) |

For more information, please refer to the **ORTEC Workforce Scheduling 7 Implementation Manual Access Control**.



2 General

Via the **General** menu you can personalize language preferences, manage email settings, and customize display formats for employees, shifts, and calculations. Gain insights into your data landscape, track active users and modules, and streamline internal communication effectively. Additionally, facilitate seamless data import and export operations.

2.1 Options

2.1.1 Display

To change the language and refresh the settings, go to **General > Options** and select the **Display** tab.

- To change the **Language**, select one from the dropdown list and click **OK**.
- To refresh the settings, select **Refresh settings**.
- To create a log file, select **Start new log file**.

2.1.2 E-mail

To configure some e-mail settings, go to **General > Options** and select the **E-mail** tab.

For more information, discover how these settings fit in configuring "[E-mail and text messages](#)" on [page 112](#).

2.2 Plan board settings

Set up the **ORTEC WS** plan board to suit your own preferences. Configure the plan board view settings, the settings that control the way employees and shifts are displayed, the way calculations are set up, and more.

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Example

The screenshot displays a complex scheduling interface. At the top, it's titled 'Master schedule 4 - Workstation pl. 01-12-2016 - 01-01-2017'. On the left, there's a table of employees with columns for Surname, Name, Hours, Unloos, Snelheid, and Skill. The main area is a grid where rows represent employees and columns represent dates from 13-12 to 31-12. The grid cells contain shift codes like 'D1', 'D2', and 'D3'. Below the grid are several summary panels: 'Daily calculations', 'KPI calculations', 'Shift counters: Assigned / Request according to duty demand', and 'Vacant shifts (1)'. A 'Violations' panel at the bottom right shows '(No violations)'. Callout boxes provide context for various parts of the interface.

2.2.1 Employee calculations



- Employee calculations, also known as horizontal calculations, are executed across multiple shifts or time periods. This supports organizations in achieving a balanced distribution of resources, identifying potential bottlenecks or surpluses, and making adjustments to optimize overall efficiency.
- Other calculations are:
 - "Daily calculations" on page 7
 - "KPI calculations" on page 10

By default, employee information (last and first name) is displayed on the left side of the plan board. Other or additional columns can be shown, such as roles. The search function on the plan board toolbar can utilize this employee information when the plan board is open. For more information, see "Find employees" on page 110.

In this section, we'll explain how to show information about employees, such as their work hours, shifts, and other details.

Manage employee calculations

1. Go to **General > Plan board settings**.
2. Select the **Employee calculations** tab.

Example


The screenshot shows a 'Settings' window with the following structure:

- Employee calculations** (selected tab)
- General employee calculations**: A list containing 'Employee' and 'Employee calculation'. To the right are icons for New, Copy, Edit, and Delete.
- Own employee calculations**: An empty list with the same control icons.
- Properties**: A 'Code:' label followed by an empty text input field.
- Use as default**: Four dropdown menus:
 - Employee data: 'Employee'
 - Employee calculations: 'Employee Calculation'
 - Hint text for employee data: '(None)'
 - Hint text for employee calculations: '(None)'
- OK** button at the bottom right.

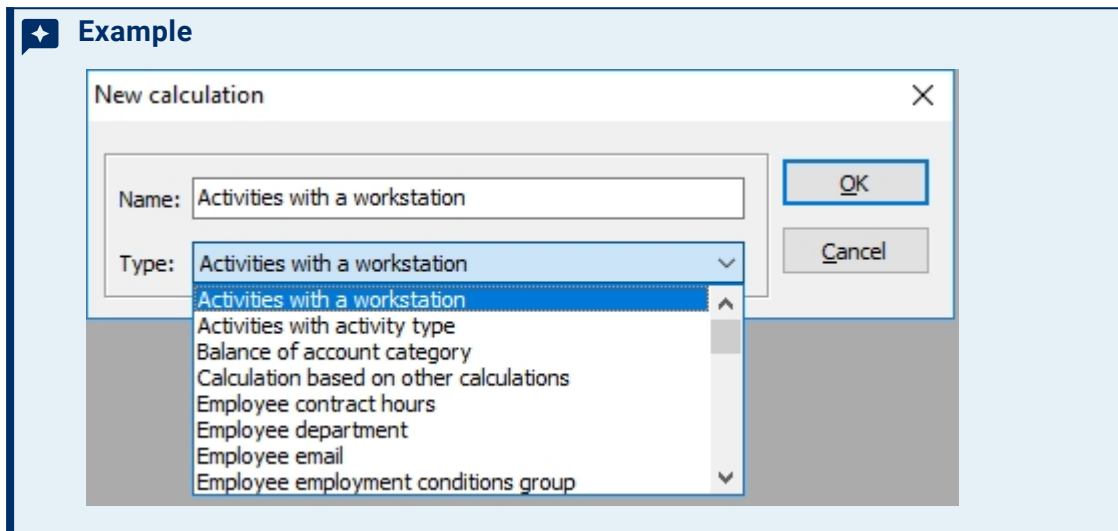
3. To add a new employee calculation set, first decide if you want to create a general or an own employee calculation set. In the appropriate section, click the **New** button.
 - Enter a **Name**.
 - (Optional) Select another employee calculation set which this new calculation set should be based on via the **Copy of** field.
 - Click **OK**.


General employee calculations are used organization-wide. **Own employee calculations** are for personal use only.

4. Per employee calculation set, enter the **Code** that is used to exchange this information with.
5. In the **Use as default** section, select the calculation sets that should be used by default.


 Only the application manager can set these default settings.

6. (Optional) Change the name of a calculation set or delete it with the appropriate buttons.
7. To open a calculation set, select it and click the **Open** button.
8. To add a new calculation, click the **New** button.
 - (Optional) Enter a **Name**.
 - From the **Type** drop-down list, select an attribute.




 The attributes available for selection are predefined and cannot be changed.

- Click **OK**.
- Complete the fields in the right-hand frame of the window.

 The **Short name** is the name that will appear at the top of the column and will be shown in the list of the search field which is located on the plan board toolbar.

- To add more calculations, click the **New** button again.
9. Click **OK**.

- 
- If an employee has multiple attributes of a certain kind (e.g., qualifications), they're listed in a column.
 - Columns can be easily rearranged by dragging and dropping.
 - Time-variable data shows information for the active period. Changes in information are marked with an asterisk and explained in a hint text.

Example

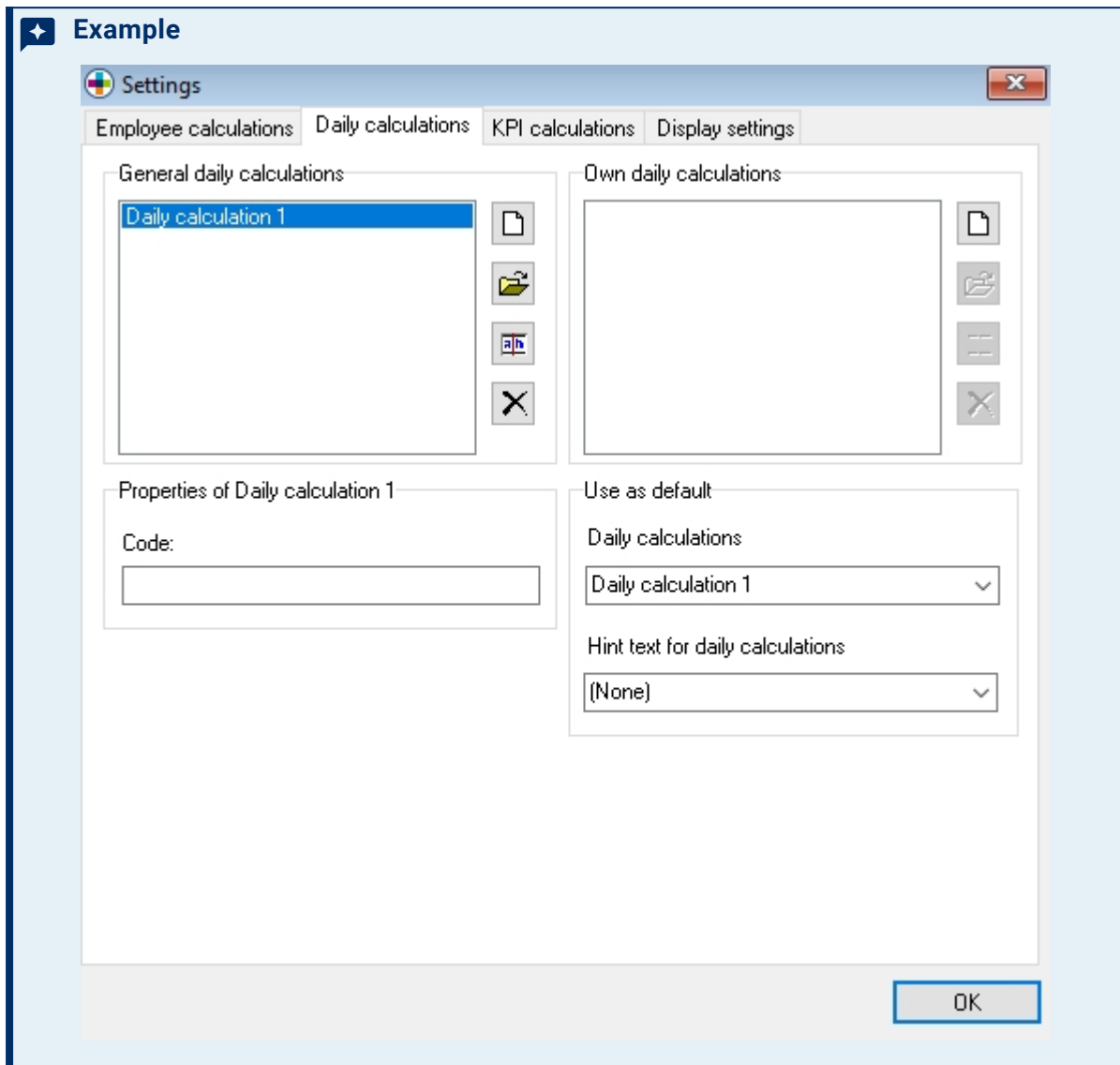
An employee has the skill Nursing B, but acquires the additional skill Nursing A with effect from 1 June. When the planner views the schedule for June, the 'Skills' column next to the person's name reads 'Nursing A*, Nursing B'. If the planner moves the mouse pointer over the column, a text box pops up that reads 'Nursing A from 01-06-2007'.

2.2.2 Daily calculations



- Daily calculations, also known as vertical calculations, may include budget and costs, staffing requirements, employee availability, and skill matching. By performing these calculations, organizations can create optimized schedules that meet operational needs while also taking into account factors such as employee preferences, labor regulations, and cost efficiency.
- Other calculations are:
 - ["Employee calculations" on page 4](#)
 - ["KPI calculations" on page 10](#)

1. Go to **General > Plan board settings**.
2. Select the **Daily calculations** tab.



3. To add a new daily calculation set, first decide if you want to create a general or an own employee calculation set. In the appropriate section, click the **New** button.
 - Enter a **Name**.
 - (Optional) Select another daily calculation set which this new calculation set should be based on via the **Copy of** field.
 - Click **OK**.



General employee calculations are used organization-wide. **Own employee calculations** are for personal use only.

- Per daily calculation set, enter the **Code** that is used to exchange this information with.

Example

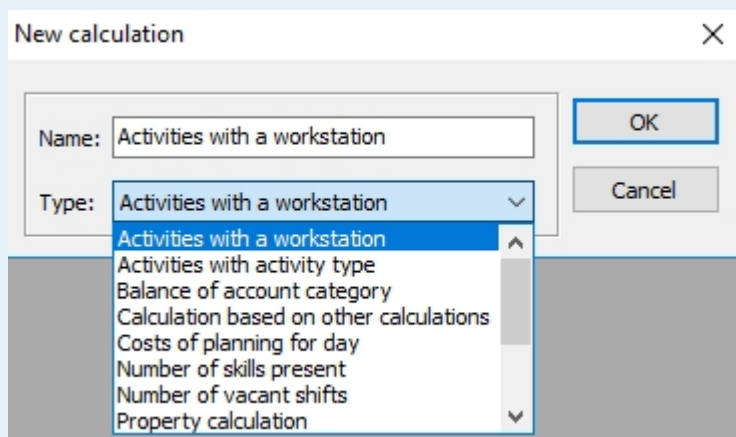
Counts in the **Team Scheduler app**, using the code TEAMSCHEDULER.


- In the **Use as default** section, select the calculation set that should be used by default, and whether or not a hint text should be shown.

 Only the application manager can set these default settings.


- (Optional) Change the name of a calculation set or delete it with the appropriate buttons.
- To open a calculation set, select it and click the **Open** button.
- After opening a calculation set, you can add a new calculation; Click the **New** button.
 - (Optional) Enter a **Name**.
 - From the **Type** drop-down list, select an attribute.

Example




 The attributes available for selection are predefined and cannot be changed.

- Click **OK**.
- Complete the fields in the right-hand frame of the window.

 The **Short name** is the name that will appear at the top of the column and will be shown in the list of the search field which is located on the plan board toolbar.


- To add more calculations, click the **New** button again.
- Click **OK**.

2.2.3 KPI calculations

 Other calculations are:

- "Employee calculations" on page 4
- "Daily calculations" on page 7


1. Go to **General > Plan board settings**.
2. Select the **KPI calculations** tab.
3. To add a new KPI calculation set, first decide if you want to create a general or an own employee calculation set. In the appropriate section, click the **New** button.
 - Enter a **Name**.
 - (Optional) Select another KPI calculation set which this new calculation set should be based on via the **Copy of** field.
 - Click **OK**.

 **General employee calculations** are used organization-wide. **Own employee calculations** are for personal use only.


4. Per KPI calculation set, enter the **Code** that is used to exchange this information with.
5. In the **Use as default** section, select the calculation set that should be used by default.

 Only the application manager can set this default setting.

6. (Optional) Change the name of a calculation set or delete it with the appropriate buttons.
7. To open a calculation set, select it and click the **Open** button.
8. To add a new calculation, click the **New** button.
 - (Optional) Enter a **Name**.
 - From the **Type** drop-down list, select an attribute.

 The attributes available for selection are predefined and cannot be changed.

- Click **OK**.
- Complete the fields in the right-hand frame of the window.

 The **Short name** is the name that will appear at the top of the column and will be shown in the list of the search field which is located on the plan board toolbar.

- To add more calculations, click the **New** button again.
9. Click **OK**.

2.2.4 Display settings

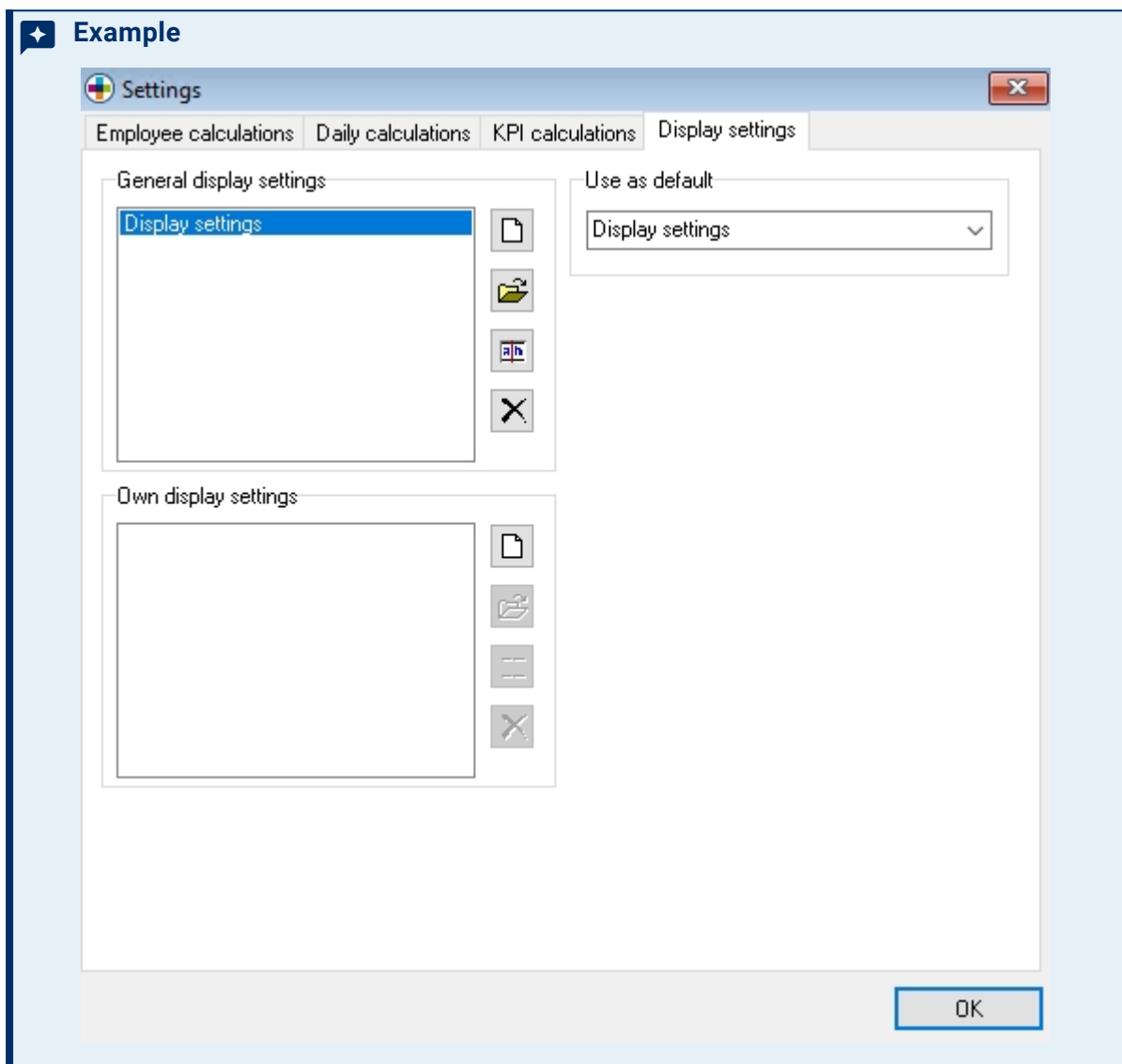
The display settings of the plan board play a crucial role in determining its visual appearance and functionality. These settings encompass various aspects such as font size, date format, history display, color usage, hint text visibility, shift counters, and more. The display settings are organized

into sets for convenient management.


By having multiple sets of display settings, users can effortlessly switch between different configurations while working on the plan board. This flexibility enables customization and adaptability to individual preferences and requirements. For more information, see "[Switch between plan board settings](#)" on page 108.

Manage display settings sets

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.



3. To create a new display settings set, first decide if you want to create a general or an own display settings set. In the appropriate section, click the **New** button.
 - Enter a **Name**.
 - (Optional) Select another display settings set on which this new set should be based via the **Copy of** field.
 - Click **OK**.

 A **General display settings** set is for organization-wide use. An **Own display settings** set is for personal use only.

4. One general set can be chosen as the **Use as default** set. These settings will then apply to all users in the organization.

 Only the application manager can set this default setting.

5. (Optional) Change the name of a set or delete it with the appropriate buttons.
6. To open a set, select it and click the **Open** button.

General

Settings

Define the font size, hint display, date format, and how the personal schedule of each employee is displayed.

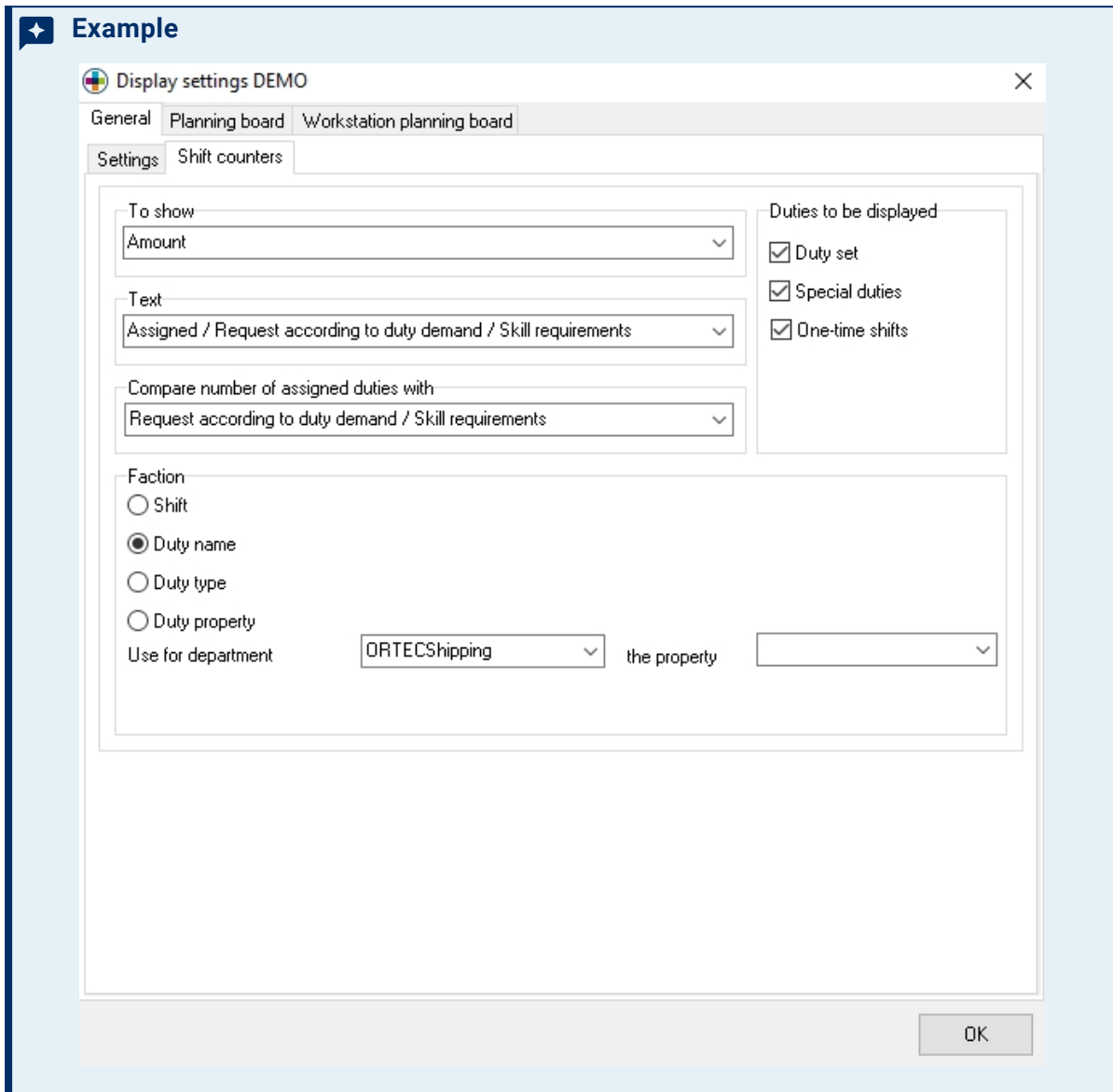
1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. On the **General > Settings** tab, define one or more of the following settings:
 - **Font size**
Decide how large the lettering and numbers on the plan board should be.
 - **Display hints**
By default, hovering over a shift on the plan board displays a pop-up with the shift description. You have the option to disable this feature.
 - **Date format**
Indicate whether month names or week numbers are displayed above the schedule matrix.
 - **Personal schedule**
You can display and print a personal schedule for each individual employee. A personal schedule can be laid out either with a row for each week, or with a row for each month.
5. Click **OK**.

Shift counters


Identify discrepancies between scheduled shifts and, for example, duty demands. Various calculation settings are adjustable.

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a settings set.


- In the **General** tab, select the **Shift counters** tab.




- Select what the hint text on the plan board should show on a specific date from the pull-down list in the **To show** field:
 - **Amount**
 - **Shift duration**
 - **Labor-time**
 - **Working hours**
 - **Employees**
- Select the appropriate calculation from the pull-down list in the **Text** field.
 - **Assigned**
The number of scheduled shifts per shift type.
 - **Shifts to be scheduled**
The number of vacant shifts per shift type.
 - **Request according to duty demand**
The number of requested shifts according to the duty demand.

 As shifts can be added or removed manually, the requested shifts might not always align with the assigned or to be scheduled shifts.


- **Assigned - Shifts to be scheduled or Assigned / Shifts to be scheduled**
The number of scheduled shifts and the number of vacant shifts per shift type. The difference between the two is only the visual presentation.
 - **Assigned - Request according to duty demand or Assigned / Request according to duty demand**
The number of scheduled shifts and the number of requested shifts according to the duty demand. The difference between the two is only the visual presentation.
 - **Assigned / Request according to duty demand / Skill requirements**
This calculation shows the number of scheduled shifts, requested shifts and number of missing skill requirements. Make sure to select **Duty name** in the **Faction** section (see step 8 below).
In the plan board, the hint text of the shift counter shows the number of missing skills.
 - **Assigned / Shifts to be scheduled / Request according to duty demand**
The number of scheduled shifts, number of vacant shifts and number of requested shifts according to the duty demand.
7. In the **Compare the number of assigned duties with** field, choose from:
- **Shifts to be scheduled**
 - **Request according to duty demand**

 If you specify that the system is to compare the number of assigned duties with the request according to duty demand, you'll be able to see from the background color whether the schedule currently complies with the requirement or not. If the background color is blue, the requirement has been surpassed; if it's red, the requirement has not yet been reached. A white background means that the number of scheduled shifts is exactly as required.

- **Request according to duty demand / Skill requirements**
This calculation shows the number of requested shifts and number of missing skill requirements. Make sure to select **Duty name** in the **Faction** section (see step 8 below).
8. In the **Faction** section, click on the appropriate radio button to indicate whether the calculations should be grouped by
- **Shift**
 - **Duty name**
 - **Duty type**
 - **Duty property**

 There is also an option to show employee names or employee short names in shift counters. Per shift, the assigned employees are listed and the number of shifts to fill are indicated with (None) and a number. For example, "(None) 3x" for shift 'A' means that 3 more employees need to be assigned to this shift 'A'.

9. The shift calculations settings have been defined.


 To show the shift calculations on the plan board, make sure you've selected **Shift counters** via **View > Plan board components**.

Planning board


Customize shift display options via plan board cell appearance. For example, you can have a colored border applied to cells to highlight rule violations, or display colored flashes in the upper left and/or upper right corners of the cells to help you identify shifts. "[Other](#)" on page 17 settings aren't about the displayed text or colors, but about - for example - column width and displayed history days.

Shift display settings

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board** and select one of the following tabs to customize how shifts are displayed:
 - **Text (special) shifts**
With the default setting, only the name of the (special) shift is displayed. For information on the available commands, view "[Text \(special\) shift commands](#)" on page 16.
 - **Font color**
Define the colors of the different shift codes.
 - **Font style**
Choose whether realizations are underlined (and under what circumstances) and whether other departments' shifts are displayed in italics.
 - **Background color**
Adjust the default background color of shift cells. For example, the default background colors of weekend days, public holidays, and birthdays are pale yellow, pale red, and orange. Requests appear by default with a light yellow background, sick leaves with a light green background and fixed shifts with a light gray background.

 If the background color for a shift is similar to the color that the shift name is displayed in, the system automatically changes the shift text color to white.

- **Cell border color**
The cell borders of, for example, violations can have a distinct color.
- **Left / Right corner color**
With the default setting, the left corner-flash appears in the color assigned to the shift as Color 1. The right corner-flash appears in the color assigned to the shift as Color 2.

 Color 1 and color 2 are assigned via **Maintenance > Organization > Properties** tab. Per department a different Color 1 and Color 2 can be defined.

- "[Other](#)" on page 17
Define the column width, the number of days history, how content must be aligned, display of night shifts and the display of shifts to be scheduled.

- ["Vertical line color" on page 20](#)
To make the schedule matrix easier to read, bold vertical lines can be included after certain days of the week.
- 5. (Optional) Add a display view:
 - Click on the **New** button.
 - In the **Select an overview** window, select a **Display** view (color assignments or shift views).
 - Click **OK**. The view will be added to the list in the **Display** section.
- 6. (Optional) Change the order of the views:
 - Select the view that you want to move up or down the list.
 - Click on the button with the up-arrow to move the view up the list (give it greater precedence).
 - Click on the button with the down-arrow to move the view down the list (give it less precedence).
- 7. (Optional) Delete a view:
 - Select the view that you want to delete.
 - Click on the **Delete** button. The view has now been deleted.

Text (special) shift commands

On the **Text shift** and **Text special shift** tabs, add one or more of the following display commands:

- **Shift name**: displays the short shift name.
- **Begin and end time**: displays start and end time of the shift.
- **Description shift**



Enter or adjust shift descriptions via the **Description** field in the **Description** tab of the realization window. The description will be available in the hint text of a shift.

- **Duty requests**
- **Begin and end time and Workstation/Activity type**: displays start and end time, and Workstation/Activity type of the shift.
- **Shift remark**



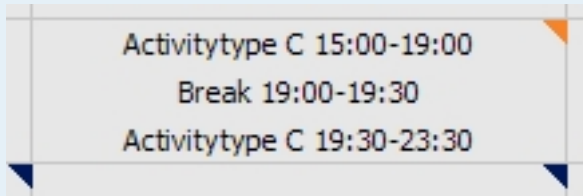
Enter or adjust shift remark via right mouse menu for a shift. The remark will be available in the hint text of a shift.

- **Non default duty properties of type yes/no**: displays the abbreviation of a duty property. Enter a separator that will be shown between the duty properties. The value CRLF ensures that every duty property starts on a new line.
- **Text per activity in relation to Expression**: indicate which text will be shown per activity using the following expressions:
 - **ActivityTypeName**: name of the activity type
 - **WorkstationName**: name of the workstation
 - **StartTime**: start time of the activity
 - **EndTime**: end time of the activity

(Optional) Indicate for which duty types no activities needs to be shown.

Example

Example of plan board information with the **Text per activity in relation to Expression** command. The expression for activity type names and start and end times is applied.



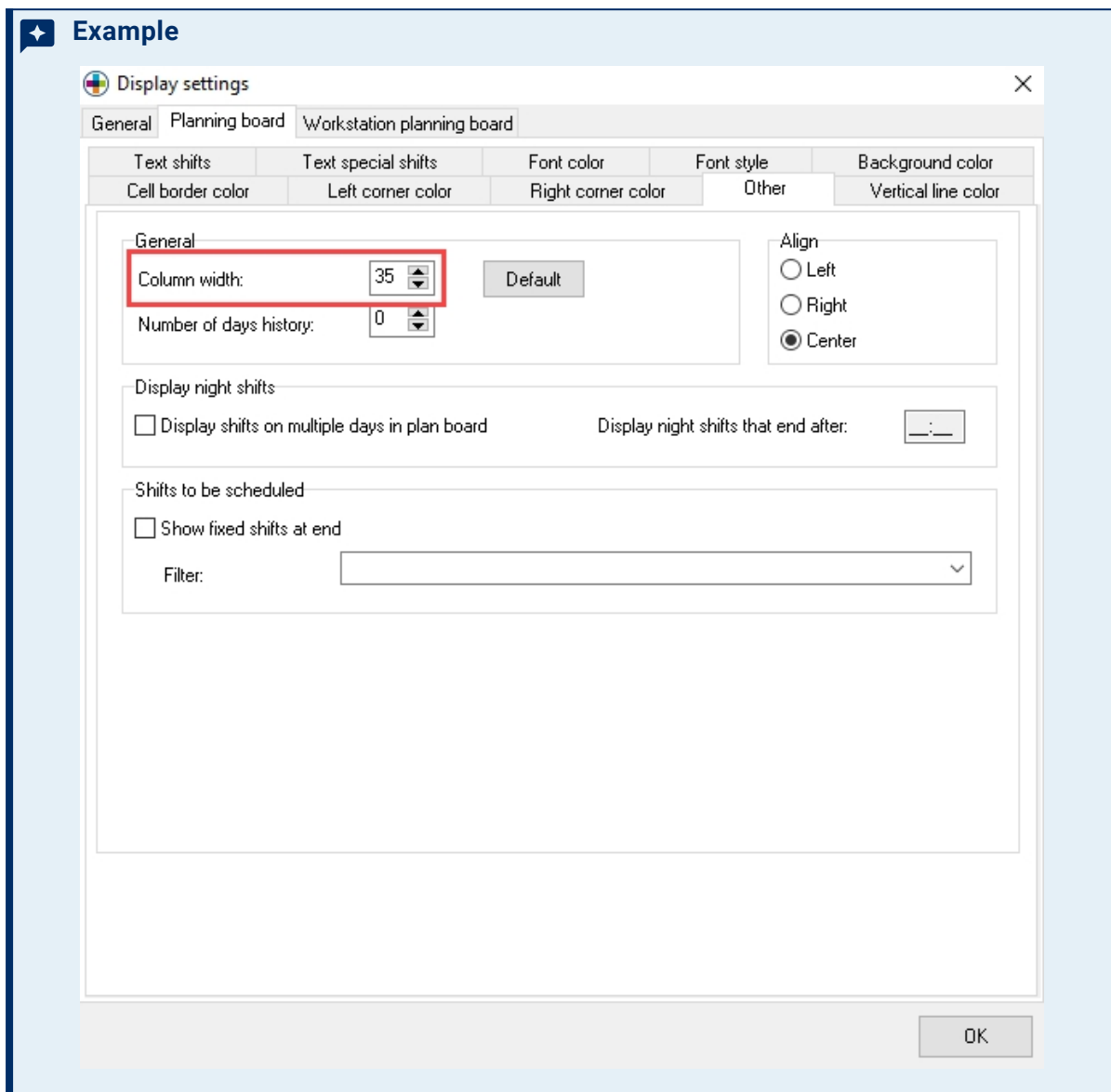
Other

Column width

The width of the day-columns on the plan board can be adjusted according to preference.

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board > Other** tab.

5. In the **Column width** field, enter a value; the default column width is 35.

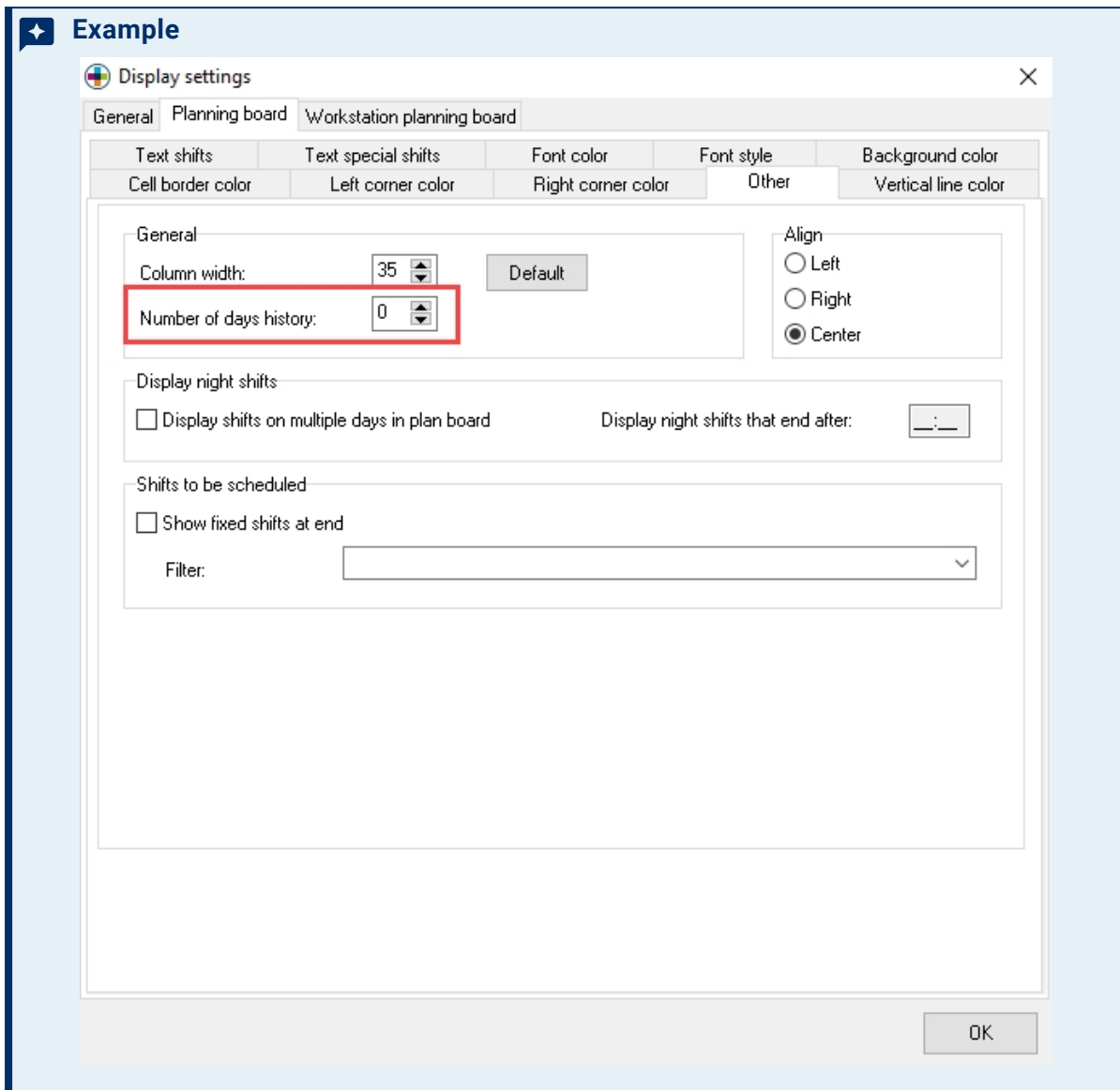


6. Click **OK**.

History days

The history days setting determines the displayed days before the selected period. The shaded history period on the schedule matrix is uneditable. It shows the previous shifts worked by employees, aiding the planner in proper shift distribution.

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board > Other** tab.
5. In the **Number of days history** field, specify the length of the history period you want displayed.



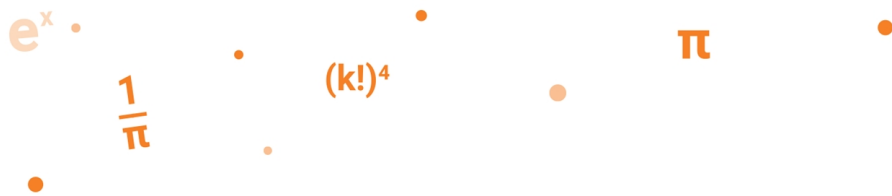
6. Click **OK**.

Align

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board > Other** tab.
5. In the **Align** section, specify how the content in the cells must be displayed.

Display night shifts

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board > Other** tab.
5. In the **Display night shifts** section, select the checkbox **Display shifts on multiple days in plan board**.
6. Enter the hour after which a shift must be displayed as a night shift.



Shifts to be scheduled

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board > Other** tab.
5. Define the **Shifts to be scheduled** section.

Vertical line color

To make the schedule matrix easier to read, bold vertical lines can be included after certain days of the week.

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Planning board > Vertical line color** tab.
5. (Optional) Add a display view:
 - Click on the **New** button.
 - In the **Select an overview** window, select a **Display** view (see step 6).
 - Click **OK**. The view will be added to the list in the **Display** section.
6. You can choose where the lines are placed via three display views:

Vertical line weekday

Example

Consider inserting a line after each Friday and Sunday to clearly distinguish the weekends from the weekdays.

The screenshot shows the 'Display settings' dialog box with the 'Workstation planning board' tab selected. The 'Display' list contains 'Vertical line status change' and 'Vertical line weekday'. The 'Vertical line weekday' section has checkboxes for Monday through Sunday, with Friday and Sunday checked. A red box highlights this section.

- **Vertical line status change**
Shows a vertical line when the status of a schedule changes.
- **Vertical line salary period**
Shows a line at the end of a salary period when salary periods are enabled.

Not seeing one of the options above? Select the **New** button and select a **Display** option.

7. (Optional) Change the order of the views:
 - Select the view that you want to move up or down the list.
 - Click on the button with the up-arrow to move the view up the list (give it greater precedence).

- Click on the button with the down-arrow to move the view down the list (give it less precedence).
8. (Optional) Delete a view:
- Select the view that you want to delete.
 - Click on the **Delete** button. The view has now been deleted.



The vertical line at the end of a salary period can also be presented in the report 'Master schedule with calculations' (not in BO or MS Reporting).

Workstation planning board

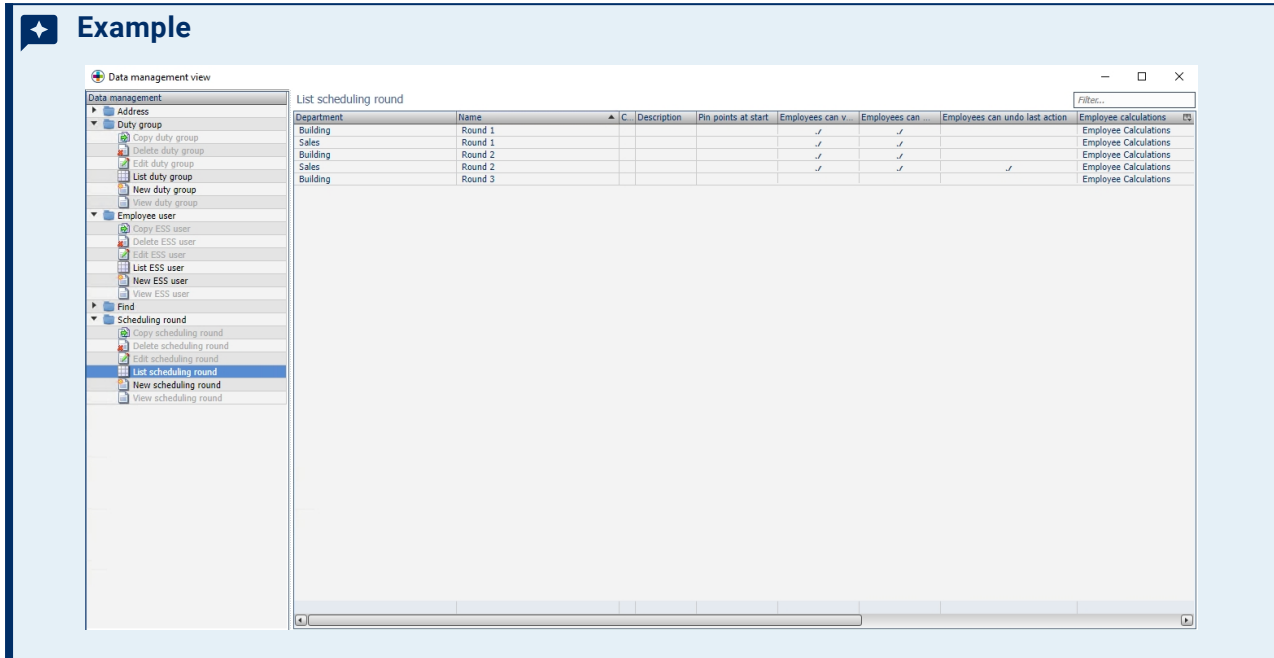
Customize the workstation planning board by adjusting the colors and some other settings.

1. Go to **General > Plan board settings**.
2. Select the **Display settings** tab.
3. Open a display settings set.
4. Select **Workstation planning board** and select one of the following tabs:
 - **Workstation item color**
Define the colors of workstation items.
 - **Workstation item border color**
Define the colors of workstation item borders.
 - **Workstation background color**
Define the colors of workstation backgrounds.
 - **Employee item color**
Define the colors of employee items.
 - **Employee item border color**
Define the colors of employee item borders.
 - **Employee background color**
Define the colors of employee backgrounds.
 - **Other**
Define the column width, the visible days, and the visible interval.
5. (Optional) Add a display view:
 - Click on the **New** button.
 - In the **Select an overview** window, select a **Display** view (color assignments or shift views).
 - Click **OK**. The view will be added to the list in the **Display** section.
6. (Optional) Change the order of the views:
 - Select the view that you want to move up or down the list.
 - Click on the button with the up-arrow to move the view up the list (give it greater precedence).
 - Click on the button with the down-arrow to move the view down the list (give it less precedence).
7. (Optional) Delete a view:
 - Select the view that you want to delete.
 - Click on the **Delete** button. The view has now been deleted.

2.3 Data Management View

For example, scheduling rounds and duty groups are created there. If the **Data Management View** window is not available, you might need to add the window from the **Customize** menu (for more

information, see "Plan board toolbars" on page 106, step 5). Or, this window might have been added to the **Maintenance** menu option.



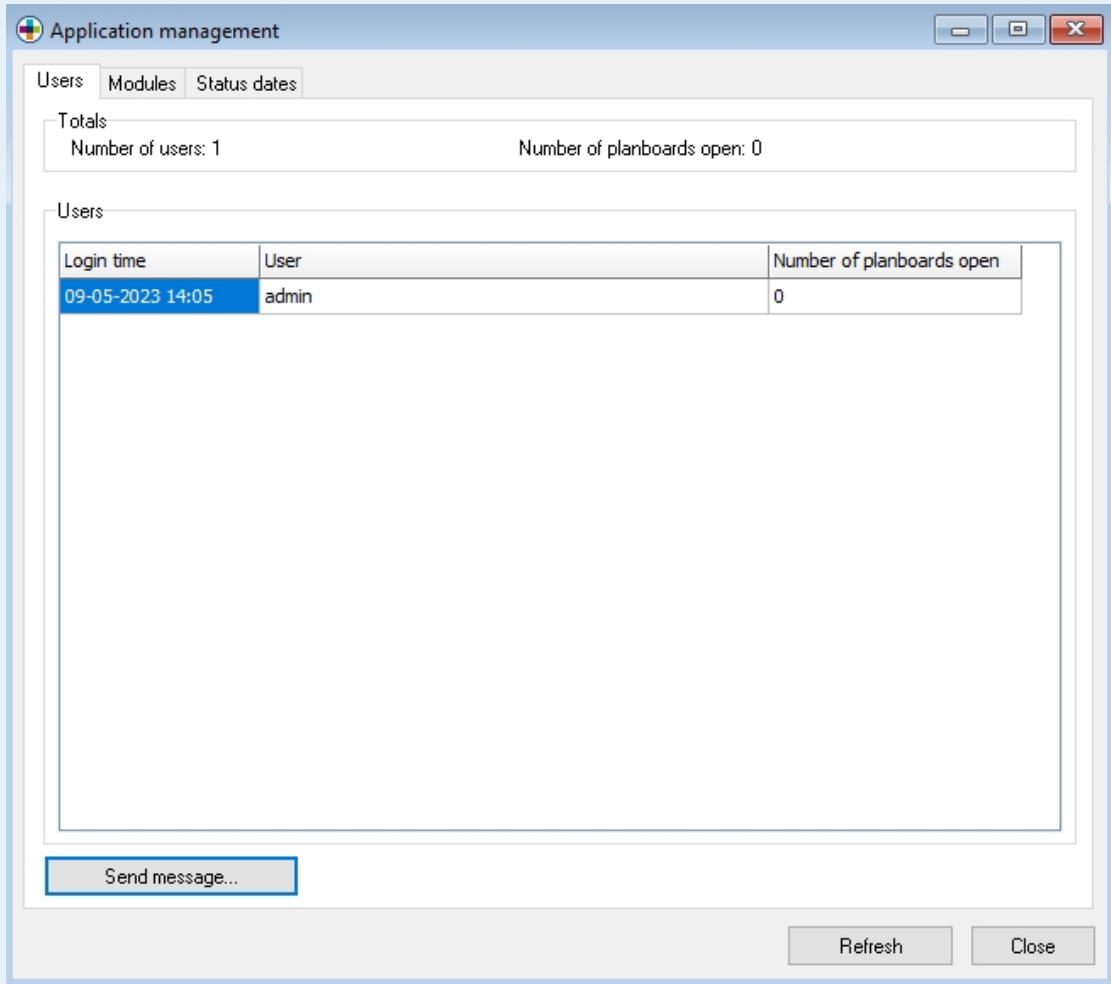
2.4 Application Management

The application management window provides the following information for the application managers:

- Active users
- Active modules
- Scheduling period statuses per department

Example

Application management window.



2.5 Mailbox management

The internal messaging system of **ORTEC WS** generates automated messages to notify relevant users of specific actions taken. Automated messages are available for the following actions:

- New, adjusted or deleted requests
- New, adjusted or deleted sick records
- Recovery reports
- Exchange requests (swaps)
- Realizations entered through Employee Self Service
- New shifts added in Employee Self Service
- Clock in or clock out through Employee Self Service
- Subcontract shifts
- Changing the status of subcontracted shifts
- Imported changes in roster data
- XML Interface failed

- XML Interface succeeded
- XML interface finished with warnings

After one or more of these actions occur, this information is sent to the relevant mailboxes, and employees assigned to those mailboxes receive a message regarding the actions that have taken place.

Example

- A mailbox named 'Clock times' can send a message to the responsible supervisor that action type 'Clock times in ESS' has taken place.
- A mailbox 'Employee requests' can send a message to multiple planners that one or more of the action types 'New request', 'Altered request', and 'Deleted request' have taken place. Once a message has been read by one planner, this becomes visible to the other planners.

2.5.1 Set up mailboxes

Application managers set up mailboxes for different actions and assign users to the relevant mailboxes. Users receive messages of the actions for which the mailboxes have a subscription. In this way users get informed only about the actions taken place that are relevant for them.



A user can be assigned to more than one mailbox. If mailboxes have overlapping subscriptions, the employee receives only one message per action related to these subscriptions.

Create mailboxes

1. Go to **General > Mailbox management > Mailboxes** tab.
2. To add a new mailbox and enter the requested information, click the **New** button.
 - Select a **User** to immediately assign one user to the new mailbox.




It's possible that this mailbox will belong to this specific user only. To clarify, add the description 'Personal mailbox'.

- Enter a **Name** for the mailbox.
 - (Optional) Enter a **Description** for the mailbox.
 - Click **OK**.
3. Add subscriptions to the mailbox.




A mailbox receives notifications of subscriptions. This can be a notification of a single subscription with one action type related to one department, but usually the **Subscriptions** section consists of multiple action types related to one or more departments. Users assigned to the mailbox receive a message when one or more of those subscriptions have occurred.

- In the **Subscriptions** section, click the **New** button.
- Select one or all categories.

 Categories are used to easily identify action types.

- Select one or more action **Type(s)**.

 Based on the selected action types, messages are sent to the assigned users to inform them that those actions have taken place.

(Optional) To include all types, select the checkbox **Select all**.

- Select one or more **Department(s)**. (Optional) To include all department, select the checkbox **Select all**.
 - Click **Apply** and close the **New subscription** window.
4. The mailbox is now created.

Assign mailboxes to users

A user can be assigned to multiple mailboxes and multiple users can be assigned to one mailbox. If one user reads a message in the mailbox, other users will see that this message has been read by another user.

1. Go to **General > Mailbox management > Users** tab.
2. Select a user in the **Name** field.
3. To assign a new mailbox to the selected user, click the **New** button.
4. In the **Add mailbox** pop-up window, select the correct mailbox and click **OK**.
5. Add multiple mailboxes to a single user by repeating step 3 and 4, or select another user to assign the same mailbox to.

2.6 Messages

The messages window in the **ORTEC WS Client** (via **General** menu > **Messages** option) displays the received messages.

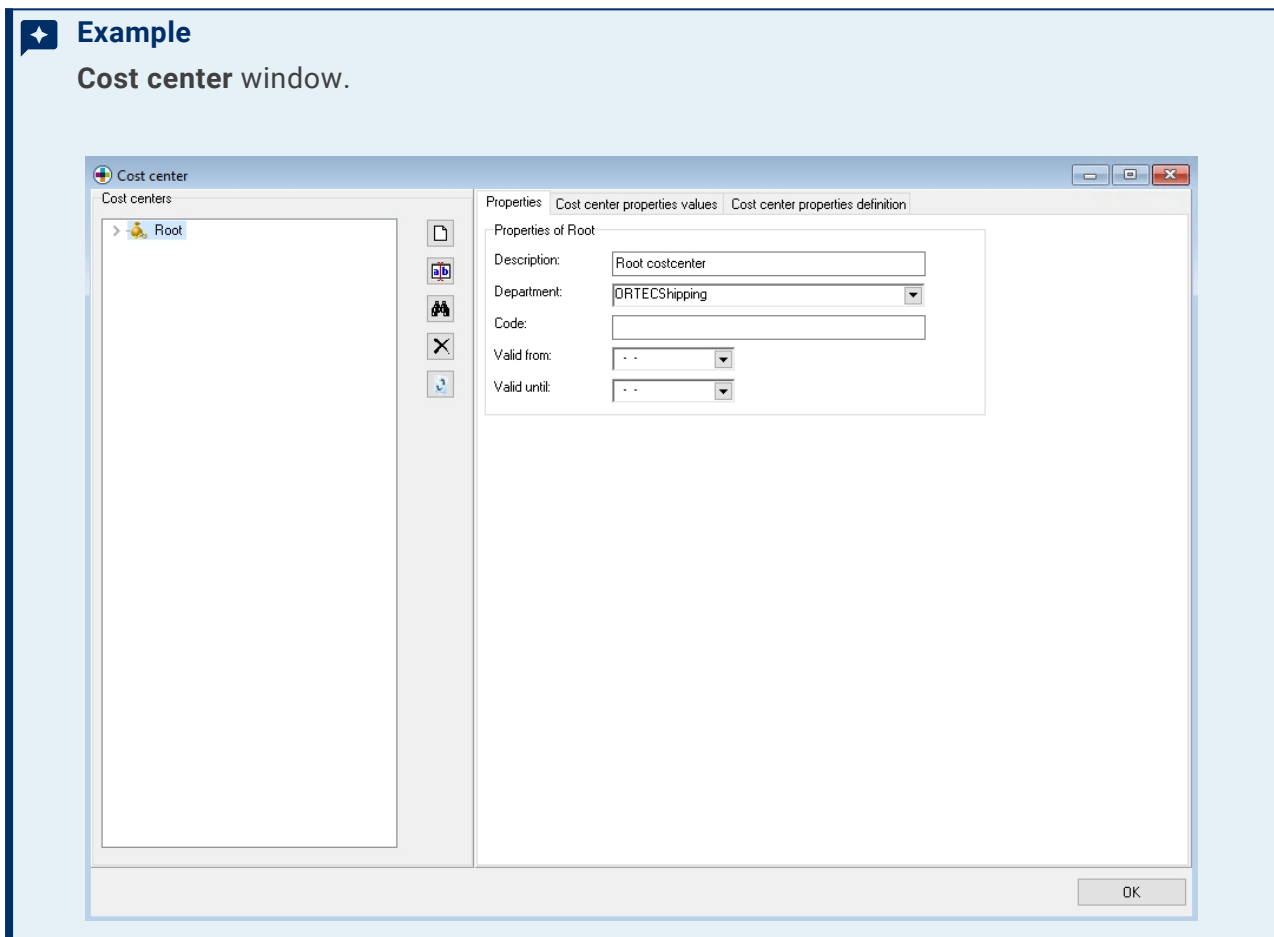
3 Maintenance

Via the **Maintenance** menu you can manage cost centers, organizational data, salary codes, employment conditions, illness types, period types, and more.

3.1 Locations and workstations

3.2 Cost center

A cost center is a budgetary entity, to which costs may be charged. Cost centers can be associated with divisions, departments and shifts.



3.2.1 Add cost center

1. Go to **Maintenance > Cost center**.
2. Click the **New** button.
3. Enter a name for the new cost center and click **OK**.

e^x $\frac{1}{\pi}$ $(k!)^4$ π

4. In the **Properties** tab, define the following:
 - **Description** of the cost center.
 - Link the cost center to a **Department**.
 - **Code**



A code is used to exchange the information defined here with an external system.

- The cost center is **Valid from** a specific date.
 - The cost center is **Valid until** a specific date.
5. In the **Cost center properties values** tab, add properties.
 - Click the **New** button.
 - In the **New property** window, select a **Property** from the drop-down list.
 - Define the **Period**.
 - Click **OK**.
 6. Click **OK**.

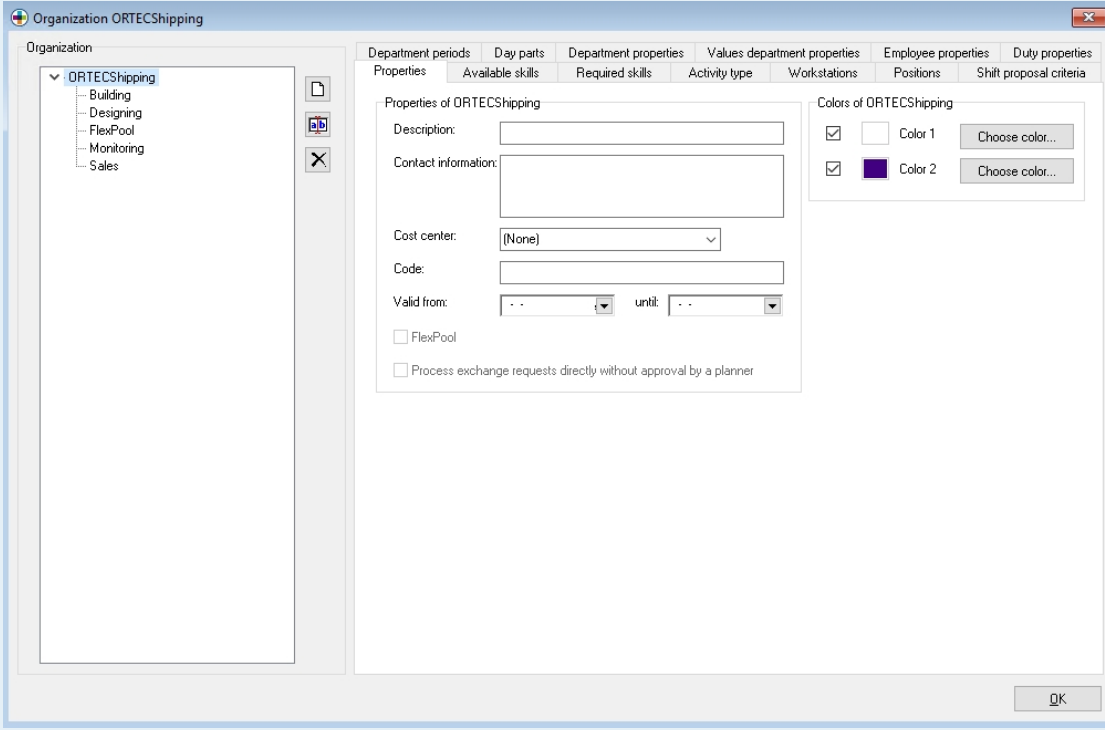
3.3 Organizational data

Managing organizational data involves making information about the organization's departments and their schedules available for use. These departments are organized into a hierarchy of primary and secondary levels. Each department represents a team or unit within the organization. By linking properties - such as employees and duties - to these departments, you can effectively track and manage data within your organization.

Effective data management for an organization is made possible by entering data for higher-level departments, which also apply to the sub-departments within them. This allows you to track and manage data for the organization as a whole, even though you can't create schedules for the entire organization or for divisions made up of multiple departments.

Example

Organizational data is - per department - divided over several tabs.



3.3.1 Organizational structure

To begin organizing your data, start by adding the highest level of the organization and work your way down to the lower levels and departments.



Be sure to include a code and a cost center for each department. Cost centers are used for accounting purposes and allow costs to be charged to specific parts of the organization.

Add departments

1. Open the **ORTEC WS** client and select **Maintenance > Organization**.
2. (Optional) When setting up a new organizational structure, click on the highest level 'Organisation' and rename it using the a/b icon.
3. Click on the **Select a new department** icon to add departments. For example, Building, Designing, Monitoring, and Sales.



Make sure you select the correct level/department below which you want to add a new department. If you accidentally added a department at the wrong level, delete **Rotation Unit 1** via the **Rotation Units** tab, then delete the department. For more information on when to use rotation units, see "[Rotation units](#)" on page 31.

4. Set, in the **Properties** tab, the **Valid from** date for each department.

5. In the **Maintenance > Cost center** window (which can be opened alongside the **Organization** window), add cost centers below the root, one for each department. For example, "Building CC," "Designing CC," etc.
 - On the **Properties** tab of each cost center, choose the corresponding department from the **Department** drop-down list.
 - Set the **Valid from** date to be the same as the **Valid from** date of the corresponding department.
6. Return to the **Organization** window, select the first department, and ensure the **Properties** tab is selected. Choose the appropriate cost center for the department from the drop-down list, and do this for all departments. This establishes the connection between each department and its cost center.
7. On the same department **Properties** tab, enter a unique code for each department.
8. Continue with adding "[Activity types](#)" on page 36 and "[Skills](#)" on page 35.


Move departments



Modifying the organizational hierarchy, such as moving departments, can have impact on the set up of **ORTEC WS**. Before implementing any change, the system will verify that all necessary requirements are met. If these requirements aren't satisfied, the modification will not be carried out.




You can only move departments if you've the appropriate authorization.

1. Select **Maintenance > Organization**.
2. Select the department you want to move and click the **Move department** button  .



Select a department that is situated below the highest organizational level.

3. In the **Move [name]** dialog box, select the organizational unit under which you will place the department:
 - The **From** field: shows the current organizational unit to which the department belongs; you can't adjust this field.
 - The **To** field: here you can choose the new organizational unit to which the department will belong.
4. Click on **OK**.
Confirm with 'Yes' whether you want to move and click on Exit.
5. **ORTEC WS** will now check if the removal is allowed, taking into account the definitions of:
 - Department properties
 - Shift properties
 - Employee properties
 - Skills
 - Activity types and derived activity types
 - Positions
 - Shift proposal criteria
 - Workstations.


 If a department cannot be moved, a message will appear indicating which requirement has not been met. If the department can be moved, it will be transferred to the selected division.

3.3.2 Rotation units

A rotation unit refers to the length of time it takes for an employee's work schedule to cycle through all possible shifts or work periods. For example, a common rotation unit in a 24/7 operation may be a week, where employees work a different shift each week in a rotating pattern, such as week 1: day shift, week 2: swing shift, week 3: night shift, and then repeat.

Add rotation unit


1. Go to **Maintenance > Organization**.
2. In the left pane, select a department.
3. Select the **Rotation units** tab.

 By default, **Rotation unit 1** is added. Click the **a/b** button to change the name. Continue with step 4 to add a new rotation unit.

4. Select the **New** button.
5. Enter a **Name** and click **OK**.
6. (Optional) Enter a **Description**.
7. (Optional) Enter a **Code**.

 A code is used to exchange the information defined here with an external system.

8. To create an individual shift pattern for each employee, select the checkbox **Personal rotation unit**.

 Per department, only one rotation unit can have this checkbox selected. If you use an employee import, it's possible to assign all employees by default to this personal rotation unit. Ask your ORTEC representative for more information on this configuration.

9. Click **OK**.

View employees per rotation unit

1. Go to **Maintenance > Organization**.
2. In the left pane, select a department.
3. Select the **Rotation units** tab.
4. Select a rotation unit and click the **Open** button.
5. In the **Overview employees** window, make a **Selection**.
 - Select a **Date**.
 - Select a **Department**.
 - Select a **Rotation unit**.
6. In the **Employees** section, view the employees that belong to the selected rotation unit.

3.3.3 Sort categories

Sort categories are used for sorting and filtering employees on the plan board. Employees who belong to the same sort category can be grouped together on the schedule.

Example

Sort categories tab.

| Employees | Shift sequences | Positions | Shift proposal criteria | Department ESS | Department periods | |
|---|------------------------------|--|-------------------------|-----------------|--------------------|--------------|
| Day parts | Values department properties | | Employee properties | | Duty properties | |
| Rotation units | Sort categories | Properties | Available skills | Required skills | Activity type | Workstations |
| Sort categories of Building | | Properties of 0-hours | | | | |
| <ul style="list-style-type: none">0-hoursFull-timePart-time | | Description <input type="text"/> | | | | |
| | | Code <input type="text"/> | | | | |
| | | Colors | | | | |
| | | <input type="checkbox"/> <input type="text"/> Color 1 <input type="button" value="Choose color..."/> | | | | |
| | | <input type="checkbox"/> <input type="text"/> Color 2 <input type="button" value="Choose color..."/> | | | | |

Manage sort categories


1. Go to **Maintenance > Organization**.
2. In the left pane, select the department related to the sort category.
3. Click on the **Sort categories** tab.
4. (Optional) To create a new sort category, click on the **New** button. Define a **Name** and click **OK**.




Tip: Start the name of each sort category with a number in order to define a sequence for your categories.

5. Select the appropriate sort category.


6. (Optional) In the **Properties** section, enter a **Description** and/or **Code**.

 A code is used to exchange the information defined here with an external system.

7. (Optional) Select the colors you want to associate with the sort category:

 All employees belonging to a given sort category can be displayed in particular colors on the plan board. The colors are selected at this stage.


- Select the check box for Color 1.
- Click on the **Choose color** button.
- Select or define a color.
- Click **OK**.
- Repeat the procedure for color 2.

 The colors that you select at this stage will be available to you when you select a plan board view.

The sort category is now available for use in connection with the department selected in step 2.

3.3.4 Properties

On the **Properties** tab, enter a description of the active department and associate it with a cost center.

 **ORTEC WS** will use the cost center that you specify in this procedure as the department's default cost center: it will be assigned to the department's shifts except where you specify another cost center for a particular shift.

Example Properties tab.

| Employees | Shift sequences | Positions | Shift proposal criteria | Department ESS | Department periods |
|---|------------------------------|------------|--|-----------------|--------------------|
| Day parts | Values department properties | | Employee properties | | Duty properties |
| Rotation units | Sort categories | Properties | Available skills | Required skills | Activity type |
| Properties of Monitoring | | | Colors of Monitoring | | |
| Description: <input type="text"/> | | | <input type="checkbox"/> <input type="text"/> Color 1 <input type="button" value="Choose color..."/> | | |
| Address: <input type="text"/> | | | <input type="checkbox"/> <input type="text"/> Color 2 <input type="button" value="Choose color..."/> | | |
| Contact information: <input type="text"/> | | | | | |
| Cost center: <input type="text" value="Monitoring CC"/> | | | | | |
| Code: <input type="text" value="1214"/> | | | | | |
| Valid from: <input type="text" value="09-05-2022"/> | | | until: <input type="text" value=".."/> | | |
| <input type="checkbox"/> FlexPool | | | | | |
| <input type="checkbox"/> Process exchange requests directly without approval by a planner | | | | | |


Manage properties

1. Go to **Maintenance > Organization**.
2. In the left pane, select the department you want to associate properties with.
3. Select the **Properties** tab.
4. Enter a **Description**, **Address** and **Contact information** of the department.
5. To assign a cost center to the department, select one from the **Cost center** field.




Cost centers are defined at **Maintenance > Cost center**. For more information, see "[Cost center](#)" on page 27.

6. (Optional) To import department and employee data, enter the **Code** used for that purpose.
7. To define when the department is active, enter a **Valid from** and, optional, an **until** date.
8. If the department is available for the Flexpool functionality, select the **FlexPool** check box.
9. To process swap requests automatically, select the **Process exchange requests directly without approval by a planner**.

 Once a schedule is published, an employee can request a swap with a colleague using **ORTEC WS for Employees (ESS 7)**. The colleague who receives the request can accept or decline the swap request in **ESS 7**. When accepted, the swap request is regarded as **completed**.

10. (Optional) Define one or two colors to be associated with the department and to be displayed on the plan board:
- Select the check box for Color 1.
 - Click on the **Choose color** button.
 - Select a color.
 - Click on **OK**.
 - Repeat the procedure for color 2.

The properties are now associated with the department.


 The colors that you select at this stage will be available to you when you select a plan board view.

3.3.5 Skills

To ensure efficient operations and a well-functioning team, you can establish the specific skills required for each department and shift by:

1. Associating available skills with each department.
2. Assigning those skills to the department's employees. For more information about assigning skills and associated levels to specific employees, see "[Employee skills](#)" on page 96.
3. Verifying that employees are qualified for a particular shift.

This process can be done at the beginning of the set-up, or you can choose to associate skills with departments later.

 You can also set up mandatory skills for a department. This means that any shift created within that department will automatically require those specific skills.

Manage available skills

1. Select **Maintenance > Organization**.
2. In the left pane, select the department you want to associate a skill with.
3. Select the **Available Skills** tab.
4. (Optional) Create a new skill using the **New** button.
5. (Optional) Enter minimum and maximum levels for the skill. The skill is now available for use in connection with the department.
6. Identify the most important skill. Select it and select the checkbox **Main skill**.
7. (Optional) Enter a **Description** and/or **Code**.

 A code is used to exchange the information defined here with an external system.

- (Optional) Determine per skill a violation type. The **(Default)** command is the standard type for violations on skills. For more information, view "[Violation types](#)" on page 58.

Manage required skills

- Select **Maintenance > Organization**.
- In the left pane, select the department you want to associate the required skill with.
- Select the **Required skills** tab.
- Click the **New** button.
- Select a skill from the drop-down list.
- Click **OK**.
- (Optional) Enter the **Level**.

3.3.6 Activity types


An activity type represents the type of work done during a shift. Each activity type belongs to a class, which determines how the activity is accounted for. The class is also used to check regulatory compliance and perform certain calculations on the plan board.

Example


In department 'Sales', there's an activity called 'Accounting.' This activity belongs to the class 'Work,' which means that 'Accounting' is considered as work within the department.

Manage activity types

- Go to **Maintenance > Organization**
- Select the department with which you want to associate activity types.
- Select the **Activity type** tab.
- (Optional) Create one or more new activity type(s) using the **Add a new activity type** button.
- Select an activity type.
- (Optional) Enter a skill and a level for the activity type:


 The skills you can choose from are created and listed on the **Available skills** tab. For more information, please refer to "[Skills](#)" on page 35.

- On the right side of the **Skill levels of [Activity type name]** section, click on the **New** button. The **Select a skill** window appears.
 - Click on the down-arrow to select a skill from the list.
 - Click **OK**.
- (Optional) In the **Belongs to** field, select a higher-level unit or department from the drop-down list.


 You can create new activity types based on existing ones at higher organizational units. This saves you repeatedly defining the associated activity sorts and skills. Additionally, you can create a remuneration rule for a master activity type that will also apply to all activity types based on that major activity type.

- (Optional) In the **Abbreviation** field, define a short name for each activity type.
- (Optional) The **Export code** field is used for payroll purposes.

10. (Optional) The **Import code** field is used to import activities.
11. In the **Class** field, select a class from the drop-down list.

 Activity classes determine how the activity is accounted for. For example, whether it's counted as rest or work.

12. In the **Description** field, shortly describe the activity type.
13. (Optional) To make an activity type available in the right-mouse menu **Replace by activity type**, select the checkbox **Show in pop-up menu of the planning board**.
14. (Optional) To fix a shift automatically after replacing with a specific activity type via the **Replace by activity type** command, select the checkbox **Fix shifts when replacing by an activity type**.

 **Example**

For activity type X this checkbox is marked. On the plan board, right-click on shift A and choose the **Replace by activity type** command. Next, select activity type X. Shift A will be fixed automatically.

15. (Optional) To make an activity type available for realization in **ESS 7**, select the checkbox **Available for realization in ESS**.
16. (Optional) To make an activity type available as leave type for leave requests, select the checkbox **Relevant to leave request**.
17. (Optional) To enable entering an address for an activity type, select the checkbox **Entering address is allowed**.
18. (Optional) To replace a sick leave shift in case of sick leave, select the checkbox **Replace by sick leave shift in case of sick leave**.
19. (Optional) To make sure a workstation must be entered for an activity type, select the checkbox **Entering a workstation is required**.
20. (Optional) To make sure it's not allowed to enter a workstation for an activity type, select the checkbox **Entering a workstation is not allowed**.
21. (Optional) To make an activity available in the **Change workstation - (None)** submenu in the workstation plan board, select the check box **Workstation planning display when removing the workstation**. When you choose an activity type, it will replace the current activity type on the workstation activity. If only one activity type is enabled, it will automatically be assigned when a workstation is removed.
22. Click **OK**.

Classes

Below is an overview of the existing activity classes:

| Activity class | Working time | Labor time | ATW-rest | Rest | Time at work |
|-------------------------|--------------|------------|----------|------|--------------|
| Amplitude | √ | √ | | | √ |
| Attendance | | √ | | | √ |
| Availability (no labor) | | | √ | | √ |
| Break | | | √ | | √ |
| Break (on call) | | √ | √ | √ | √ |

| | | | | | |
|-------------------------------|---|---|---|---|---|
| Compensated leave | ✓ | | ✓ | ✓ | |
| Compensation day off | | | ✓ | ✓ | |
| Consignation | | | ✓ | | |
| Consignation (no labor) | | | ✓ | | |
| Day-off | | | ✓ | ✓ | |
| Education | ✓ | ✓ | | | ✓ |
| Leave (no labor) | ✓ | | ✓ | ✓ | |
| Leave (no work) | | ✓ | ✓ | ✓ | |
| Leave-of-absence | ✓ | ✓ | ✓ | ✓ | |
| On Call | | | ✓ | ✓ | |
| On Call (no labor) | | | ✓ | ✓ | |
| Operational | ✓ | ✓ | | | ✓ |
| Overtime | ✓ | ✓ | | | ✓ |
| Overtime (for free time) | ✓ | ✓ | | | ✓ |
| Overtime (for money) | ✓ | ✓ | | | ✓ |
| Picket | | | ✓ | | |
| Rest | ✓ | | ✓ | ✓ | ✓ |
| Saturday off | | | ✓ | ✓ | |
| Sick leave | ✓ | ✓ | ✓ | ✓ | |
| Sick leave (no labor) | ✓ | | ✓ | ✓ | |
| Sick leave (no rest) | ✓ | ✓ | | | |
| Sick leave (no rest no labor) | ✓ | | | | |
| Sick leave (no work) | | ✓ | ✓ | ✓ | |
| Spare | ✓ | ✓ | | | |
| Special leave | ✓ | ✓ | ✓ | ✓ | |
| Sunday off | | | ✓ | ✓ | |
| Training | ✓ | ✓ | | | ✓ |
| Unpaid work | | ✓ | | | |
| Work | ✓ | ✓ | | | ✓ |
| Work (stand by) | ✓ | ✓ | ✓ | | ✓ |
| WTR | ✓ | | ✓ | ✓ | |

Working time:

Hours according to the contract, usually the hours which will be paid (including labor hours, but also leave of absence, illness, paid breaks, etc.)

Labor time:

Hours which count (according to labor time rules) as labor time: hours where labor will be accomplished as well as hours which are counted as labor (e.g. absence and illnesses). Breaks (paid or not paid) do not count as labor time.

ATW rest:

Rest which is counted as rest according to labor time rules: hours in which no labor will be accomplished. Also leave of absence, illness, et cetera count as rest.


Rest:

Hours in which no labor will be accomplished and where you don't have to be present or available. Breaks do not count as rest, because you are at

physically at work.

Time at work: *Hours when people are at work (to work or rest).*


3.3.7 Employee list

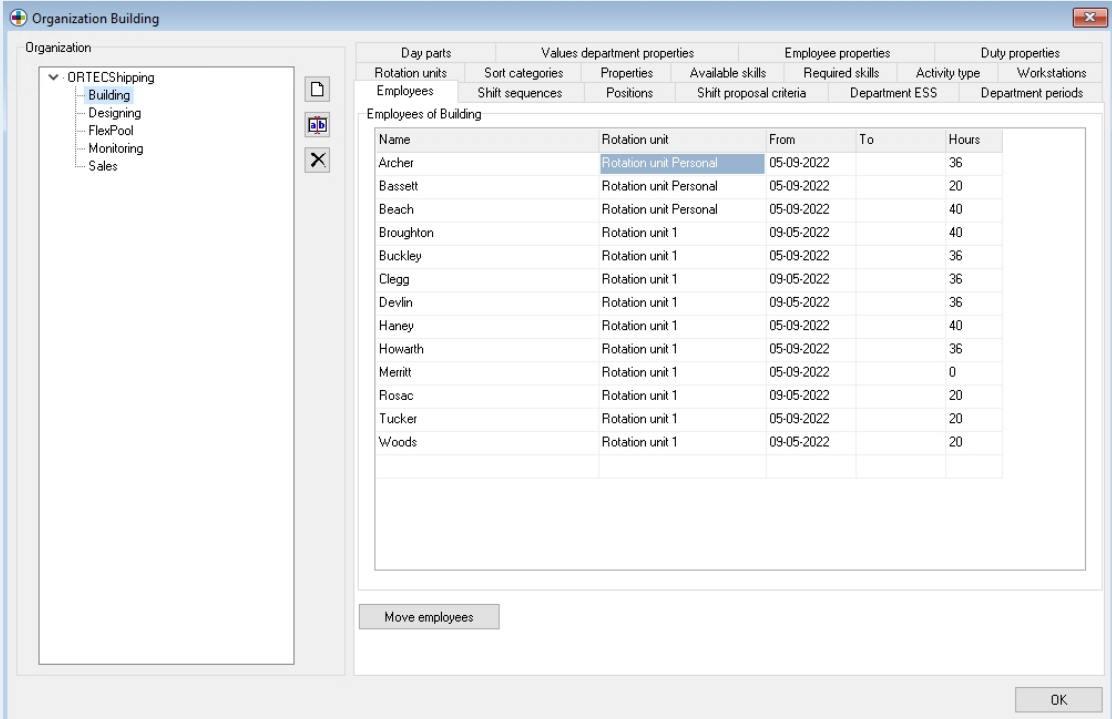
 To add or edit employees, go to **Employee > Employee management**. For more information, please refer to "[Employee](#)" on page 92.

View employees

View per active department the available employees.

1. Go to **Maintenance > Organization**.
2. In the left pane, select the department you want to view the employees from.
3. Select the **Employees** tab.

 **Example**
Employees tab.



| Day parts | | Values department properties | | Employee properties | | Duty properties | |
|-----------------------|------------------------|------------------------------|-------------------------|---------------------|--------------------|-----------------|--|
| Rotation units | Sort categories | Properties | Available skills | Required skills | Activity type | Workstations | |
| Employees | Shift sequences | Positions | Shift proposal criteria | Department ESS | Department periods | | |
| Employees of Building | | | | | | | |
| Name | Rotation unit | From | To | Hours | | | |
| Archer | Rotation unit Personal | 05-09-2022 | | 36 | | | |
| Bassett | Rotation unit Personal | 05-09-2022 | | 20 | | | |
| Beach | Rotation unit Personal | 05-09-2022 | | 40 | | | |
| Broughton | Rotation unit 1 | 09-05-2022 | | 40 | | | |
| Buckley | Rotation unit 1 | 05-09-2022 | | 36 | | | |
| Clegg | Rotation unit 1 | 09-05-2022 | | 36 | | | |
| Devlin | Rotation unit 1 | 09-05-2022 | | 36 | | | |
| Haney | Rotation unit 1 | 05-09-2022 | | 40 | | | |
| Howarth | Rotation unit 1 | 05-09-2022 | | 36 | | | |
| Merritt | Rotation unit 1 | 05-09-2022 | | 0 | | | |
| Rosac | Rotation unit 1 | 09-05-2022 | | 20 | | | |
| Tucker | Rotation unit 1 | 05-09-2022 | | 20 | | | |
| Woods | Rotation unit 1 | 09-05-2022 | | 20 | | | |

Move employees to another department

1. Follow the steps above to view employees.
2. In the bottom-left corner of the **Employees** tab, select the **Move employees** button.

- In the left section, select one or more employees.



To select all employees at once, select - in the bottom-left corner of the **Move employees** screen - the check box **Select all**.

- In the right section, define a period with the **From** and **To** fields. To make the move indefinite, leave the **To** field blank.
- Select the **New department** from the drop-down list.
- (Optional) Select a **Rotation unit** from the drop-down list.



A rotation unit refers to the length of time it takes for an employee's work schedule to cycle through all possible shifts or work periods. For example, a common rotation unit in a 24/7 operation may be a week, where employees work a different shift each week in a rotating pattern, such as week 1: day shift, week 2: swing shift, week 3: night shift, and then repeat.

- (Optional) To remove the selected employees from the current department, select the check box **Remove from old department**. When not selected, employees will be available for both departments.
- Click **OK**.

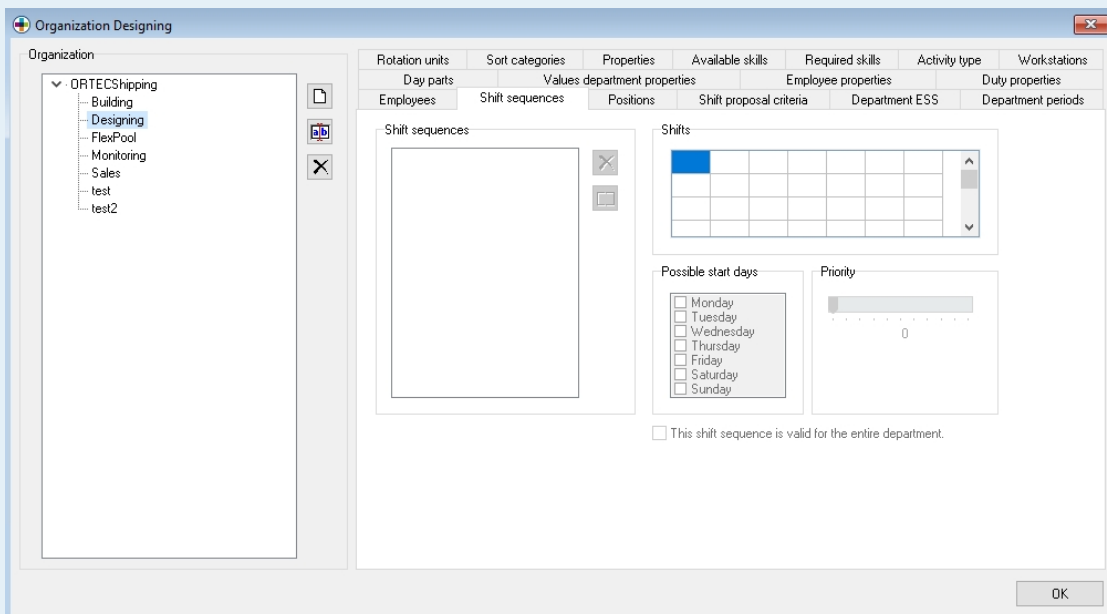
3.3.8 Shift sequences

The optimizer uses shift sequences to automatically assign predefined shift sequences to employees. It ensures that difficult shift patterns, such as night and weekend shifts, are assigned in a proper way.




Example

Shift sequences tab in the **Organization** window. Here you'll manage shift sequences previously created on the plan board.



Set up and roll out of shift sequences

1. Go to **Planning > Master schedule**.
 2. From the **Department** drop-down list, select a department.
 3. From the **Scheduling period** drop-down list, select a scheduling period.
 4. (Optional) Define a smaller **Period** such as a week.
 5. Click the **Plan board** button.
 6. On the plan board, select one or more shifts on the same row.
 7. Right-click and select **Create new shift sequence**.
 8. From the **Department** drop-down list, select a department.
 9. Enter a **Name** for the shift sequence for easy identification.
 10. Click **OK**.
 11. To create more shift sequences, repeat step 6 to 10.
 12. Go to **Maintenance > Organization**.
 13. In the left pane, select the appropriate department.
 14. Select the **Shift sequences** tab. Here you'll see the shift sequences you just created.
 15. Select a shift sequence.
 - In the **Shifts** section, view the shifts of this sequence.
 - (Optional) Select **Possible start days** of this shift sequence.
 - (Optional) Set the **Priority** of this shift sequence.
 - By default, the checkbox **This shift sequence is valid for the entire department** is selected so the optimizer assigns the pattern to all department employees. Disable the checkbox to assign the shift sequence to specific employees.
 16. (Optional) Repeat step 15 for all shift sequences.
 17. Go to **Planning > Schedule management**.
 18. Create a new scheduling period and open it.
 19. Go to **Optimizers > Plan shift sequences**.
-  Setting `UsePatternPlanner` should be enabled. Contact your ORTEC representative when needed.
20. Click **Yes** to proceed.
 21. Click **OK**.
 22. When the optimizer is ready, click **OK**.
 23. Click **Close**.

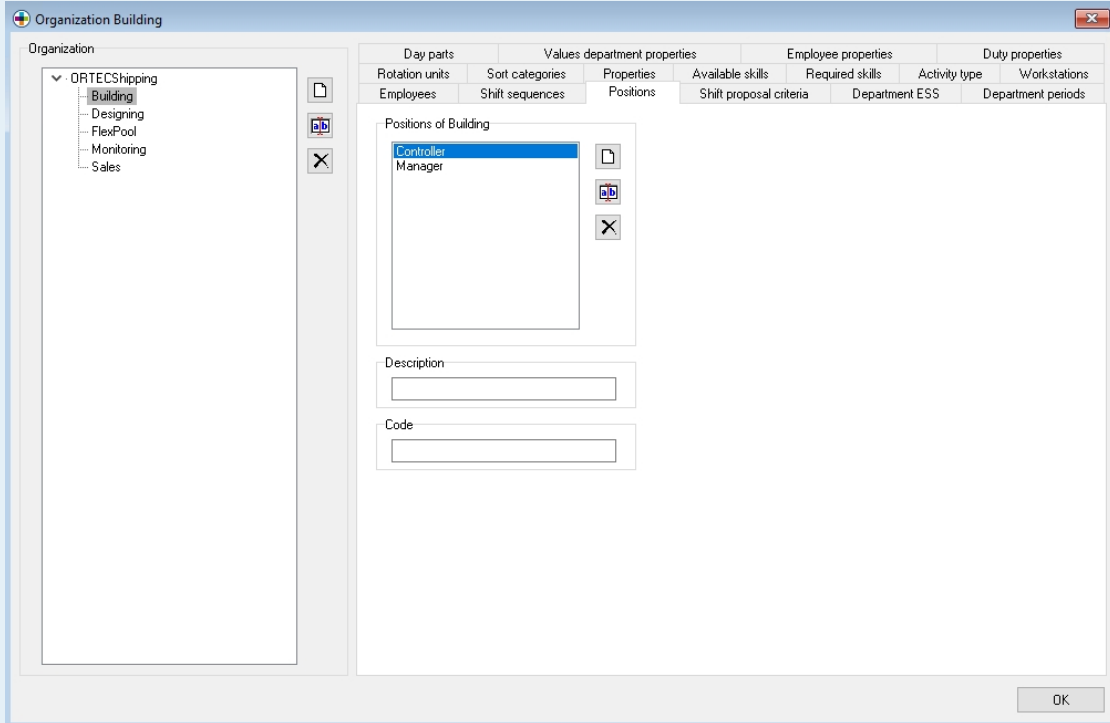
3.3.9 Positions

A position indicates an employee's role. A position doesn't guarantee competence in a task. Competence is shown through skills, which can be linked to a position. When a position is assigned to an employee, its associated skills are also assigned. Deleting a linked skill removes it from all employees with that position. Positions can be used for sorting and filtering on the plan board.



Example

Positions tab in the **Organization** window. An example of a position can be 'Manager'.



Manage positions

1. Go to **Maintenance > Organization**.
2. Select the department with which you want to associate a position.
3. Select the **Positions** tab.
4. (Optional) To add a new position, click the **New** button. Enter the **Name** of the new position and click **OK**.
5. (Optional) Enter a **Description** for the position.
6. (Optional) Enter a **Code** for the position.



A code is used to exchange the information defined here with an external system.

7. Click **OK**.
The position can now be assigned to employees of the relevant department via **Employee > Employee management > Positions** tab.

3.3.10 Shift proposal criteria

When creating a schedule, some shifts may not be filled due to a lack of available employees or other factors. Use the shift proposal feature to:

- Generate a list of potential employees based on criteria such as availability, qualifications, and importance of the shift.
- Search for employees across departments and prioritize candidates based on criteria such

as potential violations and qualifications.

- Generate the most optimal schedule by combining and prioritizing criteria collections.

Learn more on the shift proposal feature here: ["Candidates for shift" on page 145.](#)

Create shift proposal criteria set

1. Go to **Maintenance > Organization**.
2. In the left pane, select the desired department.
3. Click on the **Shift proposal criteria** tab.
4. Double-click on an existing Shift proposal criteria set or make a new set.
5. Add criteria rules in the **Shift proposal criteria [name]** window:
 - Click on **New**.
 - Enter a **Name** for the criterion.
 - Select the **Type**.
 - Click **OK**.
 - Enter the data of the rule, notice the setting of ranking of the rule within the criteria set.
6. Click on **OK** to exit.

Explanation criteria

Some shift proposal criteria are explained below:

- **Additional shifts:** goal is to plan a series of shifts on one employee as much as possible. Take notice that this criterion is only available using the Flexpool module.
- **Duty property:** allows you to present only employees in the candidates for shift window with a shift assigned that has a certain duty property. If a duty property is used to indicate that a certain shift is actually an extra shift (shift is not required according to the duty demand), a planner can check whether employees from other departments are available to help out in busy times using this criterion.
- **Employee function names:** this criterion shows the names of the positions of the employees on the start date of the shift the proposal is requested for
- **Position:** this criterion shows whether the employee has the demanded position for the shift. The possibility at a shift to indicate which position is demanded depends on a general setting.
- **Preferred employee:** shows if the employee is a preferred employee for the subcontract.
- **Preferred or forbidden department:** is meant to select employees that have the current department set as preferred department, and to exclude employees that have the current department set as forbidden department.



By setting the 'Forbidden department' labor time rule, a violation will be thrown if a shift is assigned to an employee who is forbidden for the department of that shift.

The assignment of employees to a department that will be a preferred or forbidden department, is done on the 'Forbidden department' and 'Preferred department' tabs in the Employee management window.

- **Skills:** 3 options are available to check whether employees have the required skill level for shifts: higher, equal and lower. It's also possible to sort the employees based on how well their skill level matches the required level. Employees with equal levels will be shown on top followed by the employees with a higher skill level than required to work the shift. A hint text

will explain the employee's match ('with the required level', 'level is higher than required', 'level is lower than required').

- **Skill staffing:** used mainly as a self-scheduling criterion. It combines the **Understaffing** criterion functionality with the skill requirement functionality. This criterion will limit the options an employee has to (de)select shifts during self-scheduling. When in place, an employee should be able to pick new shifts or remove planned shifts during self-scheduling in **ESS 7** as follows:

| Shift demand | Skill requirement | Employee has relevant skill* | Employee can pick shift | Employee can remove shift |
|--------------|-----------------------------|------------------------------|-------------------------|---------------------------|
| Overstaffed | Overstaffed | Yes | No | Yes |
| Overstaffed | Understaffed | Yes | Yes | No |
| Overstaffed | OK | Yes | No | No |
| Overstaffed | Overstaffed/Understaffed/OK | No | No | Yes |
| Understaffed | Overstaffed/Understaffed/OK | Yes | Yes | No |
| Understaffed | Overstaffed/OK | No | Yes | No |
| Understaffed | Understaffed | No | Yes** | No |
| OK | Overstaffed/OK | Yes | No | No |
| OK | Understaffed | Yes | Yes | No |
| OK | Overstaffed/Understaffed/OK | No | No | No |

* The relevant skill refers to:

- When picking shifts: the employee has a skill that, if scheduled, will help avoid understaffing in that particular skill.
- When removing shifts: the employee has a skill that, if taken away, will result in new understaffing in that skill or make an existing skill understaffing worse.

** Only if the shift understaffing is greater than skill understaffing.

For more information, see ["Skill requirements" on page 136](#).



Required for Skill staffing: General setting DemandedDutySkillsHCrit. Contact your ORTEC representative when needed.

- **Skill understaffing:** use in the **Candidates for shifts** functionality in the **OWS** client plan board. This criterion helps the planner in round 3 of self-scheduling to select an appropriate employee for a shift. It shows whether or not the employee improves the missing skill requirement(s). For more information, see ["Candidates for shift" on page 145](#). Also see ["Skill requirements" on page 136](#).



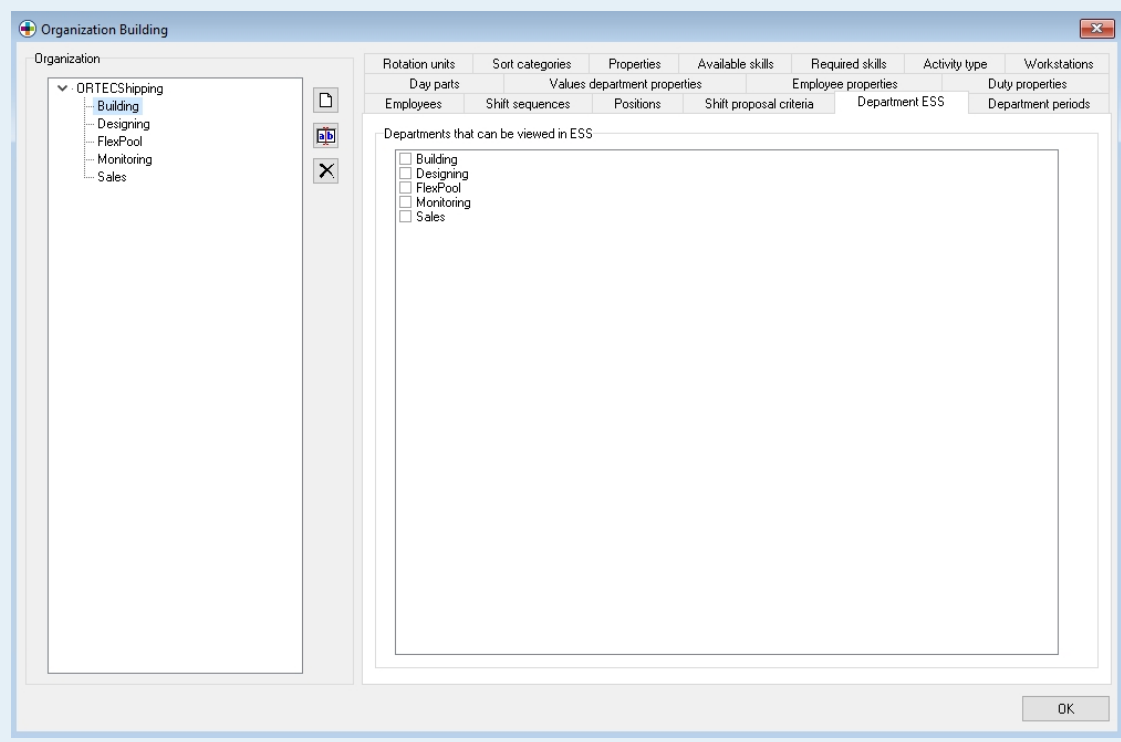
Required for Skill understaffing: General setting UnderstaffedSkillsHCrit. Contact your ORTEC representative when needed.

- **Wish to work:** “No” means that employees do not want to work and “yes” (or the priority of the request) that employees have indicated they do want to work. The priority is presented instead of “yes” if the option “Show the priority of the request” has been checked. If no request has been entered, a minus sign ‘-’ is shown. The actual request is presented in the hint text.

3.3.11 Departments ESS

In the **Departments ESS** tab, select additional department(s) that will be visible to employees in **ESS7**. Employees assigned to the original department can also see the Team Schedule and the Master Schedule report of these extra departments in the **ESS7** app.

Example
Departments ESS tab in the **Organization** window.



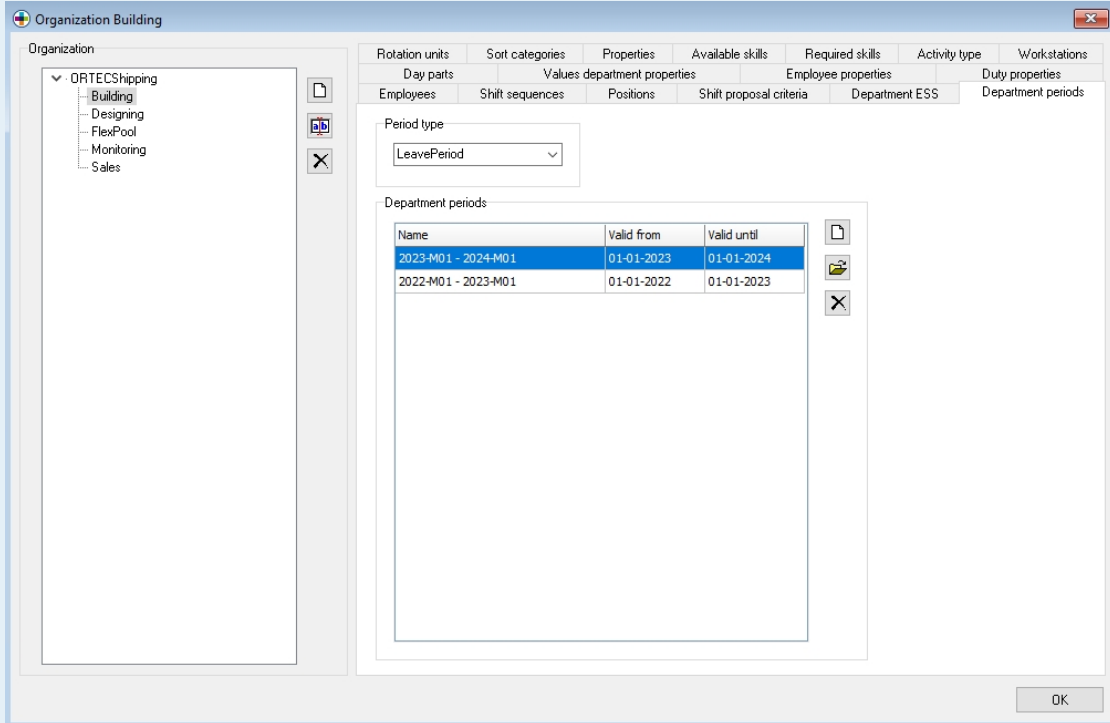
3.3.12 Department periods

Department periods are the periods in which period types are valid. Period types are used to define customer specific periods, besides salary periods and scheduling periods. Department periods can be used to check entitlements or balances per period type.



Example

Department periods tab in the **Organization** window.



Manage department periods

1. Go to **Maintenance > Organization**.
2. Select the department for which you want to define department periods.
3. Select the **Department periods** tab.
4. Select a **Period type** from the drop-down list.



The period types that you can select here are previously entered in the **Maintenance > Period types** window. For more information, see "[Period types](#)" on page 89.

5. To create a new department period, click the **New** button.
 - (Optional) Adjust the default **Name**.
 - (Optional) Adjust the **Period**; the **From** and **To** date.
 - Click **OK**.
6. To edit or delete a department period, select it and click either the **Open** or **Delete** button.



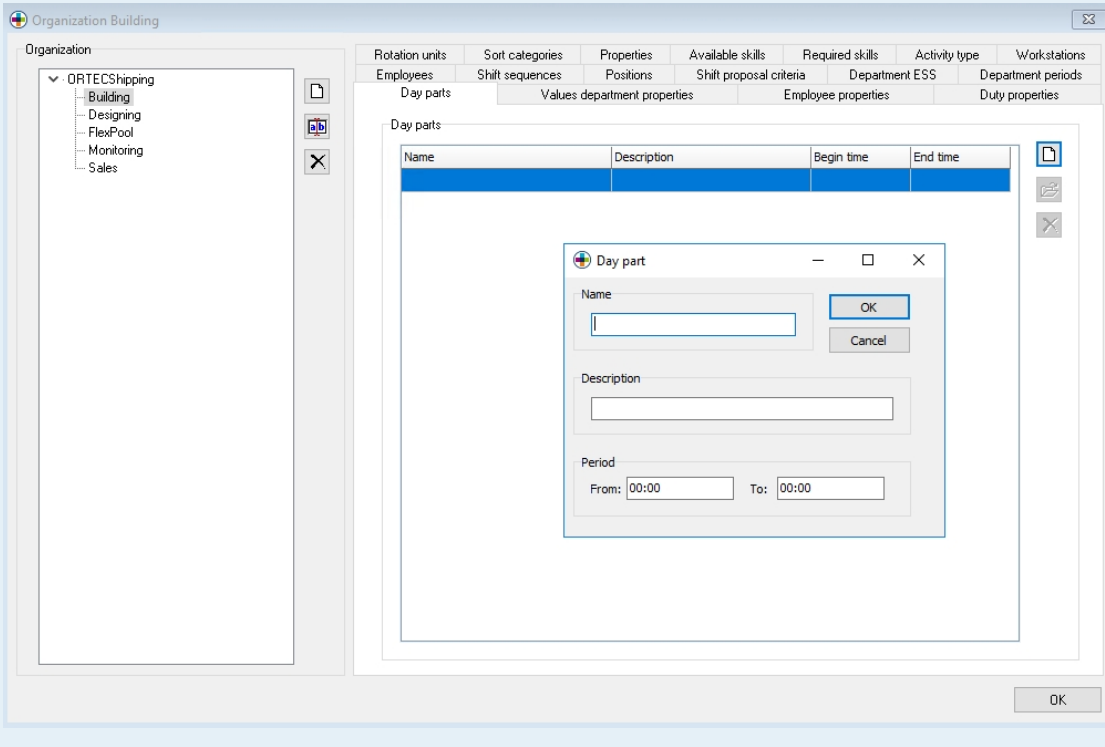
When setting up employee calculations, you can indicate the period to use when calculating the information. The department period is one of the available choices here.

3.3.13 Day parts

Day parts are used to define time intervals on a day for a department, which can then be used in plan board filtering. By creating for example a day part that covers the nightly hours, you can

filter on employees that have a shift that overlaps with this day part.

Example
Day parts tab in the **Organization** window.



Manage day parts

1. Go to **Maintenance > Organization**.
2. Select the department you want to create day parts for.
3. Select the **Day parts** tab.
4. To create a new day part, click the **New** button.
 - Enter a **Name**.
 - (Optional) Enter a **Description**.
 - Define a **Period**.
 - Click **OK**.
5. To edit or delete a day part, select it and click either the **Open** or **Delete** button.

3.3.14 Department properties

Department properties are defined at the highest organization level and can be used for all underlying departments.

Example

Department properties can be used for a variety of purposes, for example to influence calculations or interfaces. They can also be used to add a name and phone number to an e-mail or text message.

1. Go to **Maintenance > Organization**.
2. Select the highest organization level in the left pane.
3. Select the **Department properties** tab.
4. To add a new department property, click the **New** button.
 - Enter a **Name**.
 - Click **OK**.
 - Double click in either the **Property**, **Abbreviation**, or **Default value** cell to make changes. From the **Type** drop-down list you can select another type.
5. To create a new **Access Control** permission for this property, select the checkbox **Use read and write authorization to shield values for this feature**. Once created, you can set read and write permissions for this property in **Access Control**.
6. Per property, define the **Restrictions**. The restrictions determine the possible values for non Yes/No based properties.
 - **No restrictions**
All values are permitted.
 - **Values between n and n**
 - **Permitted values**
 - Click **Save**.
7. To edit or delete properties, select it and click either the **Open** or **Delete** button.

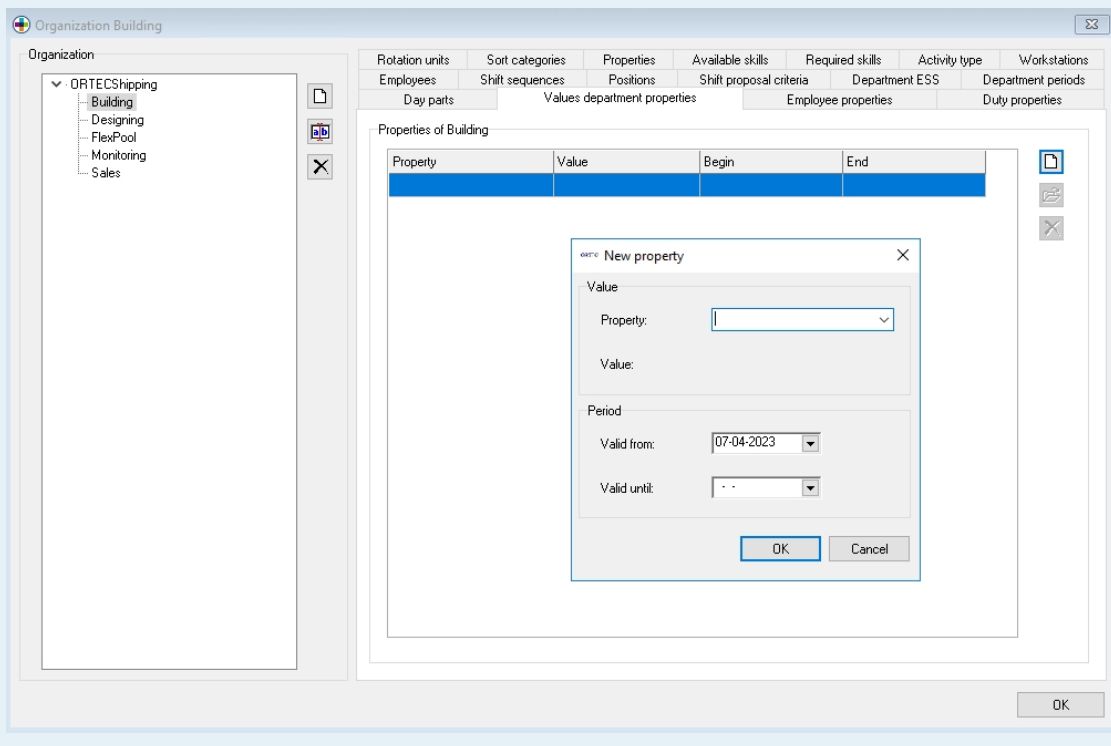
3.3.15 Values department properties

Add values to department properties to be used in, for example, e-mails or text messages.




Example

Value department properties tab in the **Organization** window.



Manage values department properties

1. Go to **Maintenance > Organization**.
2. Select the department you want add values of department properties to.
3. Select the **Values department properties** tab.
4. To create new values, click the **New** button.
 - From the **Property** drop-down list, select a property.

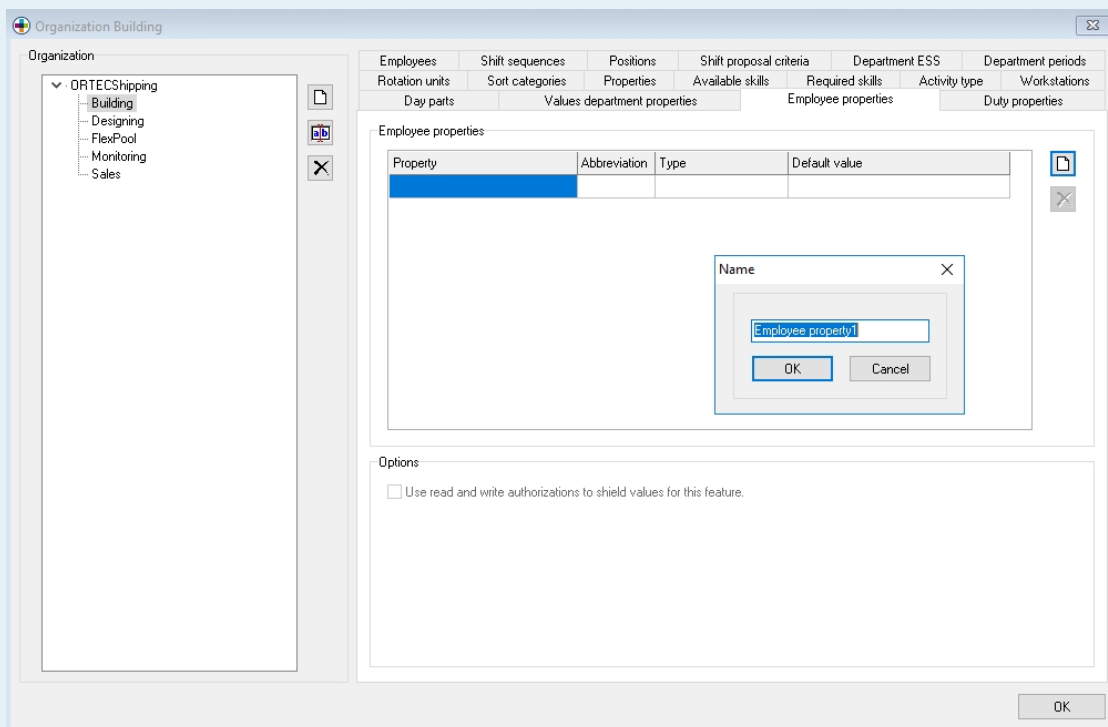
 The properties that you can select here are previously entered in "Department properties" on page 48.

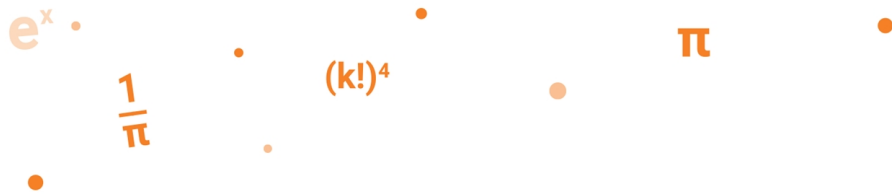
- Define a **Value**.
 - Define a **Period**.
 - Click **OK**.
5. To edit or delete values, select it and click either the **Open** or **Delete** button.

3.3.16 Employee properties

Employee properties can be used for a variety of purposes, for example to influence calculations or interfaces. For example, the employee property CostPerHour of type 'decimal number' with a default value of 12.5 can be used within a compensation rule.

Example Employee properties tab in the **Organization** window.





Manage employee properties

1. Go to **Maintenance > Organization**.
2. Select the department you want to add employee properties to.
3. Select the **Employee properties** tab.
4. To add a new employee property, click the **New** button.
 - Enter a **Name**.
 - Click **OK**.
 - Double click in either the **Property**, **Abbreviation**, or **Default value** cell to make changes. From the **Type** drop-down list you can select another type.
5. To create a new **Access Control** permission for this property, select the checkbox **Use read and write authorization to shield values for this feature**. Once created, you can set read and write permissions for this property in **Access Control**.
6. Per property, define the **Restrictions**. The restrictions determine the possible values for non Yes/No based properties.
 - **No restrictions**
All values are permitted.
 - **Values between n and n**
 - **Permitted values**
 - Click **Save**.
7. To edit or delete properties, select it and click either the **Open** or **Delete** button.

3.3.17 Duty properties

Duty properties define the character or duties. These properties are considered during calculations and the application of compensation rules.

Example

Create a 'car' duty property for duties that require employees to use a car. Then, for shifts that require a car, you can give employees compensation based on that duty property.

Duty properties tab.

| | | | | | | |
|----------------|------------------------------|------------|-------------------------|-----------------|--------------------|--------------|
| Rotation units | Sort categories | Properties | Available skills | Required skills | Activity type | Workstations |
| Employees | Shift sequences | Positions | Shift proposal criteria | Department ESS | Department periods | |
| Day parts | Values department properties | | Employee properties | | Duty properties | |

Duty properties

| Property | Abbreviation | Type | Default value |
|-----------------|--------------|------|---------------|
| Duty property 1 | | Text | |

Options

Use read and write authorizations to shield values for this feature.

Restrictions

No restriction Save

Values between and

Permitted Values

OK

Manage duty properties

1. Go to **Maintenance > Organization**.
2. In the left pane, select the department you want to associate duty properties with.
3. Select the **Duty properties** tab.
4. To add a new duty property, click on the **New** button.
 - Enter the **Name** of the new duty property and click **OK**.
5. Enter abbreviations to show in the master schedule. A display setting is available to show abbreviations of duty properties that have a value different from the default value in the master schedule, and are of type 'yes/no'.

Example

The **Extra Shift** duty property shows if a shift is not required. Its abbreviation is **Extra**. By default, it's set to **No**. If changed to **Yes** for a specific shift, it will display as **Extra** in the master schedule below the shift name (if the applicable display settings are configured to show this information).

6. Select the duty property type by clicking on the field below **Type**. Then select the appropriate type.

| Type |
|----------------|
| Text |
| Integer |
| Decimal number |
| Date |
| Text |
| Yes/No |
| Time |

7. Enter the **Default value** of the attribute. Text, decimals and integers can be typed in.



The default value of a decimal attribute must be a number with a decimal point (for example 2.75). **ORTEC WS** doesn't recognize a comma as a decimal separator character (as in 2,75).

- Dates may be typed in or entered using the calendar feature.
 - Time will be entered as separate values for minutes and hours.
8. To set which users are allowed to read and edit the values of a duty property:
 - First select the correct duty property
 - Then select the check box **Use read and write authorizations to shield values for this feature**
 9. Set the restrictions per duty property. Select the correct duty property and choose from:
 - **No restriction**
 - **Values between .. and ..**
To restrict the values that can be used, set the minimum and maximum values.
 - **Permitted Values**
To restrict the values that can be used, fill in the permitted values.
 - Click **Save**.
 10. Click **OK**.
The duty properties that you created are now available when defining a duty set via the **Planning > Schedule Management > Duty sets** tab. Open a duty set and select the **Duty properties** tab. For more information, see "[Duty properties](#)" on page 128.

3.4 Salary codes

Salary codes play an important role when it comes to employment rules. For example, a person's holiday entitlement is determined in part by their salary group.

3.4.1 Manage salary codes

1. Go to **Maintenance > Salary code**.
2. Click the **New** button.
3. Enter a **Name** for the new salary code.
4. Click **OK**.
5. Enter a **Description** of the salary code.
6. Enter a **Code**.
7. Click the **OK** button. The salary code has now been created.



Created salary codes can be entered on:

- the **Employee > Employee management > Employment conditions** tab, when managing employment conditions groups. For more information, see "[Employment conditions](#)" on page 54.
- the **Planning > Schedule management > Duty sets** tab. When managing a duty set, the salary code can be set per duty on the **Description** tab. For more information, see "[Manage duties](#)" on page 122.

3.5 Employment conditions

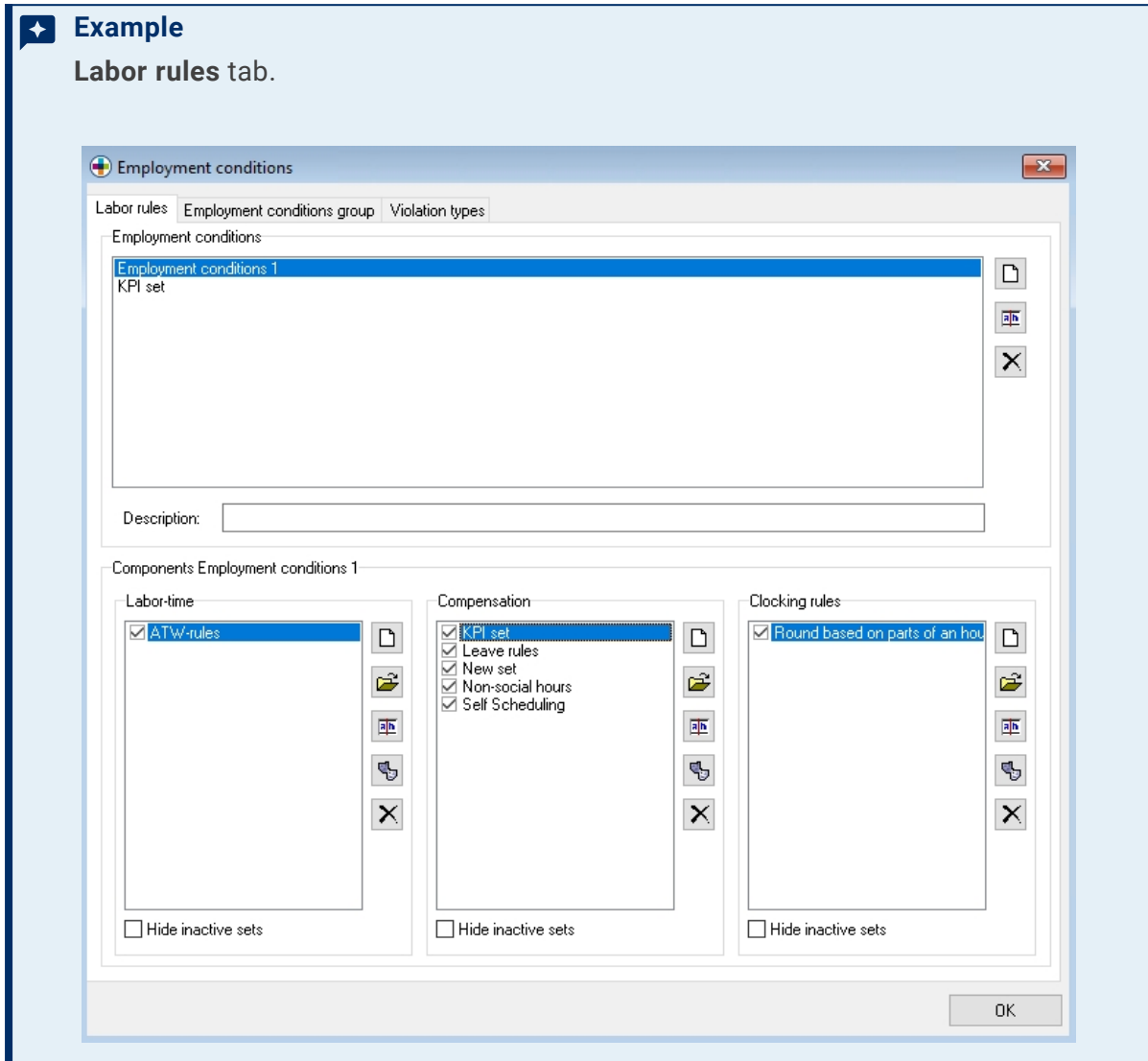
Scheduling involves adhering to regulations for when and how employees can work. Grouped employment conditions can have a specific start and end date. An employment condition group can then be assigned to an individual employee, allowing the system to determine which rules apply to them.

3.5.1 Setting up employment conditions

1. "[Add Labor-time / Compensation / Clocking rules sets](#)" on page 55.
2. "[Define the rules within the rules sets](#)" on page 55.
3. "[Compile employment conditions sets](#)" on page 56.
4. "[Create employment conditions groups](#)" on page 56.

3.5.2 Add Labor-time / Compensation / Clocking rules sets

1. Go to **Maintenance > Employment conditions**.
2. Select the **Labor rules** tab.



3. Click on the **New** button in either the **Labor time**, **Compensation** or **Clocking rules** section.
4. Enter a **Name** for the new rule set.
5. (Optional) To copy an existing rule set, select a rule set from the **Copy of** drop-down list. To view only active rule sets, click the checkbox **Hide inactive sets**.
6. Click **OK**.
A new rule set is created.

3.5.3 Define the rules within the rules sets

Labor-time rules

Regulations controlling the number of hours employees work, primarily based on the Working Hours Act and Collective Labor Agreement. For more information on defining the labor rules, see "[Labor-time rules](#)" on page 62.

Compensation rules

Regulations used to determine pay and benefits, such as leave entitlements, and allowances like unsocial hours allowance.

Clocking rules

3.5.4 Compile employment conditions sets

1. Go to **Maintenance > Employment conditions**.
2. In the **Employment conditions** section, click **New** button.
3. In the **New Employment conditions** window, enter a **Name** for the new employment conditions set.
4. (Optional) To copy an existing set, select a set from the **Copy of** drop-down list.
5. Click **OK**.
6. In the list of **Labor-time** sets, select the checkbox next to the rule set(s) that you want included in the employment condition set.
7. In the list of **Compensation** sets, select the checkbox next to the rule set(s) that you want included in the employment condition set.
8. In the list of **Clocking rules** sets, select the checkbox next to the rule set(s) that you want included in the employment condition set.
9. (Optional) Enter a description of the employment condition set.

An employment conditions set has been compiled. You can now create employment conditions groups.



You can compile multiple employment conditions sets. You might, for example, have a rule set covering unsocial hours compensation and a rule set governing leave entitlement.

3.5.5 Create employment conditions groups

When working, an employee is governed by the rules associated with the employment conditions group to which he belongs. Rules are assigned to an employment conditions group for specified periods of time.



The employment conditions group to which an individual belongs is indicated on the **Employee > Employee management > Employment conditions** tab.

1. Go to **Maintenance > Employment conditions**.
2. Click on the **Employment conditions group** tab.

Example
Employment conditions tab.

| Employment conditions | From | To |
|-------------------------|------------|----|
| Employment conditions 1 | 09-05-2022 | |

3. Click on the **New** button.
4. In the **New employment conditions group** window, enter a **Name**.




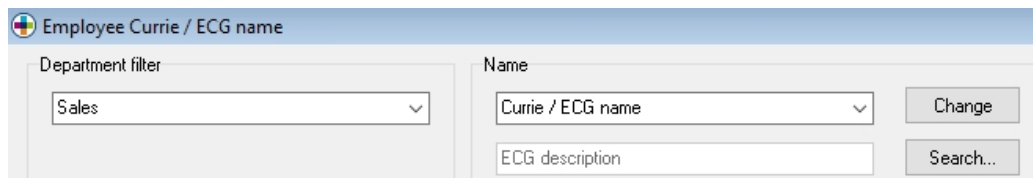
With setting `UseEmploymentTermsInEmployeeDisplayName` enabled, this name is shown in the **Name** field on the **Employee > Employee management** window.

| Department filter | Name |
|-------------------|-------------------|
| Sales | Currie / ECG name |

5. (Optional) To copy an existing group, select a group from the **Copy of** drop-down list.
6. Click **OK**.


- (Optional) Enter a **Description** of the employment conditions group.

 With setting UseEmploymentTermsWithNameInEmployeeForm enabled, this description is shown beneath the **Name** field on the **Employee > Employee management** window.




The screenshot shows a window titled "Employee Currie / ECG name". It has two main sections: "Department filter" with a dropdown menu set to "Sales", and "Name" with a dropdown menu set to "Currie / ECG name" and a "Change" button. Below the "Name" section is an "ECG description" text input field and a "Search..." button.

- (Optional) Enter a **Code**.


 A code is used to exchange the information defined here with an external system.

- In the **Employment conditions [group name]** section, select the employment conditions set to be associated with the employment conditions group.

 An employment conditions group may be associated with only one set of employment conditions.

The employment condition sets available for selection are those previously compiled. For more information, see "[Compile employment conditions sets](#)" on page 56.

- Enter in the **From** field a starting date and (optional) in the **To** field an end date for the association.
- (Obsolete) The checkbox **Automatic salary processing** is deprecated and can be ignored.
- (Obsolete) The checkbox **Hourly-paid workers** is deprecated and can be ignored.
- (Optional) Use the down-arrow in the **Use as default** field to pull down a list of employment conditions groups and select the group that you want to be used as a default whenever an individual hasn't been assigned to any other group. This makes sure that everyone is governed by a set of rules.

 You aren't allowed to select as your default employment conditions group a group associated with a set of employment rules that includes compensation rules.

The employment conditions group is created.

3.5.6 Violation types

Violations occur when there is a deviation from the established policies, regulations, or agreements related to scheduling employees.

Add violation types

1. Go to **Maintenance > Employment conditions**.
2. Click on the **Violation types** tab.

Example
Violation types tab.

The screenshot shows the 'Employment conditions' dialog box with the 'Violation types' tab selected. The 'Violation types' list contains 'Kwalificaties', 'Regelgeving', 'Eisen', and 'Wensen'. The 'Violation type properties' section for 'Kwalificaties' includes:


- Abbreviation: K
- Description: Kwalificaties
- Color: Blue
- Authorization is required to allow violations of this type.

 The 'Standard violation type' dropdowns are:


- Standard violation type for rules: Regelgeving
- Standard violation type for skills: Kwalificaties
- Standard violation type for requests: Wensen
- Standard violation type for requirements: Eisen

 An 'OK' button is located at the bottom right of the dialog.

3. Click on the **New** button.
4. Enter a **Name**.
5. Click **OK**.
6. Enter the **Abbreviation**. This will be shown on the plan board, in the column header where the number of violations per type is shown.
7. Enter a **Description** of the violation type. This will be shown in the main window and in the hint text on the plan board.
8. Choose a **Color** for the violation type. This will be shown on the plan board, at the cell where the number of violations per type is shown.
9. To enable authorization for a particular violation type, select the checkbox **Authorization is required to allow violations of this type**. Make sure the application manager grants the appropriate rights.

 When planning activities, a planner may need to intentionally violate rules or requirements. If a user isn't authorized for a specific violation type, any action that would result in that violation will be automatically undone, and the user will be shown a message.

10. Repeat step 3 to 9 to add multiple violation types. Order them with the arrow button. This order is reflected on the plan board.
11. Select the standard violation types per kind of violation.

 Standard (default) violation types are useful when you're unsure which violation type applies to a specific rule or skill you assigned. The '(Default)' command means the standard violation type and will always be the right one. For every rule or skill you can choose the default type or select another type.

Four kinds of violations are shown in the **Violations** grid on the plan board:

- **Rule violations:** per rule multiple violation types are possible.

 **Example**

The rule 'walk in the hallway' can be violated by running, jumping, or crawling in the hallway.

- **Skill violations:** per skill multiple violation types are possible.

 **Example**

The skill 'playing basketball' can be violated by double dribbling, traveling, or fouling.

- **Request violations:** per request only one violation type is possible.

 **Example**

The request to fill out a form is violated by not filling out the form.

- **Requirement violations:** per requirement only one violation type is possible.

 **Example**

The requirement to wear a helmet is violated by not wearing a helmet.

12. Click **OK**.

e^x

$\frac{1}{\pi}$

$(k!)^4$

π



The amount of violations is shown in the **Violations** grid on the plan board as a number in the column related to the specific violation type.

| Violations | | | | |
|------------|---|---|---|--|
| R | L | S | R | |
| 9 | 4 | | | |

Delete violation types

1. Go to **Maintenance > Employment conditions**.
2. Click on the **Violation types** tab.
3. Select a violation type.
4. Click the **Delete** button.



Deleting a violation type isn't possible if it's connected to a rule, or is assigned as default violation type.

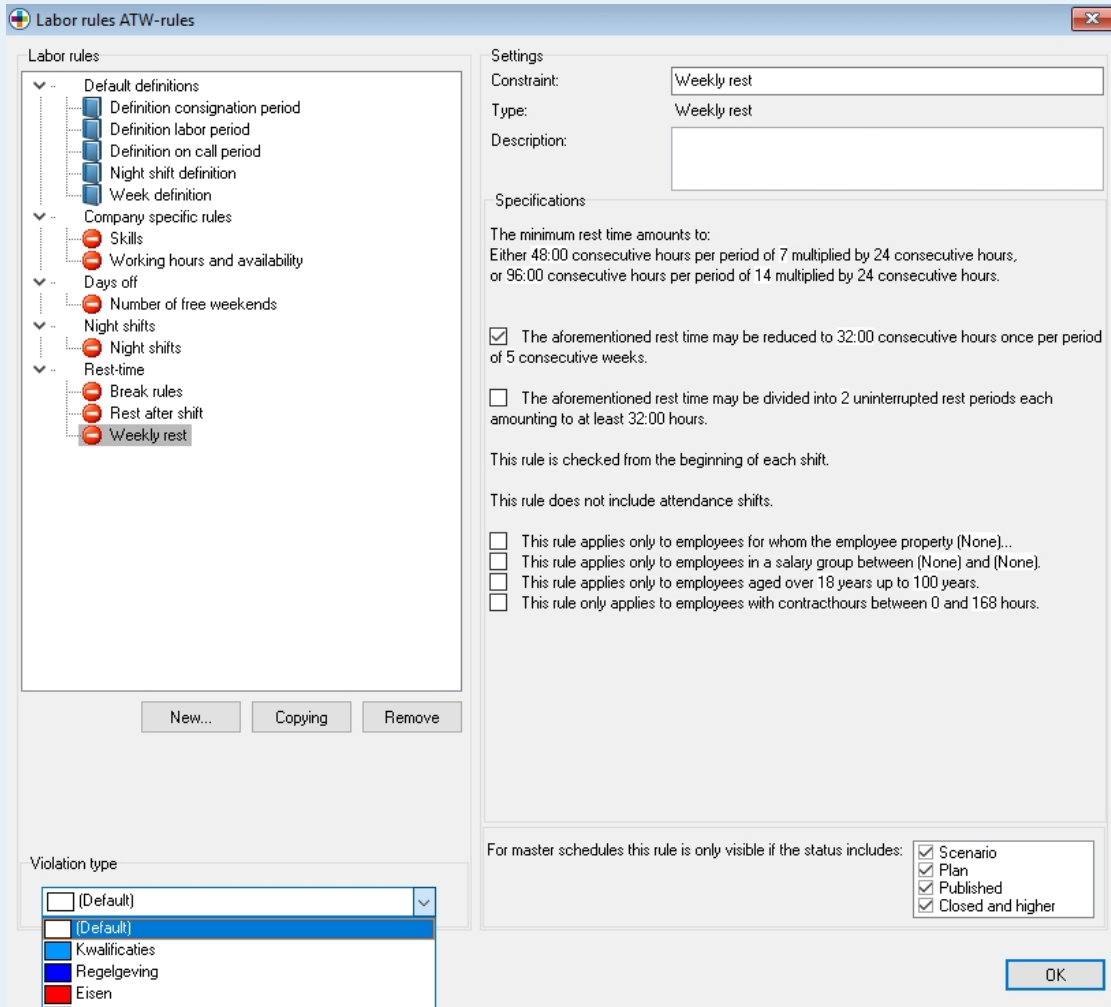
Connecting violations to violation types

Rules

Specify for every rule to what type a violation is belonging in the **Violation type** field. The '(Default)' command means the standard violation type that was selected for rules when adding/editing violation types.

Example

Define the violation type in the bottom-left **Violation type** field.



Skills

For every skill you assign the proper violation type. This is done on the **Maintenance > Organization > Available skills** tab. The '(Default)' command means the standard violation type that was selected for skills when adding/editing violation types.

3.5.7 Labor-time rules

Most of the available rules are specifically designed to reflect Dutch legislation or a particular Collective Labor Agreement. In most cases, the only possible parameters are:

- Number (shifts, weeks, hours: minutes)
- Types (Consignment, Picket, Attendance)

You can often select and define one of the following checkboxes:

- This rule applies only to employees for whom the employee property [None]...
- This rule applies only to employees in a salary group between [None] and [None].
- This rule applies only to employees aged over 18 years up to 100 years.
- This rule applies only to employees with contract hours from 0:00 up to 48:00 hours.

For some rules it's possible to define which shifts the rule must take into account, such as (all) shifts, night shifts semi-night shifts.



Use **Ctrl+F** to search for a specific rule in this document.

Working hours per period (general)

The maximum labor-hours is average per week 40:00 hours in a period of 13 succeeding weeks.

Number of on call shifts

Maximum 26 shifts of type Consignation in each 13 weeks period.



A week runs from Monday to Sunday.

Number of on call shifts with exceptions

Shifts of type Consignation : maximal frequency is 3 per 1 weeks period

This maximum can be enlarged to 4 once during 6 weeks per 52 weeks period, provided that following these presence shifts the employee will have a rest period equal in length.



A week runs from Monday to Sunday.

Number of duties that exceed the required amount


In a rotation, a duty may not be assigned more often than the number given by the demands.



Applicable only in connection with cyclic rosters.


Nof shifts in a period

At most 25 shifts per 13 weeks' period.

 This rule counts all shifts, including free-time shifts. If you don't want free-time shifts included, it is better to use the rule 'Number of work shifts'. A week runs from Monday to Sunday.

Nof shifts on a day


The maximum number of shifts that begin on the same day is 1.

 The rule counts only the number of work shifts; free-time shifts and consignment shifts are not counted.

Number of night shifts


Whenever some night shifts end after 2:00, the maximal number of night shifts is 25 per period of 13 consecutive weeks.

or the number of work hours between 0:00 and 6:00 hours does not exceed 20:00 hours per period of 2 weeks.

 The rule 'Night shift definition' is used to define the nightshifts. A week runs from Monday to Sunday.

Number of night shifts; deduction for lost days


At most 7 night shifts per 30 days.
This number can be reduced by 1 for each 6 days that were lost by sick leave or vacation.

 The rule 'Night shift definition' is used to define the nightshifts.

Number of semi night shifts


Whenever all night shifts dont finish after 2:00, the night shift frequency may not exceed 25 per 13 of consecutive weeks.

or the number of work hours between 0:00 and 6:00 hours does not exceed 20:00 hours per period of 2 weeks.

 The rule 'Night shift definition' is used to define the night shifts; a semi night shift is a special night shift. A week runs from Monday to Sunday.


Number of night shifts series

The maximum number of night series is 3 per 13 calendar weeks.

 The rule 'Night shift definition' is used to define the night shifts. An isolated night shift is treated as a series (i.e. minimum shift-series length is 1). A week runs from Monday to Sunday.


Number of extended shifts

At most 26 extended shifts in each period of 13 weeks.

 The rule applies to shifts where the working time is more than the original working time. This rule is checked by the Optimizer. A week runs from Monday to Sunday.


Number of relief day shifts

A master schedule of 4 weeks should contain at least 8 day-off days. This period should contain at least 2 series of at least 2 consecutive day-off days.

 Counts the number of relief days. Only shifts of the type 'Free time' (or a variant) can be scheduled on a relief day. The amount of rest on a relief day has to be at least the amount defined in the rule 'Minimum rest time during relief day'. If this rule does not apply to an employee, the default number of hours is twenty-four.

Number of free days on a weekday

The number of days off on Sunday between 6:00 and 0:00 in a period of 13 is at least 4.

 A week runs from Monday to Sunday.

Number of free weekends

At least 2 weekends off duty per 4 weeks period; a weekend off duty lasts 60:00 hours, enclosing Saturday 0:00 to Monday 4:00.

Also valid for on-call shifts


Number of working shifts

The maximum number of work shifts per 13 week(s) is 25.

 A week runs from Monday to Sunday.

Labor time per period (night/on call)

The maximum labour-time per week is on average 45:00 hours per period of 13 consecutive weeks, if this period includes Consignation (excluding night).

 A week runs from Monday to Sunday.

Labor time per period (day)

The maximum labour-time per week is on average 40:00 hours per period of 13 consecutive weeks, if this period does not include work during night shifts.

 A week runs from Monday to Sunday.


Labor time per period (night)

The maximum labour-time per week is on average 40:00 hours per period of 13 consecutive weeks, if this period includes work during night shifts.

 A week runs from Monday to Sunday.

Availability for a shift

An employee has to be available for a shift.

 Does not apply to cyclic rosters. This rule checks whether the employee is available to the department during the shift interval.

On call before or after a night shift

No shifts of type `Consignation` in any period between 8:00 before a night shift and 8:00 after this night shift.

On call before or after a work shift

No shifts of type `Consignation` in any period between 8:00 hour(s) before a shift and 8:00 hour(s) after a shift.

Period without on call

For each period of 4 weeks at least 2 periods of at least 168:00 hours without shifts with type `Consignation`



A week runs from Monday to Sunday.

Period without on call, but with picket

In case of a picket duty:

For each period of 13 weeks at least 8 period(s) of at least 168:00 hour(s) without shifts of activity kind `Consignation`



This rule is applied if any shift involves picket duty. A week runs from Monday to Sunday.

Break per period

Between Monday 0:00 and Monday 0:00, there must be an uninterrupted break of at least 36:00 hours.

In the event that the first or last day of the period is a day-off, this rule also takes into account the break time that falls outside of the period on the days either side of this day-off.

Daily rest time

Resting time is at least 11:00 consecutive hours during a period of at least 24 consecutive hours.

An exception is permitted: once in a period of 7 times 24 consecutive hours this resting time may be reduced to at least 8:00 hours.

Night shift definition

A shift is a night shift only if a part of it will be between 0:00 and 6:00.



A night shift is a shift that involves work during the night interval. The default definition of the night interval is from 0:00 hours to 6:00 hours, but this rule can be used to apply an alternative definition. Only one night shift definition can be introduced for each employee (otherwise it would not be clear which should be followed).

Day-off definition

If on a day there is a shift which completely exist of the activity kind Day-off, WTR the following rules apply:
There starts no other shift on or after 0:00 hours of this day and before 0:00 hours the next day. The consecutive rest time counts at least 24:00 hours.

In case of a night shift the consecutive rest time counts at least 32:00 hours.

Definition vacation day

If on one day there is a shift which completely consists of activity kind leave-of-absence (no labour), Special leave the following rules apply:
The consecutive rest time counts at least 32:00. This rest time falls for minimum 16:00 hours on one day. The minimum total rest time for each of the following shifts consisting of the same activity types is increased by 24:00 hours.

The employee finishes work not later than 0:00 o'clock on the previous day and starts not earlier than 0:00 o'clock on this day.

Duration of a day shift

Labour-time per shift is at most 8:00 hours.



This rule can be used in the context of a work agreement, so that employees who only work four hours a day are not assigned to eight-hour shifts.

Duration of a night shift

Labour-time per night shift is at most 8:00 hours.

No shift during leave

A day of leave should at least include a minimum of 24:00 hours between 0:00 hours before the begin and 0:00 hours after the end of that day of leave.



This rule ensures that no non-leave shifts are scheduled on either side of a leave shift, for at least the specified minimum numbers of hours within the specified interval.

Broken duty: Number of interruptions

If a shift contains at least 1:00 hours with activities with activity kind(s)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (no |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> leave-of-absence (no la | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

, there may be no more than 2 interruptions of that kind.

Broken duty: Maximum length

If a shift contains at least 1:00 hours with activities with activity kind(s)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (no |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> leave-of-absence (no la | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

, there be no more than 12:00 hours between the start and the end of the shift.

Broken duty: Maximum working hours

If a shift contains at least 1:00 hours with activities with activity kind(s)

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (no |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> leave-of-absence (no la | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

, the working hours of the shift may be no more than 10:00 hours.

Broken duty: Minimum working hours

When a shift contains an interruption of over 1:00 hour consisting of activity kind(s)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (n |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> leave-of-absence (no le | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

, the hours worked of at least one of the parts of the shift must be 3:00 hour or more.

Skills

Employees need to be qualified for their shifts.

Show only the total number of qualification violations in the planboard.



This rule is checked by the Optimizer, whether the rule has been activated or not.

Duration of on call period

Maximum 168:00 continuous hour(s) of shifts with activity class On call.

Maximum number of hours work per day

The maximum number of hours labour-time per day is 12:00



The total number of Labour-time per calendar day is computed.

Maximum labor time of shifts

Maximum working time per day shift is 8:30 hours.
Maximum working time per night shift is 8:00 hours.
However, shifts that begin between 4:00 and 5:00, should not exceed 7:30 hours.
These rules are allowed to be ignored for 12 times per calendar year: in these cases the maximal working time is 9:00 hours.

Maximum labor time based on account balance

The total labour-time can not be higher than the balance on account (None), category (All).

Maximum labor time per shift with exceptions

The maximum number of working hours per day shift is 10:00 hours.
The maximum number of working hours per night shift is 9:00 hours.
On Saturdays, Sundays and Public holidays the maximum is 12:00 for day shifts and 12:00 for night shifts.

Minimum labor time of shifts

Minimum working time per day shift is 5:00 hours.
Minimum working time per night shift is 5:00 hours.
However, the minimum working time for shifts that begin between 0:00 and 0:00 is 24:00 hours.
These rules may be ignored for 12 hours per calendar year: then the minimum working time is 4:00 hours.

Minimum rest time during relief day

A relief day that has been planned in a schedule between two shifts requires a resting time of at least 24:00 hours.



This rule provides a definition for a relief day (also known as a free day) in the context of the rule 'Number of free days'.

Minimum period of rest after working period

The minimum period of rest after working period of either 5 days or 60:00 hours of labor, needs to be 36:00 hours

- , unless followed by a break of 0 days
- A working day is a day which contains a minimum of 0:00 hours of labor (no rest).
- A working period consists of a series of shifts where the period of rest between the shifts is less than 24:00 hours.

Maximum labor time based on account balance

The total labour-time can not be higher than the balance on account (None), category (All).

Maximum labor time per shift with exceptions

The maximum number of working hours per day shift is 10:00 hours.
 The maximum number of working hours per night shift is 9:00 hours.
 On Saturdays, Sundays and Public holidays the maximum is 12:00 for day shifts and 12:00 for night shifts.

Minimum labor time of shifts

Minimum working time per day shift is 5:00 hours.
 Minimum working time per night shift is 5:00 hours.
 However, the minimum working time for shifts that begin between 0:00 and 0:00 is 24:00 hours.
 These rules may be ignored for 12 hours per calendar year: then the minimum working time is 4:00 hours.

Minimum rest time during relief day

A relief day that has been planned in a schedule between two shifts requires a resting time of at least 24:00 hours.



This rule provides a definition for a relief day (also known as a free day) in the context of the rule 'Number of free days'.

Minimum period of rest after working period

The minimum period of rest after working period of either 6 days or 60:00 hours of labor, needs to be 36:00 hours

, unless followed by a break of 0 days

A working day is a day which contains a minimum of 0:00 hours of labor (no rest).

A working period consists of a series of shifts where the period of rest between the shifts is less than 24:00 hours.

Minimum rest time for a series of relief day shifts

One relief day should have a length of at least 36:00 hours.
 Two relief days should have a length of at least 54:00 hours.
 For each additional relief day, the minimum total rest time is increased by 24 hours.

This rule is valid if one or both of the surrounding shifts overlap with the calendar day of the relief day.


Minimum rest time

The minimum required rest time is either 0:45 hours after 4:30 hours of working time or at least 3 periods of 0:15 hours per 5:15 hours. The following activity classes count as working hours:

- | | | |
|--|---|--|
| <input type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (no pay) |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> leave-of-absence (no pay) | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

Early shift after night shift

A night shift followed by an early shift demands a rest period of 72:00 without interruption. A shift is an early shift only if it begins before 12:00


 Can usually be covered using 'Rest after a night shift series'.

Violation of duty times based on duty properties

If a shift with property (None) is assigned at publication of the schedule or later on, this shift cannot be extended outside originally scheduled times.

Day-off after availability shift

An rest day should be followed by a relief day

 A rest shift is a shift whose type is defined as 'rest'. The times specified in the rule 'Minimum rest time during relief day' are used for the day off.

Rest after shift

During 24 consecutive hours at least 11:00 hours of rest is required without interruption.

A night shift that ends after 2:00 has to be followed by at least 14:00 hours' rest without interruption.

An exception to this minimum rest requirement is permitted: once in a period of 7 times 24 consecutive hours the resting time may be reduced to at least 8:00 hours.

Rest after shift, two exceptions

During 24 consecutive hours at least 11:00 hours of rest is required without interruption. A night shift that ends after 2:00 has to be followed by at least 14:00 hours rest without interruption. Two exceptions to this minimal rest requirement are permitted:
(1) once in a period of 7 times 24 consecutive hours the resting time may be reduced to at least 8:00 hours
(2) once in the same period the resting time is allowed to be reduced to 10:00 hours.

Rest after shift series

Following a series of at least 3 consecutive shifts a 48:00 hours' rest is required without interruption.

Rest after night shift series

Following a series of at least 3 consecutive night shifts a 48:00 hours' rest is required without interruption.

Rest on days off

A relief day planned in a schedule between two shifts requires at least 30:00 hours of rest without interruption. Two or more days off in succession count for 24:00 hours each.

Work relation

A student has to cooperate with their instructor.



For each student or trainee, the entire roster period is checked to establish whether the minimum overlap percentage exists between his/her Labor-time and those of one or more of his/her supervisors. If the minimum is not reached, a violation is generated. This rule is not checked by the schedule Optimizer.

Shift series


The number of consecutive shifts is at most 6.



Shifts belong to a series if the start times of two consecutive shifts are not more than 32 hour apart. This rule is concerned only with work shifts.

Night shift series

If some night shifts end after 2:00, then the maximal number of night shifts in succession is 6.

 The rule 'Nightshift definition' is used to define the nightshifts.


Semi night shift series

If all night shifts do not finish after 2:00, then the number of night shifts in succession has to be at most 6.

 The rule 'Night shift definition' is used to define the semi night shifts.

Series of leave days


A series of day of leave is always preceded by at least 1 day-off days and is always followed by a at least 1 day-off days.
A series of days of leave consist of at least 5 days of leave.

 A relief day (rest day) is defined on the basis of the rule 'Minimum rest time during relief day'.

Rest day after night shift series

No work should be planned after a series of night shifts for 0:00 hours.

On this day a recovery day has to be planned.

 If the box in the above window is ticked, at the end of the generation process the Optimizer rosters a rest shift after each nightshift series.

Activity classes not allowed

Activities with the activity kinds

- | | | |
|--|---|--|
| <input type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (n |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> leave-of-absence (no la | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

are not allowed.

Activity classes not allowed during sick leave

Activities with the activity kinds

| | | |
|--|---|--|
| <input type="checkbox"/> Break | <input type="checkbox"/> Overtime | <input type="checkbox"/> Sick leave (no labor) |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Overtime (for free time) | <input type="checkbox"/> Spare |
| <input type="checkbox"/> Consignation | <input type="checkbox"/> Overtime (for money) | <input type="checkbox"/> Special leave |
| <input type="checkbox"/> Day-off | <input type="checkbox"/> Picket | <input type="checkbox"/> Training |
| <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Presence | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> Leave-of-absence (no labor) | <input type="checkbox"/> Rest | <input type="checkbox"/> Work |
| <input type="checkbox"/> Operational | <input type="checkbox"/> Sick leave | <input type="checkbox"/> WTR |

are not allowed.

Applies when an employee is marked off ill.

Remark: this rule doesn't apply if 'work therapy' or 'limited work proposal' is indicated for this mark off.

Time worked per period

The maximum time worked is average per week 56:00 hours in a period of 1 consecutive weeks.

Count the following activities as time worked for this rule: classes

| | | |
|--|---|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

< [III] >

Preferred workstations and locations with percentage

If a preferred location of 0 % is indicated for an employee then the employee is not allowed to work at this location.

Forward rotation

The time between the starting times of two consecutive shifts is at least 24:00.

Weekly rest

Weekly rest is at least:


Either 36:00 hours of rest per period of 7 times 24 hours, or 60:00 hours of rest per period of 9 times 24 hours.

An exception is permitted: the last mentioned rest may be reduced to 32:00 hours, once per period of 5 hours.

Working hours and availability

An employee is not allowed to exceed the number of hours for which he/she is available for her/his department during any schedule period by 0:00 hours.

Complete full weeks based on previous schedule.

 An employee's availability to the department (reference date: first day of the roster period) is calculated for the entire roster period, unfortunately as yet without correction for weekends. The amount of working time spent in the relevant department must not exceed the availability by more than the specified number of hours.

NB.: Suppose that the roster period is a month, and the employee works 36 hours a week. The employee is therefore available $31 * 36/7 = 159.4$ hours, or for 19.92 eight-hour shifts. If it were not possible to exceed the employee's availability, he or she would be assigned shifts totaling more than seven hours a month too few. It is therefore necessary to define a permissible excess of, say, four hours.

Check on workstation validity period

An employee may not be scheduled on a workstation outside the effective period of the workstation.

Check shift times with time window

The working time of a shift must take place within the boundaries of a time window
 This rule only applies to activities with classes

| | | |
|---|---|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input checked="" type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

Only execute this check for the period that time windows are published for the relevant employee.

Days without kind in period

Per period of 8 days, at least 1 days without the following kinds:

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input checked="" type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input checked="" type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input checked="" type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

This rule includes the complete shift on the start date.

Disturbance type not permitted

The disturbance type `{None}` may not be applied to activity types `{None}`

Duration of activity

An activity of the

| | | |
|--|---|---|
| <input type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Overtime (for free time) |

kind has a minimum duration of 0:15 hours and a maximum duration of 24:00 hours.

Duty properties of consecutive shifts equal

The value of duty property `{None}` for a shift must be equal to the value of duty property `{None}` for the previous shift.
This rule is only valid if the two shifts are less than 12:00 hours apart.

Duty property equals employee property

The value of duty property `{None}` for a shift must be equal to the value of employee property `{None}`.

This rule is only valid for shifts starting more than 12:00 hours after the previous shift.

This rule is only valid in case the duty property of the shift does not have the default value.

This rule is not supported in cyclical schedules.

Forbidden department

An employee may not work a shift for a forbidden department.

Labor time in salary period

The maximum labor time per salary period is 152:00 hours.

This rule includes the complete shift on the start date.

Labor time per day for specified kind

The labor time in every continuous period of 1 x 24 consecutive hours amounts to a maximum of 13:00 hours if this period contains one of the following shift kinds:

| | | |
|--|---|---|
| <input type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input checked="" type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Overtime (for free time) |

< ||| >

Labor time per period (day/on call)

The maximum labor time per week is on average 45:00 hours per period of 13 consecutive weeks, if this period includes On call (not during the night).

This rule includes attendance shifts.

Maximum difference between start and end time for a day

The difference between the start time for the first shift on a day and the end time for the last shift on the same day is a maximum 10:30.

This rule is only valid when the shifts on a day contain between 0:01 and 24:00 hours of classes:

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input checked="" type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input checked="" type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

< ||| >

This rule does not apply to availability assignments.

Maximum duration of shift with certain activity kind

The duration of a shift of which the spent time contains activities with activity kind

- | | | |
|--|---|---|
| <input type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input type="checkbox"/> Overtime (for free time) |

is at most 24:00 hours.

Maximum number of shifts with labor time per period

In a period of 3 weeks a maximum number of 9 shifts are allowed with more than 8:00 hours of labor time.

Maximum working time on an around public holidays

In the period between 0:00 for the start of the holiday and 0:00 after the end of the holiday, the working time amounts to a maximum 0:00 hours.

Minimum break time

The minimum break period within a shift is 0:45 hours after 4:30 hours of the selected activities. This break period may be split into a period of at least 0:15 hours followed by a period of at least 0:30 hours.

After meeting the break time demands, the remainder of the shift must also meet the break requirements.

Two consecutive shifts will be treated as one shift if the gap between them is no more than 0:45 hours. In this case the gap will be treated as break.

Take activities into account that contain classes

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

Minimum of rest after shift

A shift that contains 12:00 continuous hours of working time needs to be followed by at least 10:00 hours of rest.

This rule does not apply to availability assignments.

Minimum rest time after work at weekend

The minimum uninterrupted rest time following the end of working in the period between Friday 0:00 and Monday 0:00 is 0:00 hours.

Minimum rest time after work on public holidays

The minimum uninterrupted rest time following the end of working in the period between 0:00 hours before the start of the holiday and 0:00 hours after the end of the holiday is 0:00 hours.

Minimum time of activity class during shift

A minimum of 4:00 continuous hours of activity class Rest is required if the duration of a shift is 12:00 hours or more.

Minimum working hours of a shift

The hours worked of a shift must be at least 8:00 hour(s).

No kind in period

Per period of 28 x24 consecutive hours, at least 2 periods of 48:00 hours without the following kinds:

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input checked="" type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input checked="" type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input checked="" type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

< ||| >

Non acceptable (combination of) duties

It is not allowed to assign shifts with duty type(s) (None) and shifts with duty type(s) (None) in the same schedule.

Remark 1: Use a semicolon (;) to enter multiple duty types

Remark 2: If one of the parameters is blank, all duty types entered for the other parameter will be not acceptable in the schedule.

Number of free weekends based on days

At least 2 weekends off of 60:00 hours per 4 weeks, including Saturday 0:00 until Monday 4:00.

The rule is reset to zero after 3 consecutive weekends without shifts (no shifts start or end in the period concerned).

Also valid for on-call shifts

Only work in registered provinces

An employee is only allowed to work in a registered province. (Provincie 1, Provincie 2 of Provincie 3)

Position intersection

If the position of an activity equals (calculated), the intersection of the employee's positions and the positions of the activity's workstation should be exactly 1 position.

Rest after labor on Sunday

When working more than 4:00 hours on Sunday, there should be at least 35:00 hours of consecutive rest time within 155:00 hours after the last shift on the Sunday.
 When working 04:00 hours or less on Sunday, there should be at least 12:00 consecutive hours of rest time within 144:00 hours after the last shift on the Sunday. This rest time should be completely before or after 13:00 hours. It is not allowed to work more than 5:00 hours on the day of the rest period.

Rest after series of days with starting shifts

After the last shift with labor in a period of at least 6 and at most 14 consecutive days with labor shifts starting on each day there should be at least 24:00 hours of rest.

This rule applies only if a night shift starts on at least 1 of these days.

Rest after series of days with starting shifts

After the last shift with labor in a period of at least 6 and at most 14 consecutive days with labor shifts starting on each day there should be at least 24:00 hours of rest.

This rule applies only if a night shift starts on at least 1 of these days.

Rest days without starting shifts

After 14 days there should be at least 2 days without starting shifts with labor.

This does not apply when this period contains 2 days without a starting shift with labor and at least 1 of these days overlaps with a continuous period of rest of at least 24:00 hours.

Rest per number of hours

The minimum rest time is 11:00 consecutive hours in a period of 24:00 consecutive hours.

The minimum rest time in a period of 168:00 consecutive hours can be shortened:

- once to 8:00 hours
- once to 9:00 hours
- once to 10:00 hours

This rule does not apply to availability assignments.

Rest per number of hours labor period

This rule uses 'shifts' according to the labor period definition.

The minimum rest time is 11:00 consecutive hours in a period of 24:00 consecutive hours.

The minimum rest time in a period of 168:00 consecutive hours can be shortened:

- once to 8:00 hours
- once to 9:00 hours
- once to 10:00 hours
- This rule also applies to attendance shifts.

Rest per week for shift with certain activity kind

The minimum rest time in a consecutive time period of 7 times(multiplied by) 24 hours is at least 90:00 hours, if this period contains Presence.

The rest time needs include 1 period of at least 24:00 consecutive hours rest, as well as 6 periods of at least 11:00 consecutive hours rest. 6 rest times in each consecutive time period of 7 times 24 hours can be shortened to 8:00 hours once and to 10:00 hours once.

Shifts with property in period

Between Sunday 0:00 and Sunday 0:00, there must be at least 1 shifts with property (None) value (None) or 2 shifts with property (None) value (None).

Note: The automatic planner is not able to assign shifts to resources for whom this rule is valid.

- This rule includes the complete shift on the start date.

Time worked in between two rest periods

The maximum time worked is 9:00 hours in between two rest periods of at least 9:00 hours. This maximum can be increased to 10:00 hours at most 2 times a week. Check up to 2 days of history to search for the preceding rest period.

Count the following activities as time worked for this rule: classes

| | | |
|--|---|--|
| <input checked="" type="checkbox"/> Amplitude | <input type="checkbox"/> Day-off | <input type="checkbox"/> On call |
| <input type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> On call (no labor) |
| <input type="checkbox"/> Break | <input type="checkbox"/> Leave (no labor) | <input checked="" type="checkbox"/> Operational |
| <input type="checkbox"/> Compensated leave | <input type="checkbox"/> Leave (no work) | <input checked="" type="checkbox"/> Overtime |
| <input type="checkbox"/> Compensation day off | <input type="checkbox"/> Leave-of-absence | <input checked="" type="checkbox"/> Overtime (for free time) |

< ||| >

Week definition

The week starts on Monday at 0:00.

Weekly rest based on days

The minimum weekly rest time amounts to 36:00 consecutive hours in a period of 7 days starting on Monday.

It is allowed to use the first 6:00 hours of the following period to reach the required amount in this week. These hours can, however, only count as rest time in 1 period, not in both. Check this for a maximum of 4 weeks in the past.

The minimum weekly rest time must include a full calendar day. Note that it is not allowed to use a full calendar day of rest from the following period.

Rest day after labor on Sunday or public holiday

Each Sunday or public holiday is a day off. Whenever a Sunday is not a day off, a compensation day off must be had within 2 weeks. Whenever a public holiday is not a day off, a compensation day off must be had within 8 weeks.

A day off is defined as a full calendar day without activities, or only activities with class(es)

| | |
|---|---|
| <input type="checkbox"/> Amplitude | <input checked="" type="checkbox"/> Consignation (no labor) |
| <input checked="" type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Day-off |
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Education |
| <input checked="" type="checkbox"/> Compensated leave | <input checked="" type="checkbox"/> Leave (no labor) |
| <input checked="" type="checkbox"/> Compensation day off | <input checked="" type="checkbox"/> Leave (no work) |

Note: when looking for compensation days off, the rule looks back no further than 16 weeks. This rule cannot be calculated in a cyclical schedule.

The day off on a Sunday or public holiday must either follow a rest of at least 11 hours or be followed by a rest of at least 11 hours. For the compensation day off the same must hold. In the rest of at least 11 hours no activity should be planned or only one or more activities with class(es)

| | |
|---|---|
| <input type="checkbox"/> Amplitude | <input checked="" type="checkbox"/> Consignation (no labor) |
| <input checked="" type="checkbox"/> Availability (no labor) | <input checked="" type="checkbox"/> Day-off |
| <input checked="" type="checkbox"/> Break | <input type="checkbox"/> Education |
| <input checked="" type="checkbox"/> Compensated leave | <input checked="" type="checkbox"/> Leave (no labor) |
| <input checked="" type="checkbox"/> Compensation day off | <input checked="" type="checkbox"/> Leave (no work) |

Daily rest after a shift (labor period)

This rule uses 'shifts' according to the labor period definition.

The minimum rest time is 11 consecutive hours after every shift.

The minimum rest can be shortened to at least 10 hours, when this is compensated by a rest of at least 12 hours within 4 weeks.

Different conditions for 'on call (no labor)' or 'work (stand by)':

- Activities of the kind work (stand by) are not considered rest.

- The minimum rest time of 11 consecutive hours can only be shortened when the total time for work (stand by) is not more than the total time for on call (no labor). In this case the missed rest should be compensated by a daily rest of at least 11 hours plus the missed rest within 8 weeks.

This rule applies only to employees for whom the employee property (None)...

This rule applies only to employees in a salary group between (None) and (None).

This rule applies only to employees aged over 18 years up to 100 years.

Maximum number of on call periods per month

This rule uses the definitions for labor period and on call period.
A presence period is a labor period where the activity 'Presence' is used.

The maximum number of on call periods per calendar month is 12.

This rule is only valid when there is no presence period.

- This rule applies only to employees for whom the employee property (None)...
- This rule applies only to employees in a salary group between (None) and (None).
- This rule applies only to employees aged over 18 years up to 100 years.

Maximum number of special periods per month

This rule uses the definitions for labor period, on call period and consignment period.
A presence period is a labor period where the activity kind 'Presence' is used.
Special periods are on call periods, presence periods and consignment periods.

Maximum 5 special periods per 3 weeks.

This rule is only valid when there is at least one on call period.

This rule is only valid when there is at least one presence period or one consignment period.

- This rule applies only to employees for whom the employee property (None)...
- This rule applies only to employees in a salary group between (None) and (None).
- This rule applies only to employees aged over 18 years up to 100 years.

Minimal rest after work stand by (labor period)

This rule uses 'shifts' according to the labor period definition.

A shift may not start within 5:30 hours after an activity with kind work (stand by).

- This rule applies only to employees for whom the employee property (None)...
- This rule applies only to employees in a salary group between (None) and (None).
- This rule applies only to employees aged over 18 years up to 100 years.

Minimum time between attendance shift and long shift

This rule uses 'shifts' according to the labor period definition.

There should be at least 72 hours between the end time of an attendance shift and the begin time of a shift containing more than 10 hours of the following classes:

| | |
|--|---|
| <input checked="" type="checkbox"/> Amplitude | <input checked="" type="checkbox"/> Spare |
| <input checked="" type="checkbox"/> Education | <input checked="" type="checkbox"/> Training |
| <input checked="" type="checkbox"/> Operational | <input checked="" type="checkbox"/> Unpaid work |
| <input checked="" type="checkbox"/> Overtime | <input checked="" type="checkbox"/> Work |
| <input checked="" type="checkbox"/> Overtime (for free time) | |
| <input checked="" type="checkbox"/> Overtime (for money) | |
| <input checked="" type="checkbox"/> Presence | |

- This rule applies only to employees for whom the employee property (None)...
- This rule applies only to employees in a salary group between (None) and (None).
- This rule applies only to employees aged over 18 years up to 100 years.

Maximum labor time of shifts (labor period)

This rule uses 'shifts' according to the labor period definition.

The labor time in a shift should be at most 12 hours.

No more than 4 shifts with more than 10 hours of labor time each may be worked in sequence. Two consecutive shifts are in the same sequence if there is less than 35 hours in between.

In every 2 calendar weeks, no more than 8 shifts with more than 10 hours of labor time each may be worked.

This rule does not include attendance shifts.

- This rule applies only to employees for whom the employee property (None)...
- This rule applies only to employees in a salary group between (None) and (None).
- This rule applies only to employees aged over 18 years up to 100 years.

3.6 Illness types

When someone is off sick, you can specify the illness type. To make this possible, the various illness types have to be defined first.

3.6.1 Manage illness types

1. Go to **Maintenance > Illness definitions**.
2. (Optional) To add a new illness type, click - on the **Illness type** tab - the **New** button.
 - Enter a **Name** for the new illness type.

 An illness type might be 'Sickness during pregnancy'.

- Click **OK**.

3. To define or edit a new or existing illness type, make sure the correct illness type is selected from the **Name** drop-down list.
4. (Optional) Enter a **Description** of the illness type.
5. To set this illness type as the default illness type that's shown in the **Sick leave registration** window, select the checkbox **Default illness notice**.
6. Select the activity types that will replace the original activity type in the schedule when someone is off sick.
 - **Replace labor and work:** This type is used for all original activity types that are counted as both labor and work. For more information, view the table in "[Activity types](#)" on page 36.
 - **Replace labor:** This type is used for all original activity types that are counted only as labor but not work. For more information, view the table in "[Activity types](#)" on page 36.
 - **Replace free time:** This type is used for all original activity types that are counted only as work but not labor. For more information, view the table in "[Activity types](#)" on page 36.
7. If this illness type involves a waiting day, select the checkbox **Relevant for waiting day**. This property can be used in certain compensation rules that deal with waiting days, i.e. when an illness 'should start counting'.
8. If this illness type can be combined with earlier illnesses, select the checkbox **Relevant for continuous sick leave** to determine the combined total illness length. This property is taken into account when using certain illness-related expressions.
9. To be able to match an illness that is imported to an illness type, enter a **Code** for the illness type. By providing this code in the illness import, the illness will be created with this illness type.
10. If you want the sick leave shift to have a specific name, enter an **Illness shift name**. If left empty, the sick leave shift will have the name of the activity type it was replaced by.
11. By default sick leave shifts will be created based on the (hours of the) original shift in the schedule.
 - If you want to create sick leave shifts based on contract hours instead, select **Contract** from the **Illness replace type** drop-down list. Both **Planned shifts** and **Contract** can be used in Team Schedulers to create sick leave shifts.
 - If you want to create sick leave shifts based on the average worked hours in the past X days, select **Hours worked in the last 0 days** from the **Illness replace type** drop-down list. Note: This option is not being used in Team Schedulers.
 - Also define the period over which the average worked hours are calculated in the **Days in history for replacement type Hours worked**.



Depending on the [UseTwoReplaceTypesForIllnessType](#) setting in **OWS Settings manager > General settings**, one or two replacement options are possible. When activated, you can define two different periods and assign a replacement option for each.

A common approach is to select **Planned shifts** as the replacement type for the first period and **Contract** for the second period. This allows you to manage short- and long-term absences more effectively. Planned shifts for the first period cover short-term gaps by replacing only already assigned shifts. In contrast, Contract for the second period addresses longer-term needs more reliably by setting sick leave placeholders based on the employee's contract hours.

12. Click **OK**.

3.7 Period types

Period types are used to define customer specific periods, besides salary periods and scheduling periods. Department periods are the periods in which period types are valid. Department periods can be used to check entitlements or balances per period type.

First, create a period type. Next, define - per period type - the department periods (the periods in which the period type is valid).

Example


Assume you have employees working in a flexpool to cover absenteeism and additional work. These employees might have a contract to work 32 hours a week, but to be more flexible you might agree that they need to work an average of at least 32 hours a week in a period of 13 weeks. Using the period type, you can set up 13 week periods for a department. In monthly schedules you can still check whether the flex employees meet the average of 32 hours per week in the defined 13 week period.

3.7.1 Create a period type

1. Go to **Maintenance > Period types**.
2. Click the **New** button.
 - Enter a **Name**.
 - Click **OK**.
3. (Optional) Enter a **Description** for the period type.
4. Select a **Kind of period** from the drop-down list.
 - **days**
 - **weeks**
 - **months**
5. Define the **Maximum number of periods**.
6. To allow interruptions between periods, select the checkbox **Allow nonconsecutive periods**.
7. Click **OK**.

3.7.2 Define department periods

1. Go to **Maintenance > Organization**.
2. Select the department for which you want to define department periods.
3. Select the **Department periods** tab.
4. Select a **Period type** from the drop-down list.
5. To create a new department period, click the **New** button.
 - (Optional) Adjust the default **Name**.
 - (Optional) Adjust the **Period**; the **From** and **To** date.
 - Click **OK**.

 When setting up employee calculations, you can indicate the period to use when calculating the information. The department period is one of the available choices here.

3.8 Special duties

Special duties are duties or shifts that have a uniform composition throughout the organization. Special duties are not associated with any requirements. Special duties that have been created are available for inclusion in a schedule.

Example

'Course', 'Holiday' or 'Scheduled leave'.

3.8.1 Manage special duties

1. Go to **Maintenance > Special duties**.
2. Follow the steps as described in "[Manage duties](#)" on page 122.

3.9 Public holidays

For each shift a demand can be entered. This demand relates to the required staffing level of the shift on each day of the week. However, planners will often apply non-standard requirements to shifts worked on public holidays.

The system therefore allows you to define public holidays, on which non-standard staffing requirements may apply, and to indicate which 'ordinary' day of the week a public holiday corresponds to. New Year's Day, for example, may correspond (in terms of staffing requirements) to a Sunday. So, if New Year's Day falls on a Monday, the staffing requirements that normally apply to a Sunday will apply to that Monday's shifts.

If a day counts as a public holiday for regulatory and compensation purposes (and therefore for salary calculation), this can be indicated on the system.

Manage public holidays

1. Go to **Maintenance > Public holidays**.
2. (Optional) To define a new public holiday, click the New button.
 - Enter a **Name**.
 - Click **OK**.
3. (Optional) Enter a **Description** of the public holiday.
4. To make sure the public holiday is taken into account in the various labor and compensation rules that deal with public holidays, select the checkbox **Counts as public holiday for labor and compensation rules**. This is typically enabled for all official public holidays.
5. Enter the **Date** of the public holiday.

e^x

$\frac{1}{\pi}$

$(k!)^4$

π

6. Select the day of the week that will correspond with the shifts for this public holiday.

★ **Example**

When less shifts are worked on both a Sunday and a public holiday, select Sunday.

7. To manage the definition of custom properties for all public holidays, select the **Holiday properties definition** tab. Here you can define custom properties that can be used in compensation rule expressions, for example to distinguish between different types of public holidays.
8. To manage the values of the earlier defined custom properties for this public holiday, select the **Holiday properties values** tab.
9. Click **OK**. The public holiday has now been set up.

4 Employee

Before you can produce a schedule, you need to have the relevant employees entered on the system. **ORTEC WS** records a great deal of information about employees. View and edit data concerning members of staff per individual employee.

Example

Employee data is - per employee - divided over several tabs. To search for an individual using his/her employee number, use the **Search** button.


The screenshot shows the 'Employee Bassett' window with the following components:

- Department filter:** A dropdown menu currently set to '(All departments)'. To its right is a 'Name' dropdown menu set to 'Bassett', with a 'Change' button.
- Search options:** A checked checkbox labeled 'Hide employees without a valid contract' and a 'Search...' button.
- Buttons:** 'New', 'Delete', and 'OK' buttons are located in the top right corner.
- Tabs:** A row of tabs includes 'General', 'Schedule data', 'Positions', 'Skills', 'Work relation', 'Preferred locations', 'Employment conditions', 'Work agreements', 'Shift sequences', 'Properties', and 'Log book'. Below this, sub-tabs for 'Employee data', 'Addresses', and 'Alternative travel addresses' are visible.
- Employee data fields:**
 - Name:** Title, Initials, First name (pre-filled with 'Athena'), Prefix, Abbreviation, Name of partner.
 - Contact information:** Telephone 1, 2, 3, E-mail, Private email.
 - Remarks:** A large text area.
 - Other:** Date of birth, Gender, End date contract.
 - Identification:** Employee number (pre-filled with '121'), Organization code, Badge.
 - Employee Self Service:** User name, Last login (with a clock icon).
 - Current address:** A large text area.

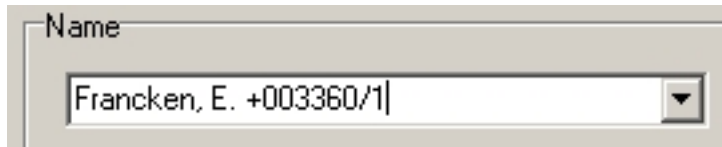
4.1 View employees

1. Go to **Employee > Employee Management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. (Optional) To show all employees, even those without a contract, deselect the checkbox **Hide employees without a valid contract**.

4. From the **Name** drop-down list, select an employee.


 Employee names can be displayed with the employment conditions group they belong to. For more information, see ["Create employment conditions groups" on page 56](#).

Employee names can also be displayed with the employee number - separated by a white space and the plus sign - with setting `UseEmployeeNumberInEmployeeDisplayName`.



The screenshot shows a dropdown menu with the label 'Name'. The selected item is 'Francken, E. +003360/1'. The dropdown arrow is visible on the right side of the menu.

5. Click on one of the tabs to view the relevant type of information.

 The **Employee** window can also be opened by double-clicking on an employee's name in the plan board.

4.2 Employee management

Learn how to manage employees.

4.2.1 General

- View the selected individual's name, address, contact details, ID information and other details. With the proper authorization, employee details can be edited. Also, new employees can be added.
-
- Passport-style photos can be displayed.

If the **End date contract** field has been filled in (manually or with an import), the end dates of all connected data (e.g. schedule data, positions, skills, employment conditions) are automatically changed too. This also happens if the end date is set to an earlier date.

 If the date is changed into a later date, the connected data remain untouched.

Add new employee

1. Go to **Employee > Employee management**.
2. Click the **New** button.
3. Enter the **Name** of the new employee.
4. From the **Department** drop-down list, select a department.

5. (Optional) From the **Rotation unit** drop-down list, select a rotation unit. This is only relevant when working with cyclical schedules. For more information, see "[Rotation units](#)" on page 31.
6. (Optional) Enter the **Weekly hours** and **Period**.
7. Click **OK**.


4.2.2 Schedule data

Assign - per employee - the department(s) he belongs to. It's also possible to define the borrowing/lending, forbidden and preferred departments. Within a department, an employee can be assigned to "[Rotation units](#)" on page 31 and "[Sort categories](#)" on page 32.


 You can only assign employees to departments for which you've authorization.

Assign employee to department/rotation unit


1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Schedule data > Departments** tab.
5. Click the **New** button.
6. From the **Department** drop-down list, select a department.

 The departments that you can select here are previously entered in the **Maintenance > Organization** window. For more information, see "[Organizational structure](#)" on page 29.

7. From the **Rotation unit** drop-down list, select a rotation unit.

 The rotation units that you can select here are previously entered in the **Maintenance > Organization > Rotation units** tab. For more information, see "[Rotation units](#)" on page 31.

8. (Optional) Enter the **Weekly hours** and **Period**.


 When defining the period, you don't have to enter an end date.

9. Click **OK**.


Manage borrowing/lending departments

View the availability for other departments. If the selected employee has been lend to or borrowed from other departments, the period(s) in question are displayed. You can't enter new data on this tab, but you can adjust the duration of a borrowing/lending period or delete a period where the employee is temporarily available for another department.


Assign employee to preferred/forbidden department

 The functionality of preferred departments is only available when the **Flexpool** module is activated.

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Schedule data > Forbidden departments** or **Preferred departments** tab.
5. Click the **New** button.
6. Select the relevant department(s).

 The departments that you can select here are previously entered in the **Maintenance > Organization** window. For more information, see "[Organizational structure](#)" on page 29.

7. (Optional) Enter the **Period**.


 When defining the period, you don't have to enter an end date.

8. (Optional) When defining multiple preferred departments, you can set the **Priority** per department. This is recommended when using the central department functionality. For more information, see "[Use of central schedule](#)" on page 213.
9. Click **OK**.


Assign employee to sort categories

Sort categories are used for sorting and filtering employees on the plan board. Employees who belong to the same sort category can be grouped together on the schedule.


1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Schedule data > Sort categories** tab.
5. Click the **New** button.
6. From the **Department** drop-down list, select a department.

 The departments that you can select here are previously entered in the **Maintenance > Organization** window. For more information, see "[Organizational structure](#)" on page 29.

7. From the **Sort categories** drop-down list, select a sort category.

 The sort categories that you can select here are previously entered in the **Maintenance > Organization > Sort categories** tab. For more information, see "[Sort categories](#)" on page 32.

- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.


- Click **OK**.

4.2.3 Positions


Define and edit the positions of the selected employee. You can assign multiple roles to an employee.

Manage positions

- Go to **Employee > Employee management**.
- (Optional) From the **Department filter** drop-down list, select a department.
- From the **Name** drop-down list, select an employee.
- Select the **Positions** tab.
- To add a new position, click the **New** button.
 - From the **Departments** drop-down list, select a department.

 The departments that you can select here are previously entered in the **Maintenance > Organization** window. For more information, see "[Organizational structure](#)" on page 29.

- From the **Position** drop-down list, select a position.

 The positions that you can select here are previously entered in the **Maintenance > Organization > Positions** tab. For more information, see "[Positions](#)" on page 42.

- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.

- Click **OK**.

- To edit a position, select the appropriate row and click the **Open** button. Change the settings and click **OK**.


4.2.4 Employee skills

Assign skills and associated levels to each employee. Skills determine whether an employee is able to perform a given activity. An employee can't be assigned to a shift if that shift involves activity types for which he or she isn't qualified. Determine per skill for which department it's valid.


Manage skills

- Go to **Employee > Employee management**.
- (Optional) From the **Department filter** drop-down list, select a department.
- From the **Name** drop-down list, select an employee.


- e^x $\frac{1}{\pi}$ $(k!)^4$ π
4. Select the **Skills** tab.
 5. To add a new skill, click the **New** button.
 - From the **Filter skills for department** drop-down list, select a department.

 The departments that you can select here are previously entered in the **Maintenance > Organization** window. For more information, see "[Organizational structure](#)" on page 29.

- From the **Skill** and **Level** drop-down list, select a skill and level.

 The skills and levels that you can select here are previously entered in the **Maintenance > Organization > Skills** tab. For more information, see "[Skills](#)" on page 35.

- (Optional) Enter a **Certificate**.
- To define the department a skill is valid for, select - from the **Department** drop-down list - a department.
- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.

- Click **OK**.
6. To edit a skill, select the appropriate row and click the **Open** button. Change the settings and click **OK**.

4.2.5 Work relation

Manage the work relationships and specify desirable and undesirable work relationships for the selected employee. A work relationship always involves two employees. A desirable or undesirable work relation means that employees do or do not wish to work the same shift. If you assign a work relationship to an individual, the 'matching' working relationship is automatically assigned to the other person concerned.

The following non-adjustable work relationships are available:

- Mentor of
- Mentored by
- Instructor of
- Instructed by
- Positive work relation
- Undesirable work relation
- Manager of
- Managed by
- Substitute of
- Substituted by


Supervision on compliance

The daily requirement 'Work relations per shift' rule checks whether employees who cooperate with each other are working at the same time.

The requirement 'Both employees must use the same workstation' is activated when selecting the work relation types 'Instructed by' and 'Mentored by'.


Manage work relations

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Work relation** tab.
5. To add a new work relation, click the **New** button.
 - From the **Work relation type** drop-down list, select a work relation type.
 - From the **Colleague** drop-down list, select a colleague.
 - (Optional) Enter the **Percentage**.

 A (target) percentage may be specified to determine the degree of applicability of the working relationship. The default percentage is 100. It's possible to define different applicability percentages for a given relationship at different periods of time. This is done by defining the relationship several times, on each occasion with different starting and end dates and a different applicability percentage.

When defining a second rule for a given employee, set the applicability percentage to less than 100. You can always adjust the percentage later if you need to.

- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.

- Click **OK**.
6. To edit a work relation, select the appropriate row and click the **Open** button. Change the settings and click **OK**.


 When a new rule is defined, the previously selected rule is closed.

Use the Business Objects reports 'Cooperation overview per department' and 'Cooperation overview per employee' to check if undesirable work relations exist.


4.2.6 Preferred locations

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Preferred locations** tab.

5. To add a new preferred location, click the **New** button.
 - From the **Preferred locations** drop-down list, select a location. To limit the amount of locations to choose from the checkbox **Only show locations that are linked to the departments of the employee** is selected by default.


 The preferred locations and workstations that you can select here are previously entered in the **Maintenance > Locations and workstations** window.

- From the **Workstation** drop-down list, select a workstation.
- (Optional) Enter the **Percentage**.

 A (target) percentage may be specified to determine the degree of applicability of the preferred location. The default percentage is 100. It's possible to define different applicability percentages for a given location at different periods of time. This is done by defining the preferred location several times, on each occasion with different starting and end dates and a different applicability percentage.

When defining a second rule for a given employee, set the applicability percentage to less than 100. You can always adjust the percentage later if you need to.

- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.


- Click **OK**.

6. To edit a preferred location, select the appropriate row and click the **Open** button. Change the settings and click **OK**.


4.2.7 Employment conditions

Assign the selected employee to an employment conditions group. For more information, see "[Employment conditions](#)" on page 54.


1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Employment conditions** tab.
5. To add a new employment condition group, click the **New** button.
 - From the **Employment condition group** drop-down list, select an employment condition group.

 The employment condition groups that you can select here are previously entered in the **Maintenance > Employment conditions > Employment conditions group** tab. For more information, see "[Create employment conditions groups](#)" on page 56.


- From the **Salary code** drop-down list, select a salary code.

 The salary codes that you can select here are previously entered in the **Maintenance > Salary code** window. For more information, see "[Salary codes](#)" on page 53.

- (Optional) Enter the **Weekly hours** and the **Minimum** and **Maximum** amount.
- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.


- Click **OK**.
6. To edit an employment condition group, select the appropriate row and click the **Open** button. Change the settings and click **OK**.
 7. (Optional) In the **Status dates** section, view - in the **Entries for approved schedules known until** field - the date until when account entries of the selected employee are saved in the database. This date is automatically determined by **ORTEC WS**, based upon the approved statuses of the employee's schedules.

 Don't change the date in this field unless debugging specific issues related to saved account entries.


4.2.8 Work agreements

Define the personal labor rules for the selected employee.

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Work agreements** tab.
5. To add a new work agreement for this specific employee, click the **New** button.
 - From the **Department** drop-down list, select a department.
 - From the **Labor rules** drop-down list, select a work agreement.

 Work agreements are defined on department level. They are created and maintained via **Planning > Schedule management > Scheduling criteria tab > Maintenance of work agreements** section. Per department, multiple work agreements can be created.

- (Optional) Define the **Period**.


 When defining the period, you don't have to enter an end date.

- Click **OK**.
- 6. (Optional) Repeat step 5 to add more work agreements.
- 7. To edit a work agreement, select the appropriate row and click the **Open** button. Change the settings and click **OK**.


4.2.9 Shift sequences

Assign and manage shift sequences per employee. The schedule optimizer will try to assign those shift sequences to the employee according to their priorities.

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Shift sequences** tab.
5. To add a new shift sequence, click the **New** button.
 - From the **Department** drop-down list, select a department.

 The departments that you can select here are previously entered in the **Maintenance > Organization** window. For more information, see "[Organizational structure](#)" on page 29.

- From the **Shift sequence** drop-down list, select a shift sequence.




- The shift sequences that you can select here are previously defined in the master schedule by selecting a number of shifts, right-clicking and choosing **Create new shift sequence**.
- Shift sequences can be edited via **Maintenance > Organization > Shift sequences** tab.
- Only shift sequences that aren't marked as 'This shift sequence is valid for the entire department' can be assigned to individual employees.

- (Optional) Set the **Priority** of the shift sequence.
 - Click **OK**.
6. To change a shift sequence assigned to this employee, select the appropriate row and click the **Open** button. Change the settings and click **OK**.


4.2.10 Properties

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Properties** tab.
5. To add a new property, click the **New** button.
 - From the **Property** drop-down list, select a property.

 The properties that you can select here are previously entered in the **Maintenance > Organization > Employee properties** tab.

- (Optional) Enter a value.

- (Optional) Define the **Period**.

 When defining the period, you don't have to enter an end date.

- Click **OK**.
6. To edit a property, select the appropriate row and click the **Open** button. Change the settings and click **OK**.

4.2.11 Log book

Register extra information about each employee. Write and copy free form information like text and web addresses formatted as hyperlinks. The log types 'Memo' and 'Message' allow you to classify the information according to your wishes.

Because of privacy reasons the accessibility of information on this tab has been authorized on four levels:

- EMPLOYEE_LOG_ADAPT: authorization to edit existing data
- EMPLOYEE_LOG_DELETE: authorization to delete data
- EMPLOYEE_LOG_READ: authorization to read data
- EMPLOYEE_LOG_WRITE: authorization to add (write) data

Manage log book

1. Go to **Employee > Employee management**.
2. (Optional) From the **Department filter** drop-down list, select a department.
3. From the **Name** drop-down list, select an employee.
4. Select the **Log book** tab.
5. To add a new entry, click the **New** button.
 - From the **Type** drop-down list, select a type.
 - Define a **Reference date**. By default, that's the current date.
 - Enter a **Title** and **Text**.
 - Click **OK**.
6. To edit a log entry, select the appropriate row and click the **Open** button. Change the settings and click **OK**.
7. To find specific entry types, select - from the **Filter type** drop-down list, a log type.

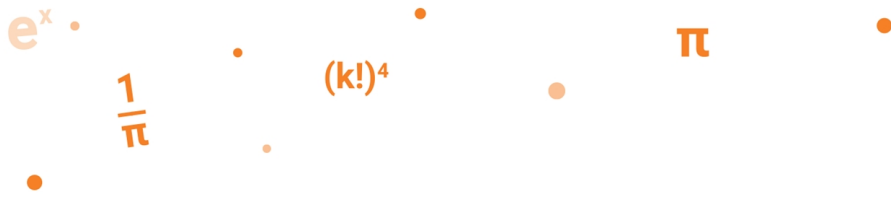
4.3 Requests

Handle requests of individual employees via **Employee > Requests**.

 Learn all about handling requests, via "[Handle requests](#)" on page 156.

4.4 Personal schedule

View the personal schedule of an employee via **Employee > Personal schedule**.



 Learn more via ["Open personal schedule"](#) on page 140.

4.5 Time and attendance

View the time and attendance records of an employee via **Employee > Time and attendance**.

5 Planning


Learn how to work with the plan board and schedule shifts.

5.1 Work with plan board

After defining the calculations and basic display settings, further adjust the plan board according to your preferences. On the plan board, "[Scheduling](#)" on page 138 is done.

5.1.1 Open a plan board

There are three ways to open the plan board:

- Go to **Planning > Schedule management > Scheduling periods** tab. Select and open the relevant schedule.
- Go to **Planning > Master schedule**. Select the relevant scheduling period and click the **Plan board** button.
- There's a shortcut button to the **Master schedule** command in the toolbar: 

Close a plan board

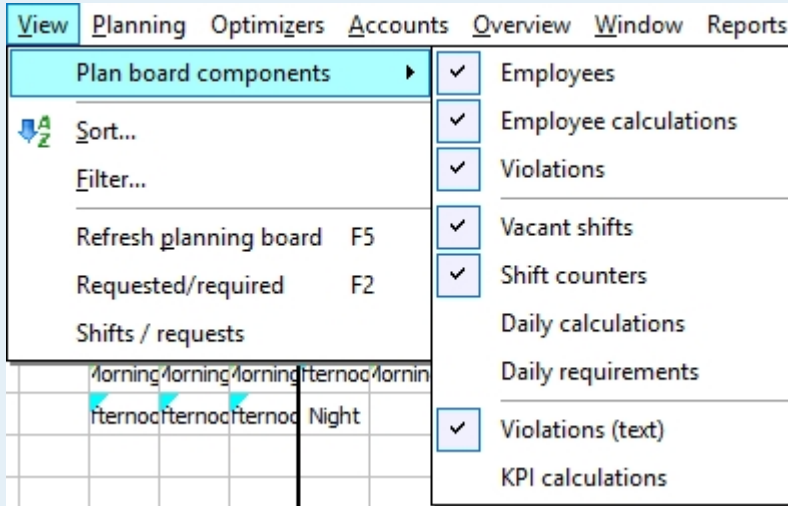
Close the plan board either by clicking on the red cross in the top right-hand corner of the window, or by selecting **File > Close**.

5.1.2 Plan board components

The plan board consists of a number of components that can be adjusted via **View > Plan board components**.

Example

Select the components that should be displayed on the plan board.



All plan board components



- Most components can be hidden by clicking the X in the top-right corner of the frame.
- After changing the plan board, make sure to save. Changes will only be saved for the currently logged in user.
- Employee notes are only visible to authorized users on the plan board.
- **ORTEC WS** can remember and restore the layout of screens when reopened, including the distribution of windows over multiple monitors used in the previous session.

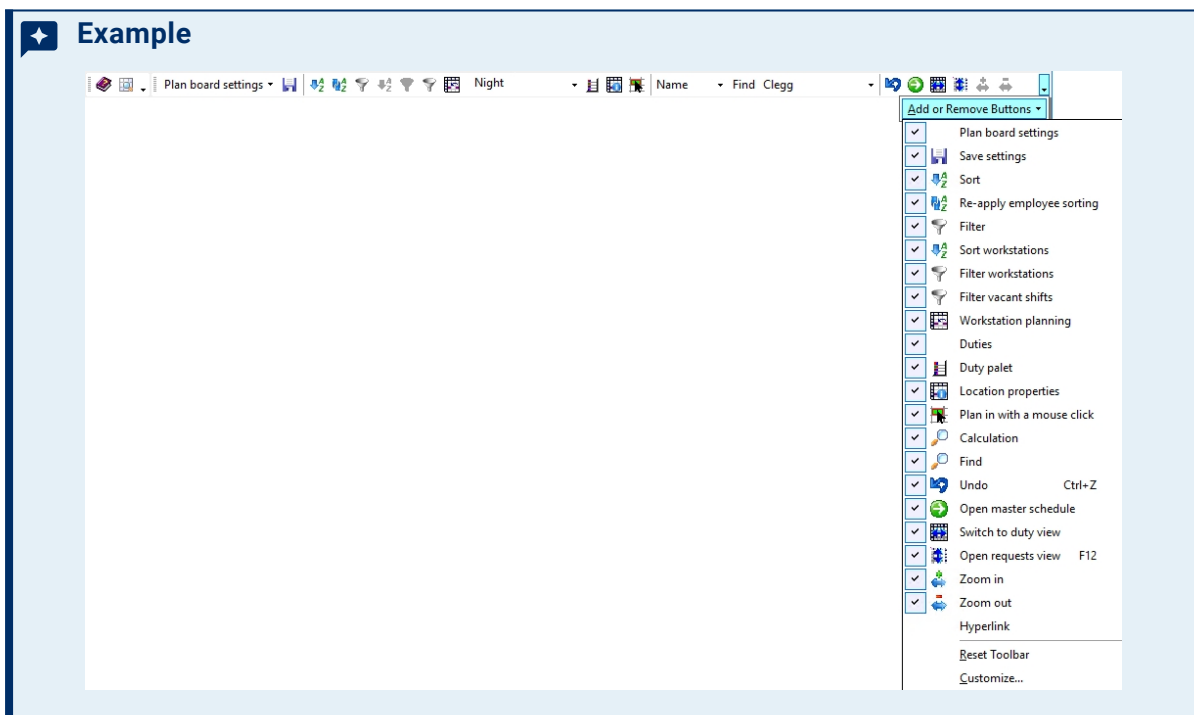
- **Schedule matrix**
When you open the plan board, the schedule matrix will appear in the center of the screen. This component is always visible. The schedule matrix is made up of a large number of schedule cells. There's one cell for each employee for each day. Shifts are assigned to employees by placing shifts in the appropriate cells.
- **Employees**
To the left of the schedule matrix is a list of all the employees belonging to the department whose schedule you're viewing. In the default list view, each person's name is listed.
- **Time bar**
The time bar above the schedule matrix provides information about the active schedule period: the month, the dates in the month and the days of the week.
- **Employee calculations**
To the right of the schedule matrix is the 'Employee calculations' frame. This frame gives statistical information of an employee's shifts.
- **Violations**
If rules are violated in a schedule, the number of violations are indicated per violation type in the 'Violations frame'.

A figure is given for the number of violations per employee under each of the following violation types:

- Rules
 - Skills (Qualifications)
 - Requirements (= the definite needs of employees)
 - Requests (= the preferences of employees)
-
- Vacant shifts
The 'Vacant shifts' frame appears below the schedule matrix. It contains all the shifts that have to be scheduled in order to satisfy the requirements.
 - Shift counters
 - Daily calculations
Daily calculations provide statistical information of particular days.
 - Daily requirements
Daily requirements relate to the minimum and maximum numbers of people with certain qualifications who must be available.
 - Violations (text)
Details of the violations are displayed in the frame in the bottom right-hand corner of the plan board.
 - KPI calculations

5.1.3 Plan board toolbars

1. "Open a plan board" on page 104.
2. Click on the little arrow on the far right of the plan board toolbar.

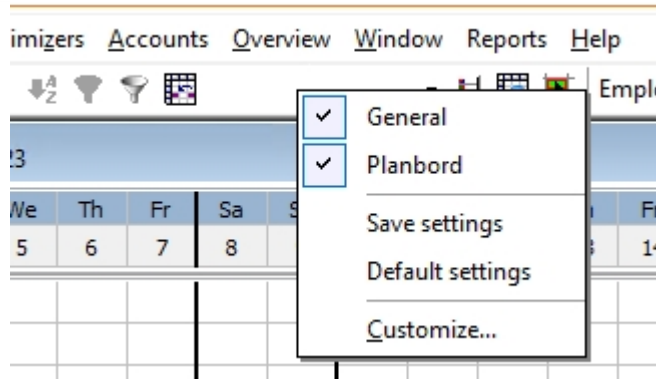


3. To show/hide buttons on the toolbar, select **Add or Remove Buttons**.
4. To go back to the original settings, select **Reset Toolbar**.

- To adjust various other toolbar settings, select **Customize**.



As a shortcut, click with your right-mouse button on a toolbar and select **Customize**. Here you can also enable/disable toolbars, save your settings, and return to the default settings.



- In the **Settings** window, three tabs are available:

- **Toolbars**

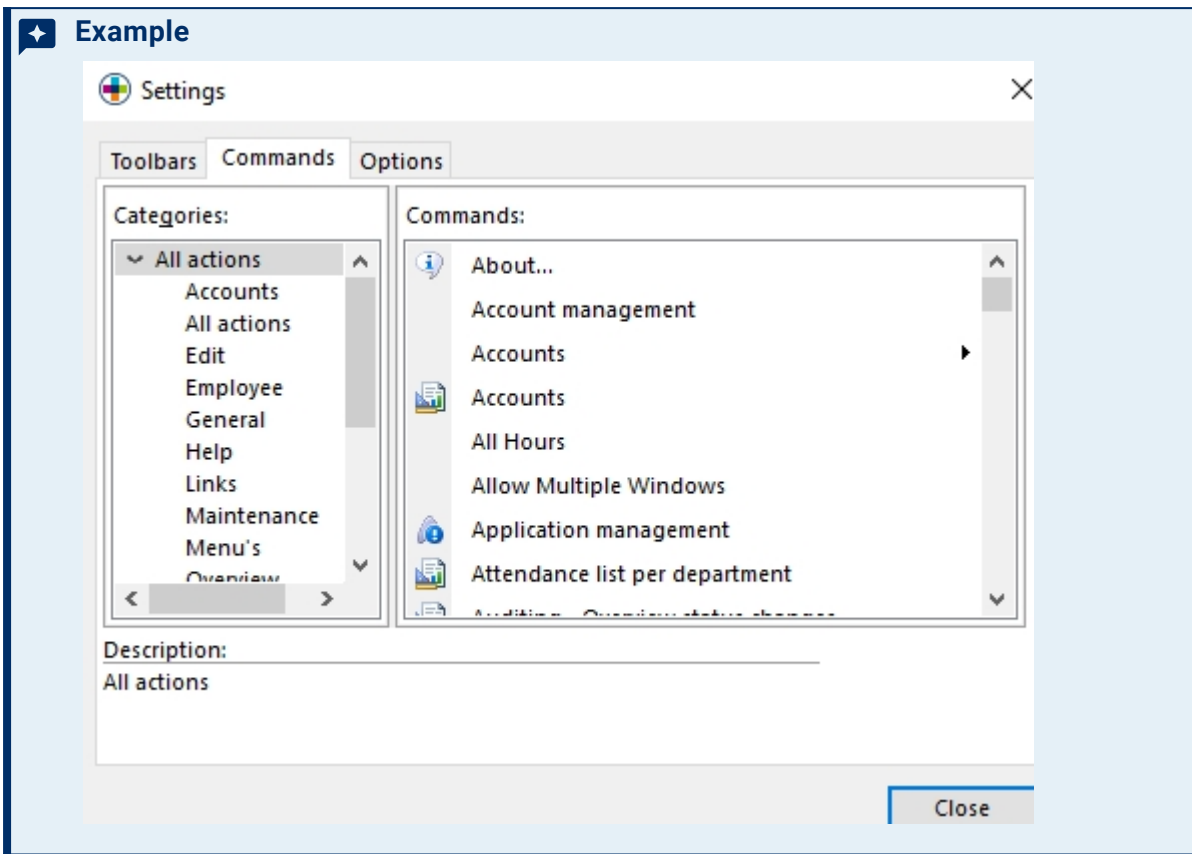
Lists the available toolbars and indicates whether they are enabled or disabled. Add, rename, restore or delete toolbars.

- **Commands**

Lists the main menus in the left-hand section; the commands that make up the selected menu are listed in the right-hand section. Drag and drop commands to a toolbar to create a short-cut button to the command in question. Drag and drop it back to remove the button from the toolbar and leave the command accessible only from the relevant menu.

- **Options**

Lists a number of commands related to icons, delay intervals, pop-up texts and animations.



7. Click **Close**.
8. To confirm and save your changes, click **Yes**. Your changes take effect when you opt to save them.

5.1.4 Switch between plan board settings

After creating multiple sets of plan board settings, users can effortlessly switch between different configurations while working on the plan board. This flexibility enables customization and adaptability to individual preferences and requirements.


Example

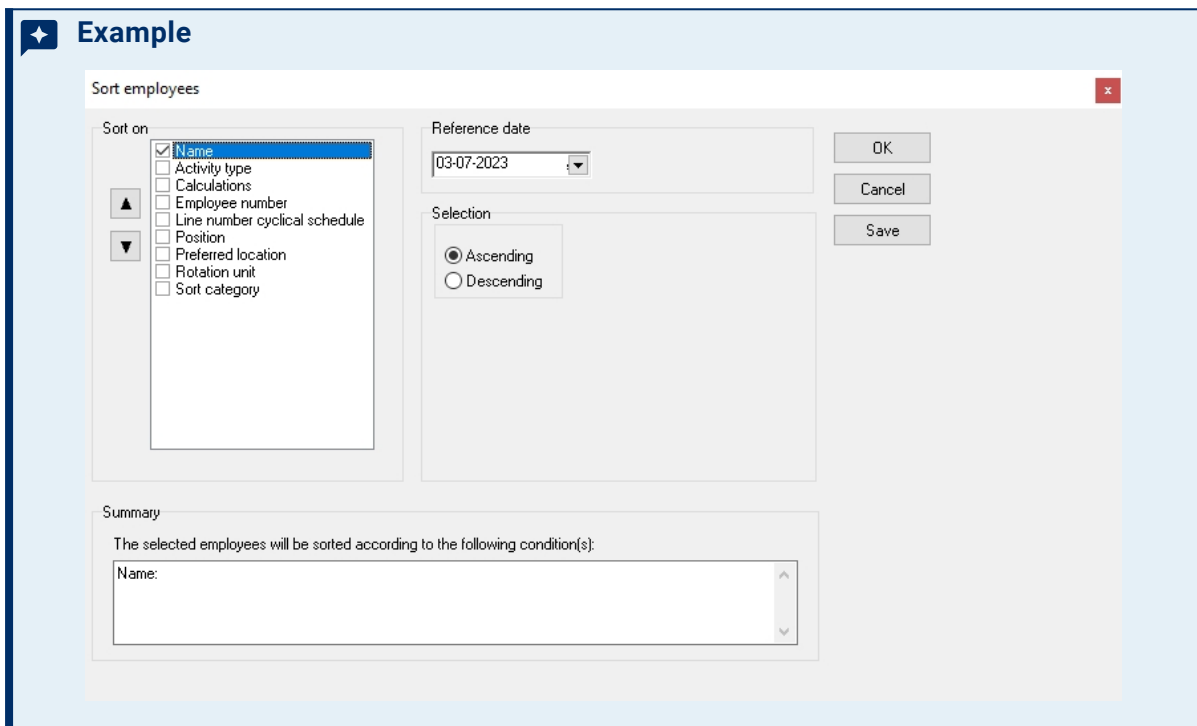
On the tool bar above the schedule matrix, multiple pull-down setting lists are available.

| | |
|-----------------------|------------------------|
| Plan board settings ▾ | |
| Display settings | DEMO ▾ |
| Employee data | Employee ▾ |
| Employee calculations | Employee calculation ▾ |
| Daily calculations | Daily calculation ▾ |
| KPI calculations | KPI calculation ▾ |

5.1.5 Sort employees

Change the order in which employees are listed on the plan board. Sort on multiple criteria simultaneously by first grouping the employees based on the highest criterion, and then sorting each group further based on subsequent criteria. User-defined sorts are also supported, see "[Own sorting](#)" on page 109.

1. "[Open a plan board](#)" on page 104.
2. On the toolbar, select the  **Sort employees** button or go to **View > Sort**.
3. In the **Sort employees** window, select the box(es) next to the criteria you want to sort by.



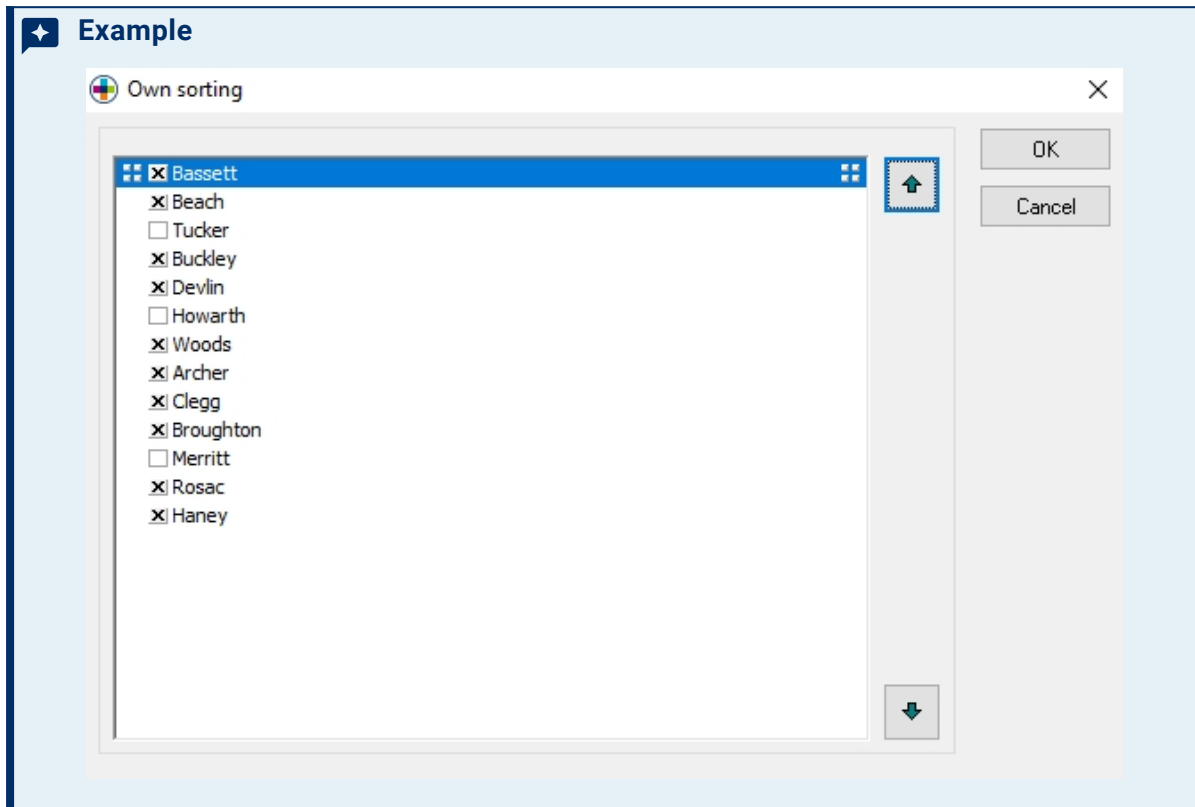
4. (Optional) Change the order of the criteria:
 - Select the criterion that you want to move up or down the order.
 - Click on the up-arrow or down-arrow until you have moved the criterion to the appropriate position in the list.
 - In the **Selection** section, select either **Ascending** or **Descending**. In the lower section of the window, a summary is displayed, indicating the criteria that the sort is to be based on, the order they are to be applied in and how.
5. (Optional) To save the sorting settings for future use, click **Save**. Skip this step if the sorting settings are for one-time use only.
6. To perform the sorting settings, click **OK**. The employee list will now be sorted on the basis of your settings.

Own sorting



Setting `UseUserResourceSorter` should be enabled. Contact your ORTEC representative when needed.

1. "Open a plan board" on page 104.
2. Go to **View > Own sorting**.
3. In the **Own sorting** window, deselect the checkboxes of the employees who shouldn't appear on the plan board.




4. Change the order of the employees:
 - Select the employee who you want to move up or down the list.

- Select several people at once by using the CTRL or Shift key.
 - You can also drag-and-drop employees up or down the list.

 - Click on the arrow buttons on the right-hand side of the frame to move the selected employees up or down the list.
5. Click **OK**; the user-defined sort has now been set up.



User-defined sort settings are saved using the  **Save settings** button. However, they're not immediately activated the next time you open the plan board. To activate the settings, go to **View > Own sorting**. In the **Own sorting** window, click **OK**.


5.1.6 Find employees

Find employees in relation to employee data via the **Calculation** and **Find** fields. The data you can search on depends of the chosen employee calculation. For more information, see "[Employee calculations](#)" on page 4.

Example

1. Select, from the **Calculation** drop-down list, the type of employee information you want to search on.
2. Select, from the **Find** drop-down list, the search term or enter it by typing.

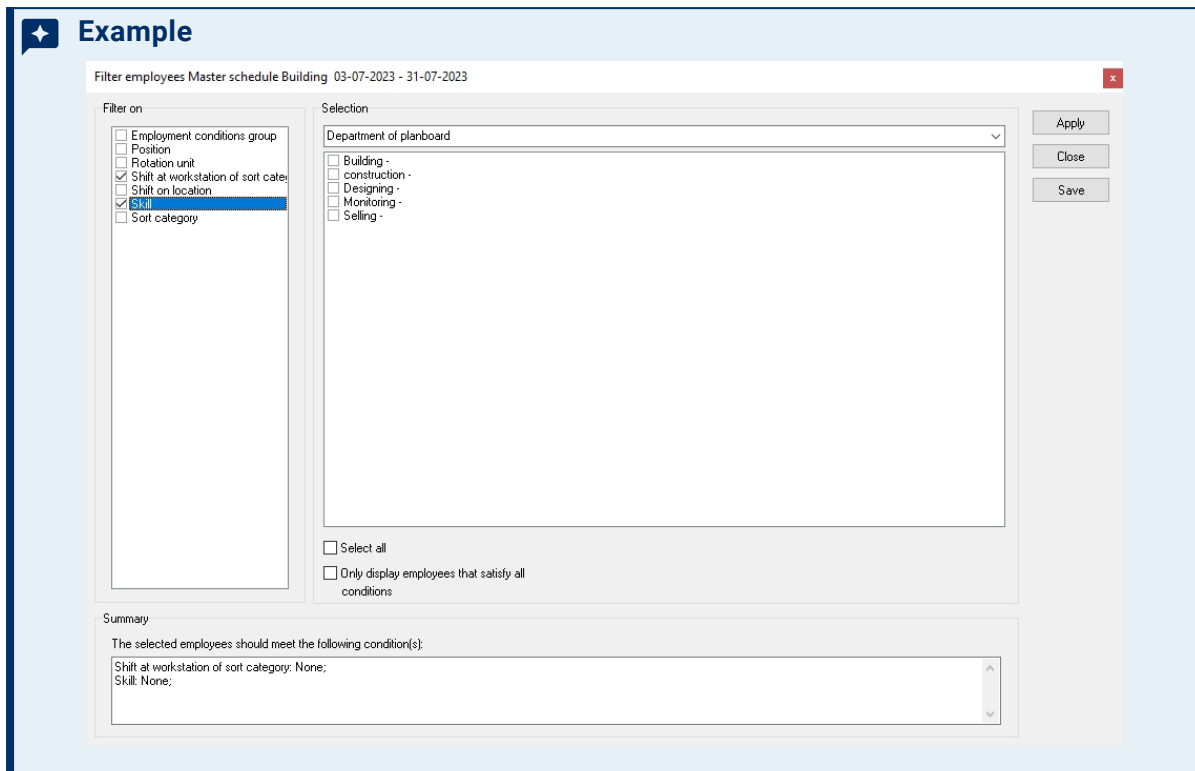
5.1.7 Filter employees

1. "Open a plan board" on page 104.
2. On the toolbar, select the  **Filter employees** button or go to **View > Filter**.
3. In the **Filter employees** window, select the box(es) next to the criteria you want to filter on.



Not all available filtering criteria are listed below. For all filtering criteria, go to **ORTEC WS Settings Manager > General Settings > Filters**.

- **Employment conditions group**
Filter employees on the basis of the employment conditions group that they belong to. Make sure general setting `ResourceEmploymentTermsGroupFilter` is enabled for this filter. For more information, see "[Employment conditions](#)" on page 54.
- **Position**
For more information, see "[Positions](#)" on page 42.
- **Rotation unit**
For more information, see "[Rotation units](#)" on page 31.
- **Shift at workstation or shift category**
- **Shift on location**
- **Skill**
For more information, see "[Skills](#)" on page 35.
- **Sort category**
For more information, see "[Sort categories](#)" on page 32.



4. In the **Selection** section, select - per selected criterion - one or more sub-criteria.
 - To select all sub-criteria at once, select the checkbox **Select all**.
 - To display only those employees that meet your chosen filter criteria, select the checkbox **Only display employees that satisfy all conditions**.
5. View, in the **Summary** section, the details of the parameters that employees must meet in order to be displayed in the list.
6. (Optional) To save the filter settings for future use, click **Save**. Skip this step if the filter settings are for one-time use only.
7. To perform the filter settings, click **OK**. The plan board will show only employees who meet the specified criteria.



A filter can be disabled by removing all the ticks.

Filter daily calculations

Calculations can be set up to include only filtered employees within the relevant department.

1. Go to **General > Plan board settings**.
2. Select the **Daily calculations** tab.
3. Select a daily calculation set and open it.
4. Select a calculation.
5. Select the checkbox **Apply this calculation to filtered resources**. Now, when you activate a filter on the plan board, the vertical calculation will include only the filtered employees.

5.1.8 E-mail and text messages

Communicate via text messages or e-mail and/or send reports through e-mail.

Example

Assign shifts to employees in a flexpool. The flexpool dispatcher can assign a shift to an employee (Concept planned) and send a message. Based on the employee's response, the dispatcher can either change the shift status to 'Final planned' or assign it to another employee. Requiring a response from the employee enables the dispatcher to keep track of flexpool assignments.

How to use

Send a text message or an e-mail

1. Open the plan board.
2. Select the shift you want to message the employee about.
3. Right-click on the name of the employee.
4. Select **Send e-mail** or **Send text message**.

The screenshot shows the 'Master schedule Flexpool 14-09-2009 - 09-10-2009' interface. On the left, there is a table of employees:


| Name | Tel | E-mail |
|---------------|------------|-----------------------|
| Jack Jackson | 0612345678 | jjackson@ortec.com |
| John Johnson | 0698765432 | jjohn.jones@ortec.com |
| Pete Peterson | 0634567 | |
| Will Williams | 0609876 | |

A context menu is open over the employee list with the following options:

- Properties (Ctrl+E)
- Requests (Ctrl+Alt+W)
- Analyze cooperation
- Planning costs
- Send e-mail
- Send text message
- Sick-leave (Ctrl+K)

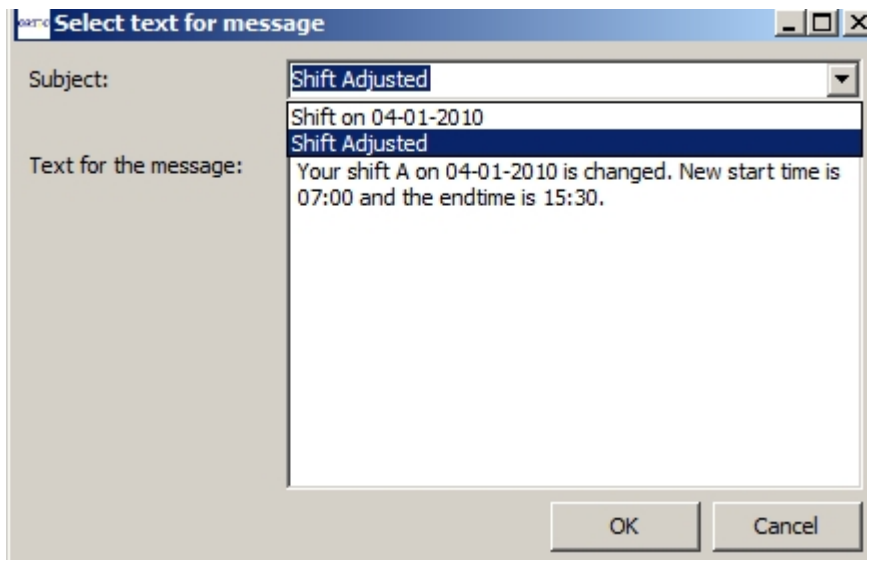
On the right, there is a shift plan board with columns for days M (14), T (15), W (16), T (17), and F (18). Shifts are represented by colored blocks with labels like 'P', 'B', 'D', and 'E' and time ranges such as '09:00-17:06'.

- Select a default message. View and/or edit the selected message. Click **OK**.

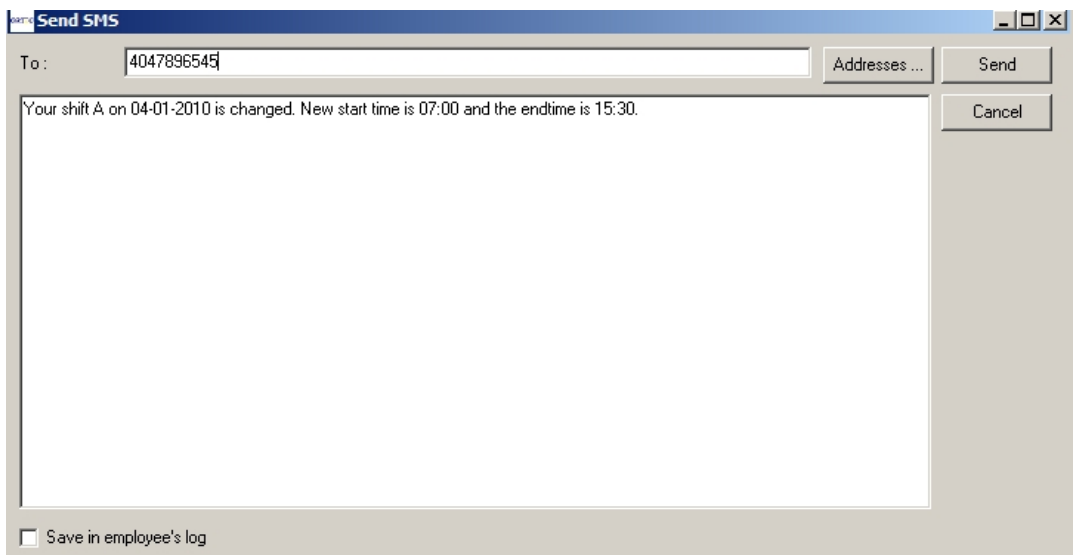
 If only 1 default message is present, this step is skipped. Default messages are configured in **ORTEC WS Settings Manager**.

$$\sum_{n=0}^{\infty} \frac{x^n}{n!}$$

$$\sum_{n=0}^8 \frac{x^n}{n!}$$



- If only 1 default message is available, this message will immediately appear including the employees' e-mail address or phone number. You can view and/or edit this.



5. To save the message in the employee's log book, select the checkbox **Save in employee's log**
6. To send the message, click **Send**.



When sending a text message, the first telephone number will be entered. When sending an e-mail, all available e-mail addresses for the employee will be entered.

Select multiple employees to send an e-mail or text message to multiple employees. Additional e-mail addresses or telephone numbers can be added in the message as well.

5.2 Schedule management

Learn how to manage scheduling periods, duty sets and demands, and more.

5.2.1 Scheduling periods

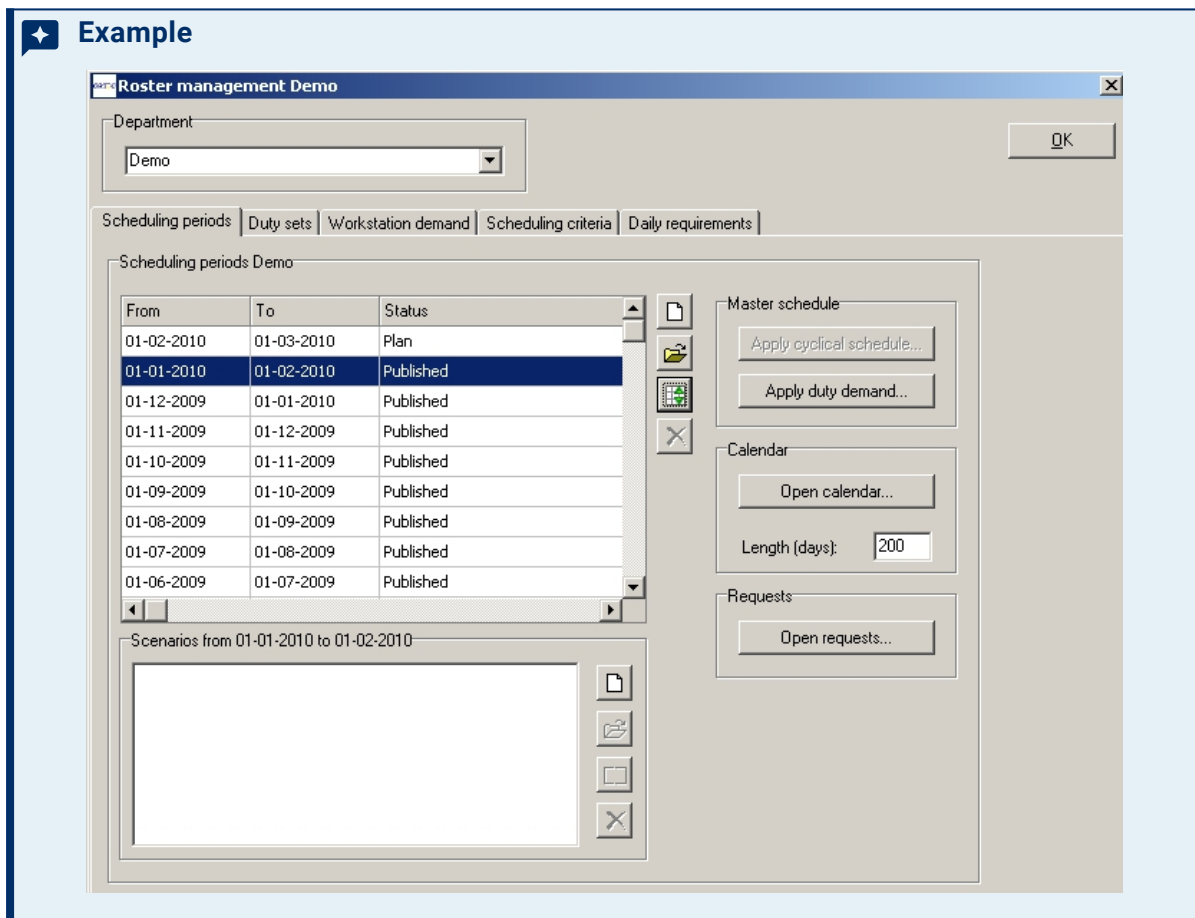
Each schedule covers a defined timeframe, known as a scheduling period. Schedules are created and published per scheduling period, typically 1 month or 4 weeks. Scenarios are draft schedules for a scheduling period. A calendar is a tool for scheduling special events like shifts, training, holidays, and leave. It also includes requests and public holidays.

Manage scheduling periods

A scheduling period represents a time frame, like a month or four weeks, covered by a schedule. Each period has a status reflecting its scheduling progress.


Create scheduling period

1. Go to **Planning > Schedule management > Scheduling periods** tab.



2. Click the **New** button; the **New scheduling period** window will open.

3. Enter the **From** and **To** dates of the scheduling period.


 ■ A scheduling period typically aligns with a full calendar month for payroll purposes. However, you have the flexibility to define periods shorter or longer than a month. Each scheduling period starts immediately after the previous one, without any gaps.

■ The default maximum length of a schedule is 100 days.


4. (Optional) To apply a cyclical schedule and/or duty demand to the new scheduling period, select the appropriate **Options**:
 - **Apply cyclical schedule**;
 - **Apply duty demand**.
5. Click **OK**. The scheduling period is created with the default status 'Plan.'

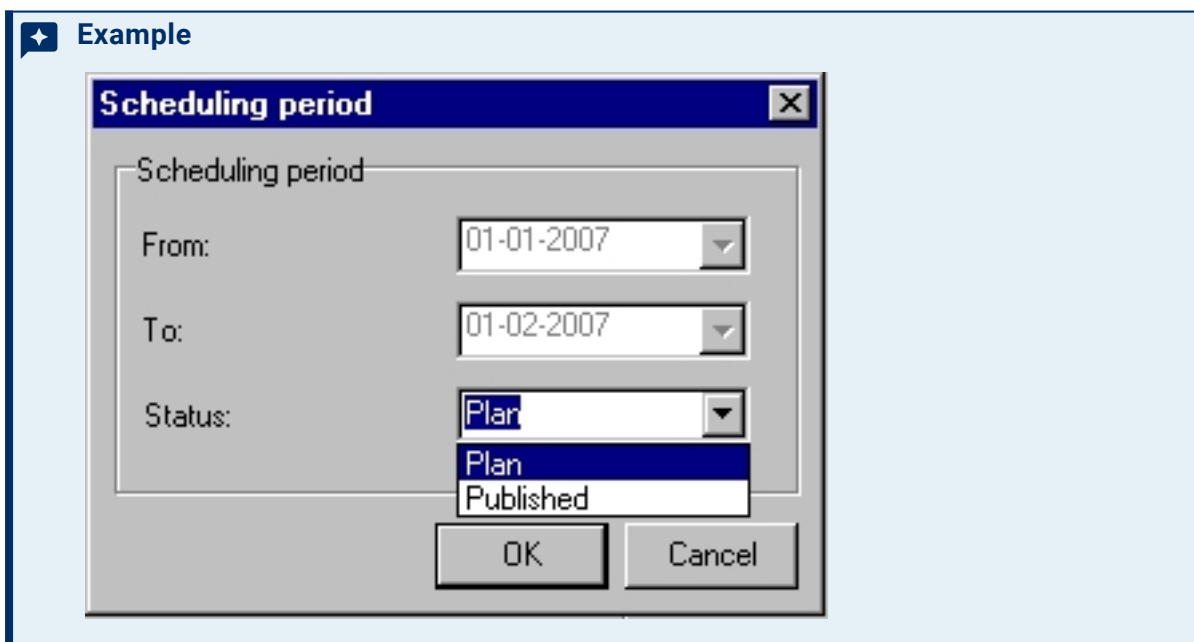
Change status of scheduling period

The status of a scheduling period reflects its current phase in the scheduling process and dictates what actions can be taken. For instance, once a scheduling period is 'Approved,' you cannot add shifts, but you can modify the status.

 ■ To be able to change the status of a scheduling period you need to have the relevant authorization.

■ Furthermore, upgrading a schedule status from 'Plan' to 'Published' or 'Published' to 'Closed' is only allowed if you're authorized to create violations as a result of status change. If a violation occurs because of this, you'll receive a warning.

1. Go to **Planning > Schedule management > Scheduling periods** tab; a list of scheduling periods will be displayed, indicating the start and end dates and status of each.
2. Click on a scheduling period.
3. Click the  button; the **Scheduling period** window will open.



4. Pull down the list in the **Status** field and select the appropriate status. The status of a scheduling period can only be changed one step at a time in either direction.



- **Plan:** the schedule is still being compiled by the planner; shifts can still be entered or removed.
- **Published:** the draft schedule has been made available to the employees for comment; shift-swaps and alterations are possible, but each modification is individually logged.
- **Closed:** the planner has finished work on the schedule; no more changes may be made to it.
- **Approved:** the closed schedule has been approved by a manager.
- **Processed:** final processing by outside parties (e.g. the payroll administration department) is complete; no further processing is required.

5. Click **OK**. The **Schedule management** window is updated and the scheduling period's new status will be shown in the list.

Difference published versus realized schedule

In Workforce scheduling, a published schedule and a realized schedule (for information on realizations, see "[Shift realization after scheduling](#)" on page 171) refer to different stages in the scheduling process:

1. **Published schedule:**

- The published schedule is a fixed and finalized version of the schedule that is shared with employees in advance.
- It typically includes planned work shifts, assignments, and breaks for each employee over a specific period, such as a week or a month.
- The published schedule serves as a reference for both employees and management, providing clarity on work expectations and helping employees plan their personal lives around their work commitments.

2. **Realized schedule:**

- The realized schedule, on the other hand, represents the actual shifts and assignments that employees have worked or are currently working.
- It takes into account any changes, adjustments, or substitutions that may have occurred during the scheduling period.
- Realized schedules are dynamic and can be subject to modifications based on unforeseen circumstances, such as employee availability changes, shift swaps, or unexpected absences.

In summary, the key difference lies in the timing and flexibility of the schedules. The realized schedule reflects the current state of affairs, considering any changes that have occurred during the scheduling period. In contrast, the published schedule is a static, pre-determined plan that is shared with employees ahead of time to provide structure and expectations.

Status change of transferred employees

All shifts in a schedule can be marked as 'Closed.' However, if employees are temporarily assigned to another department during the scheduling period, their shifts in that department will not be automatically marked as 'Closed.'

To enable status adjustments for shifts worked by employees in other departments, enable a general setting. When changing the scheduling status to 'Closed,' it affects shifts in that schedule and those worked by employees from the originating department when they were assigned to other teams.

Manage scenarios

A scenario is essentially a draft schedule for a specific department during a defined period. It possesses all the attributes of a regular schedule, including rule compliance checks and the ability to be customized. Once finalized, a scenario can be converted into an official schedule by assigning it a 'Plan' status.

Create scenario

1. Go to **Planning > Schedule management > Scheduling periods** tab.
2. Select the scheduling period for which you want to create a scenario.
3. In the **Scenarios** section, click the **New** button.
4. Enter a **Name** for the new scenario.
5. (Optional) If you want the new scenario to be based on an existing one, select the scenario you want to copy from the pull-down list in the **Copy of** field; otherwise keep **[None]** selected.
6. Click **OK**. The new scenario is added to the **Scenarios** section.

Example

Schedule management Building

Department: Building

Scheduling periods | Duty sets | Workstation demand | Scheduling criteria | Daily requirements

Scheduling periods Building

| From | To | Status |
|------------|------------|--------|
| 28-08-2023 | 25-09-2023 | Plan |
| 31-07-2023 | 28-08-2023 | Plan |
| 03-07-2023 | 31-07-2023 | Plan |
| 05-06-2023 | 03-07-2023 | Plan |
| 08-05-2023 | 05-06-2023 | Plan |
| 10-04-2023 | 08-05-2023 | Plan |
| 13-03-2023 | 10-04-2023 | Plan |

Properties for scheduling period 28-08-2023 to 25-09-2023

Description:

Scheduling round:

Maximum number of wildcard wishes:

Scenarios

- Scenario 1
- Scenario 2

Master schedule

Apply cyclical schedule...

Apply duty demand...

Calendar

Open calendar...

Length (days):

Requests

Open requests...

Open scenario

1. Click on the **Open** button; the **Scenario** window will open, showing the name of a scenario and the start and end dates of the associated schedule period.

Example

Scenario

Scenario

Name: Scenario 1

From: 01-01-2007

To: 01-02-2007

Components

Duty set: Duty set 1

Demand: None

Cyclical schedule: None

Scheduling criteria: None

Daily requirements: None

Master schedule


Apply cyclical schedule... Open master schedule

Apply duty demand Make final


OK

2. In the **Components** section, specify the elements that you want included in the scenario by selecting from the various pull-down lists.


3. To incorporate a cyclical schedule into the scenario, click **Apply cyclical schedule**.

 If you've selected 'None' in the 'Cyclical schedule' field, the corresponding 'Apply cyclical schedule' button is dimmed and inactive.

4. To incorporate daily requirements into the scenario, click **Apply duty demand**.

 If you've selected 'None' in the 'Daily requirements' field, the corresponding 'Apply duty demand' button is dimmed and inactive.

5. When you're ready, click on the **Open master schedule** button to open the scenario. You can now edit the scenario.
6. Click on the **Make final** button if you want to incorporate the scenario into the schedule.

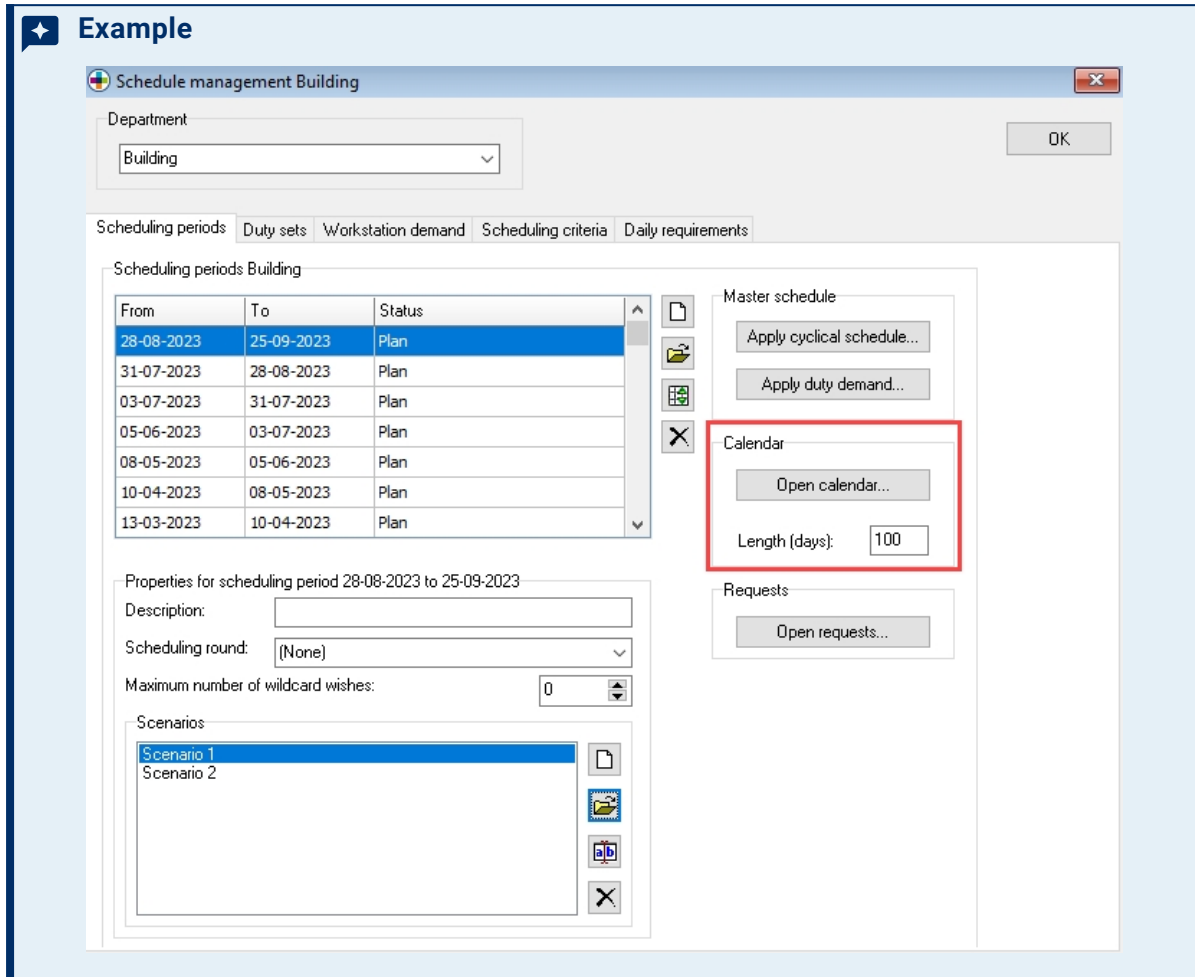
 If you finalize a scenario when there are already shifts on the schedule for the department and period in question, these will be overwritten by the shifts from the scenario. You'll be warned that this is about to happen.

Scheduling in the calendar

A calendar is a tool for scheduling special events like shifts, training, holidays, and leave. It also includes requests and public holidays. Each department can set its own calendar period, often around 100 days, which starts right after the previous schedule period ends.

Calendar length

1. Go to **Planning > Schedule management > Scheduling periods** tab.



2. Select the appropriate **Department**.
3. On the **Scheduling periods** tab, in the **Calendar** section, specify the **Length** (in days) of the period you want the calendar to cover. The length of the calendar has now been set.

Open calendar



- A calendar is available for each department.
- A calendar can be edited using the standard plan board editing principles.

1. Go to **Planning > Schedule management > Scheduling periods** tab.
2. Select the appropriate **Department**.
3. On the **Scheduling periods** tab, in the **Calendar** section, click on the **Open calendar** button; the calendar will open.

5.2.2 Duty sets

Duties are one of the central elements of a staff schedule. A duty typically refers to a specific shift or period of work that an employee is scheduled to work. It can include information such as the

start and end time of the shift, the location where the employee is expected to work, and the specific tasks or responsibilities that the employee will be responsible for during that time.

A duty set is a collection of duties that are assigned to an employee over a specific period of time. It can be used to define the total number of hours that an employee is expected to work over a given period, as well as the specific days and times that the employee is scheduled to work. Duty sets are often used to ensure that employees are working appropriate amounts of time, and that the right mix of employees is on hand to meet the demands of the business at different times. A duty set is associated with a department.

Create a duty set

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select the department to be associated with the new duty set.
3. Select the **Duty sets** tab.
4. Next to the **Maintenance duty sets** section (bottom left), click the **New** button.
5. In the **Duty set** window, enter the name of the new duty set.
6. (Optional) To copy some or all requirements and/or cyclical schedules associated with another duty set, select one from the **Copy of** drop-down list.



With the proper authorization, you can now select the appropriate checkboxes.

7. Click **OK**.
The new duty set is created.
8. Continue with "[Manage duties](#)" on page 122.

Open a duty set

1. Select **Planning > Schedule management**.
2. From the **Department** drop-down list, select the department associated with the duty set you want to work on.
3. Select the **Duty sets** tab.
4. In the **Maintenance duty sets** section, select the duty set you want to work on.
5. Click the **Open** button.

Manage duties

A duty has a **Begin** and **End time**, as well as a **Working hours** and **Labor-time**. It's important to understand the difference between working and labor time according to the Working Hours Act:

- Working time refers to the time an employee spends actually working, including time spent on activities such as meetings, training, and travel that are considered to be part of the job. This also includes paid and unpaid breaks.
- Labor time, on the other hand, refers to the total time an employee is at the employer's disposal, including working time and rest periods. This includes time spent on call, standby time and other non-working time that the employer requires the employee to spend on their premises.


A duty is made up of one or more activities, which can be work, rest, leave, holiday, and so on. Activities in a duty occur without interruption; rest is considered a type of activity. This means that when defining an activity's period, the starting time must be immediately after the end of the preceding activity.

Breaks

The breaks functionality allows you to include a specific duration of break within an activity, without specifying when it will be taken. To use this feature, the 'Allow breaks within activities' setting must be enabled in the **ORTEC WS Settings manager**. This way, you can create tasks that include a paid or unpaid break without having to use an activity-break-activity combination, which also eliminates the risk of employees expecting a break at a certain time. The breaks are considered in the total working hours and compensation rules, on the assumption that the non-working time is evenly distributed through the duty.

Add a duty to a duty set

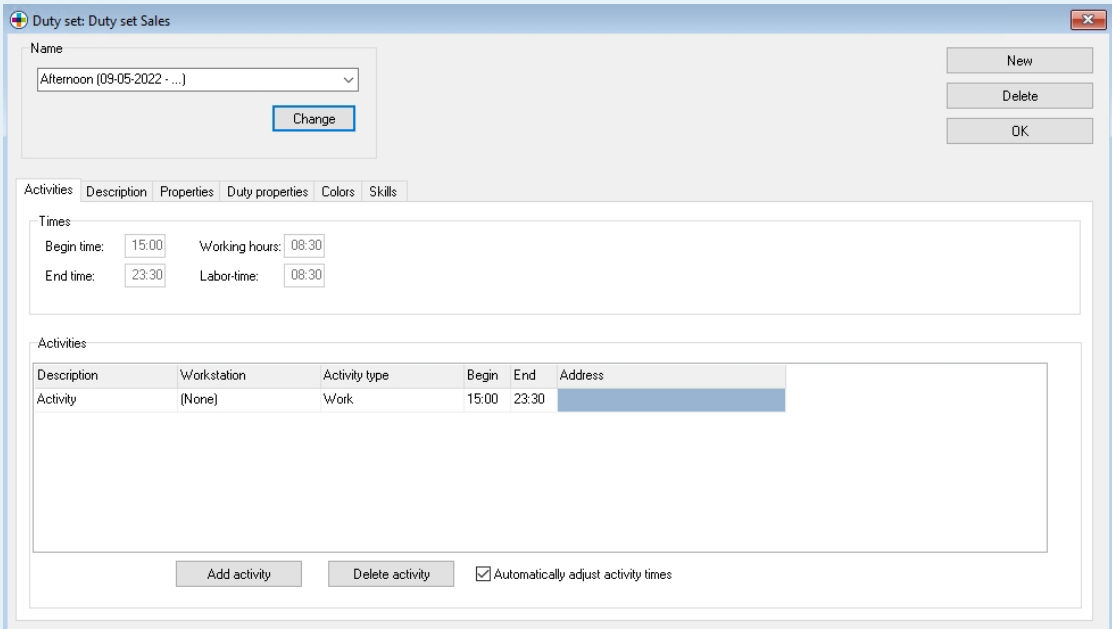
1. Select **Planning > Schedule management**.
2. From the **Department** drop-down list, select the department associated with the duty set you want to work on.

 To create organization wide duties, go to **Maintenance > Template duties** or **Special duties**. All tabs and settings are similar to the tabs and settings for adding department specific duties, as described in this topic.

3. Select the **Duty sets** tab.
4. In the **Maintenance duty sets** section, select the duty set you want to work on.
5. Click the **Open** button.
6. Click the **New** button.
 - In the **New duty** window, enter the (short) name of the duty.
 - (Optional) To base this new duty on one of the organization wide template duties, select - from the **Based upon** drop-down list - a duty. For more information, see the note in step 2.
 - (Optional) To copy all attributes from an existing duty in the selected duty set, select - from the **Copy of** drop-down list - a duty.
 - Click **OK**. The duty has now been added to the duty set and can be set up and managed via the tabs described below.

Activities

Example
Activities tab.



Duty set: Duty set Sales

Name
Afternoon (09-05-2022 - ...)
Change

New
Delete
OK

Activities | Description | Properties | Duty properties | Colors | Skills

Times
Begin time: 15:00 Working hours: 08:30
End time: 23:30 Labor-time: 08:30

Activities

| Description | Workstation | Activity type | Begin | End | Address |
|-------------|-------------|---------------|-------|-------|---------|
| Activity | (None) | Work | 15:00 | 23:30 | |

Add activity Delete activity Automatically adjust activity times

Add activities

1. At the bottom of the **Activities** tab, click the **Add activity** button.



Control where the new activity will be placed in relation to an existing activity by choosing either its start or end time before clicking the **Add activity** button:

- If you first select the **End** time of an existing activity and then click the **Add activity** button, the new line will be added after the existing activity.
- On the other hand, if you first select the **Begin** time of an existing activity and then click the **Add activity** button, the new line will be added before the existing activity.

2. To adjust the description, click on the **Description** cell of the new line and type a new description.
3. To set the workstation, click on the **Workstation** cell of the new line. Click on the arrow and from the drop-down list, select the desired workstation.
4. To set the cost center, click on the **Cost center** cell of the new line. Click on the arrow and from the drop-down list, select the desired cost center. For more information, see "[Cost center](#)" on page 27.



Setting UseCostCenterActivityType should be enabled. Contact your ORTEC representative when needed.

- To set the activity type, click on the **Activity type** cell of the new line. Click on the arrow and from the drop-down list, select the desired activity type. For more information, view "[Activity types](#)" on page 36.
- (Optional) Adjust the begin and end times of the activity. The activity has now been added to the duty.



By default, the **Automatically adjust activity times** checkbox is selected. If you change the times of an activity, the times of the other activities are automatically adjusted to compensate if necessary.

If you clear this checkbox, ORTEC WS immediately records the change and remembers it for the next time you open the window.

- To add an address, click on the **Address** cell of the new line. In the **Address** window fill out the respective fields and click **OK**.

Description

Example

Description tab.



The validity period is important, because a duty that is no longer valid can't be assigned in a schedule. It's therefore best not to define an end date for a duty's validity period, unless you're sure that the duty will not be worked beyond a particular date.


All other details are optional.

- **Name**
- **Valid from / Until**

The default start is the creation date of the duty.


- **Description**

Where appropriate, enter some explanatory information.


 The text you enter here will appear as a pop-up text on the plan board if the user moves the mouse pointer over the relevant duty.

- **Duty type**

Enable duty type calculations by defining a duty type.

 **Example**
You create a day duty and define its duty type as 'Day'. You can subsequently perform a calculation, which will include all duties whose duty type is 'Day'.


- **Cost center**

 The default cost center on the **Description** tab is the cost center linked to the department that the duty is associated with. However, you can also select another cost center if you want the costs to be charged elsewhere.


- **Salary code**

For more information, view "[Salary codes](#)" on page 53.

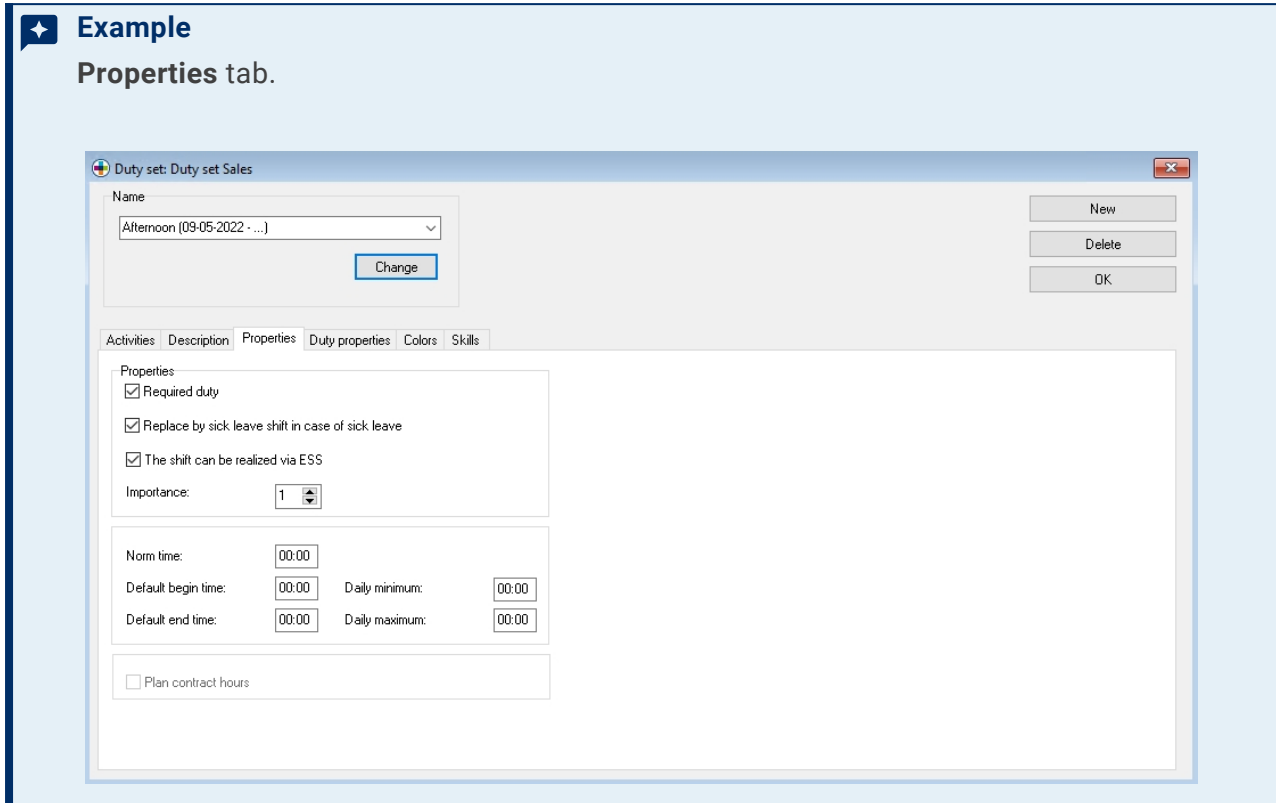
- **Duty group**

 Duty groups can be used to group duties together in the **Self Scheduling** view in **ORTEC WS for Employees**. They are defined via **Maintenance > Data management view > Duty groups**.

- **Code**

 A code is used to exchange the information defined here with an external system.

Properties




Various properties can be assigned to an individual duty to control how it is processed. The following checkboxes determine the action(s) taken in case of sick leave:

- **Required duty**
This means the duty must be reassigned if the person originally assigned is out sick. The plan board will update to reflect that the duty has been moved back to the **Duties to be scheduled** section for reassignment.
- **Replace by sick leave duty in case of sick leave**
With this option, the duty doesn't need to be reassigned if the person originally assigned is out sick. The plan board will indicate that the person is absent, but the planned duty will remain on the board.

Other properties are:

- To enable users in **ORTEC WS for Employees** to make changes to their shifts (usually to register their actual worked hours on the shift), select the checkbox **The shift can be realized via ESS**.

 Usually their changes need to be approved by the planner first (depending on setting UseApproveRealizations).

- **Importance**
The importance of the shift is taken into account when using the Vertical Norm **Importance of vacant shifts**. A lower importance gives a lower penalty if the shift remains vacant. This can be used in the Optimizer to determine which shifts have more priority to assign.
- **Norm time**

- **Default begin time / Daily minimum**
- **Default end time / Daily maximum**
- To schedule a duty in proportion to the employee's contract hours, select the checkbox **Plan contract hours**. This option is only available for duties in the **Special Duties** set (organization wide duties).

Duty properties

Example
Duty properties tab.

Manage duty properties

Duty properties are added or deleted via **Maintenance > Organization > Duty properties** tab. For more information, see "[Duty properties](#)" on page 51.

1. On the **Duty properties** tab, click on a value that you want to change, then adjust it as follows:
 - If it's a numeric integer attribute, numeric decimal attribute or a text attribute, simply type the new value into the field.

A decimal attribute must be a number with a decimal point (e.g. '3.75'). ORTEC WS does not recognize a comma as a decimal separator character (as in '3,75').

- If it's a Yes/No attribute, select one of the two values.
 - If it's a date attribute, enter the date using the calendar feature.
2. Click **OK**.
The modified properties are assigned to the duty.

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Colors

Example

Colors tab.

Duty set: Duty set Sales

Name
Afternoon (09-05-2022 - ...)
Change

New
Delete
OK

Activities Description Properties Duty properties Colors Skills

Colors

| | | | | |
|--------------------------|----------------------|---------|-----------------|-----------|
| <input type="checkbox"/> | <input type="text"/> | Color 1 | Choose color... | |
| <input type="checkbox"/> | <input type="text"/> | Color 2 | Choose color... | Afternoon |



Be mindful when assigning colors, particularly bright ones, to duties. Too many different colors on the plan board can cause confusion.

1. On the **Colors** tab, click a **Choose color** button.
2. Select a color.
3. Click **OK**.

An example of how the duty will be displayed appears. The color is now assigned to the duty.

Skills

Example Skills tab.

Duty set: Duty set Sales

Name
Afternoon (09-05-2022 : ...)
Change

New
Delete
OK

Activities Description Properties Duty properties Colors Skills

Only use skills with origin 'duty'

| Skill | Skill defined at | Level | Origin |
|-------|------------------|-------|--------|
|-------|------------------|-------|--------|



When selected, the checkbox **Only use skills with origin 'duty'** indicates that you only want to check required skills that have been assigned directly to the shift. All other required skills will be removed.

Add or adjust required skills

You can only add/adjust required skills directly for the shift (Origin=Shift/Duty). Skills coming from other origins can only be viewed. For each skill, the following information is shown:

- **Skill:** required skill
- **Skill defined at:** the department where the indicated skill belongs to
- **Level:** required level
- (Optional) **Location:** the name of the location for which the skill is required (Origin=Workstation)
- (Optional) **Workstation:** the name of the location for which the skill is required (Origin=Workstation)
- **Origin:** reason the skill is required for this shift

Example

Origin activity type: required skills for activity types

Example: Activity type Driving requires the skill Drivers License

If activity type Driving is used in a shift, the required skill Drivers License will be shown in the new tab Skills with origin Activity type Driving.

Origin workstation: required skills for workstations

Example: Workstation A requires the skill Background Check OK

If workstation A is used in a shift, the required skill Background Check OK will be shown in the new tab Skills with origin Workstation A.

Origin position: required skills for positions

Example: Position Manager requires the skill Location Manager

If the position manager is assigned to a shift, the required skill Location Manager will be shown in the new tab Skills with origin Position manager.

Origin duty: required skills for shifts

A required skill can be assigned directly to a shift.

Registration / Bookkeeping

Example

Bookkeeping tab is displayed with **THREELEVELCOSTCENTERSFORACCOUNTING** set at Y.

The screenshot shows a software window titled "Duty set: Duty set Sales". The "Bookkeeping" tab is active. It features a "Name" dropdown menu with "Afternoon (09-05-2022 · ...)" selected and a "Change" button. To the right are "New", "Delete", and "OK" buttons. Below is a "Times" section with input fields for "Begin time" (15:00), "End time" (23:30), "Working hours" (08:30), "Labor-time" (08:30), "Work activities" (08:30), "Other activities" (00:00), and "Bookkeeping" (00:00). The "Bookkeeping" section contains a table with the following columns: "Cost center level 1", "Cost center level 2", "Cost center level 2 description", "Cost center level 3", and "Cost center level 3 description". The first row of the table is highlighted in blue.

| Cost center level 1 | Cost center level 2 | Cost center level 2 description | Cost center level 3 | Cost center level 3 description |
|---------------------|---------------------|---------------------------------|---------------------|---------------------------------|
| | | | | |

Registration

Registration focuses on capturing the necessary information at the time of scheduling a duty. This information enables the accounting system to allocate expenses and track costs accurately.



Registration hours can be updated automatically when changing shift times; in that case additional/less working hours will be divided/subtracted evenly on/from cost centers that already had registration hours on the shift. In case the shift didn't have registration hours yet, nothing happens.

Note that this functionality only works when realizing a shift in the **OWS Client** duty form and when approving a pending employee realization.

Bookkeeping

Bookkeeping records and organizes the captured information to ensure accurate accounting and financial reporting.

1. At the right of the **Bookkeeping** section, click the **Add bookkeeping line** button.
2. Select the appropriate cost center levels.
3. Click **OK**.

Link to department

To incorporate a duty set, demand and/or a cyclical schedule into a schedule, link it to a department:

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select the department you want to link duty sets and/or demands to.
3. Select the **Duty sets** tab.
4. On the right from the **Duties and demand for [department]** section, click the **New** button.
5. In the **Duty set periods** window, define a period. Enter a **From** and **To** date.



The period doesn't need to match the schedule periods defined on the **Scheduling periods** tab.

6. Select a **Duty set** from the drop-down list.
7. Select a **Demand** from the drop-down list.
8. Select a **Cyclical schedule** from the drop-down list.
9. Click **OK**.

Edit or delete link

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select a department.
3. Select the **Duty sets** tab.
4. In the **Duties and demand for [department]** section, select a period.
 - To edit, click the **Open** button. In the **Duty set period** window, adjust the **Period** and/or **Properties**. Click **OK**.
 - To delete, click the **Delete** button. To confirm, click **Yes**.

5.2.3 Duty demand

A demand outlines the number of employees needed for a specific shift on a specific day of the week. One or more demands can be defined for each department. Typically, a demand applies


throughout the schedule period. However, you can differentiate from this with date-specific demands. Demands are organized in sets. The plan board's "[Shift counters](#)" on page 12 section is populated on the basis of the defined demands.

Manage duty demand


1. Go to **Planning > Schedule management**.
2. Select the **Department** whose duties you want to work on.
3. Select the **Duty sets** tab.
4. Select a demand set in the **Components Duty set [department] > Maintenance demand** section.

Or, when you need to create a demand set first, click the **New** button.


6. Click on the **Open demand** button.
7. For each duty, enter the number of people required on each day of the week.
 - Select a cell.
 - Define the **Minimum**, **Normal** and **Maximum** number of people needed.

 Filter on duty names via the **Filter duties** field. Type (part of) a duty name and click **Apply**. Only corresponding duties are shown. The **Delete** button will clear the filter and all duties are shown again.


8. In the **Demanded duty skills** section in the bottom-right corner, view and manage the skill requirements of a duty demand.

 **Required:** The general setting `UseDemandedDutySkills`. Contact your ORTEC representative when needed.


- To add a new skill, click the **New** button.

 When the **New** button is inactive, first set a demand on the selected duty and day. When no demand has been set, you can't add skills.

- Select a **Skill** and **Level** from the respective drop-down lists.

 For more information, on where and how to define skills and levels, see "[Skills](#)" on page 35.


- Define the **Amount** of people needed with that skill.
 - Click **OK**.
- To remove a skill, select it and click the **Delete** button.



- The total number of skill requirements can never exceed the duty demand.
- To edit a skill requirement, remove it completely and create a new one.

9. (Optional) To define a non-standard demand for a particular date:
 - Select the duty to which the date specific demand will apply.
 - Click the **Date specific** button in the bottom-left corner.

- (Optional) Adjust the year.
- In the box for the appropriate date, enter the number of people required for the duty. Define the **Minimum**, **Normal** and **Maximum** number of people needed.
- View and manage the skills needed. For more information, see step 8 above.

 Any existing skill requirements from the recurring duty demand are copied to the date specific demand (activated by general setting UseCopySkillRequirementsDateSpecificDutyDemand).


Note: When the demand for a specific date is lower than the total number of copied skills, the application will display an error. To correct this, first set the demand to match the number of copied skills, remove any unnecessary skills, and then lower the demand.

- Click **OK**.
The date-specific demands have now been assigned to the duty.

Link to department

To incorporate a duty set, demand and/or a cyclical schedule into a schedule, link it to a department:

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select the department you want to link duty sets and/or demands to.
3. Select the **Duty sets** tab.
4. On the right from the **Duties and demand for [department]** section, click the **New** button.
5. In the **Duty set periods** window, define a period. Enter a **From** and **To** date.

 The period doesn't need to match the schedule periods defined on the **Scheduling periods** tab.

6. Select a **Duty set** from the drop-down list.
7. Select a **Demand** from the drop-down list.
8. Select a **Cyclical schedule** from the drop-down list.
9. Click **OK**.

Edit or delete link

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select a department.
3. Select the **Duty sets** tab.
4. In the **Duties and demand for [department]** section, select a period.
 - To edit, click the **Open** button. In the **Duty set period** window, adjust the **Period** and/or **Properties**. Click **OK**.
 - To delete, click the **Delete** button. To confirm, click **Yes**.

5.2.4 Workstation demand

5.2.5 Scheduling criteria

5.2.6 Daily requirements

Daily requirements refer to the minimum number of individuals with a particular qualification needed to be present during a specific time period. These requirements are essential for ensuring that a department is adequately staffed.

Compliance with daily requirements is checked by counting the number of qualified individuals that are scheduled on the plan board. If there aren't enough, the cells appear with a red border, but if there are more than enough, they appear with a green border. If the requirement is met exactly, the cells have no colored border.

Add daily requirements

1. Go to **Planning > Schedule management**.
2. Select the **Daily requirements** tab.
3. In the **Maintenance daily requirements** section, click the **New** button.
 - Define a **Name** for the new set of daily requirements.
 - (Optional) To copy some or all requirements associated with another daily requirements set, select one from the **Copy of** drop-down list.
 - Click **OK**.
4. Select the new daily requirements set and click the **Open** button.
5. Daily requirements will be listed in the left pane, grouped per category. To add daily requirements, click the **New** button.
 - (Optional) Define a **Name** for the new requirement.
 - Select a **Type** of requirement from the drop-down list:
 - Balance of account category
 - Importance of vacant shifts
 - Number of skills present
 - Number of vacant shifts
 - Work relations per shift
 - Workstation demand
 - Click **OK**.
6. Define the parameters of the requirement.



It is advisable to enter a short name, because this name will be shown on the plan board, where space is at a premium.

7. Click **OK**.

Edit or delete daily requirements

1. Go to **Planning > Schedule management**.
2. Select the **Daily requirements** tab.
3. In the **Maintenance daily requirements** section, select a daily requirements set.
 - To edit or remove requirements inside a set, click the **Open** button. Now edit or remove one or more daily requirements listed in the left pane. When finished, click **OK**.

- To edit a daily requirements set, click the **Change** button. Edit the name of the daily requirements set and click **OK**.
- To delete a daily requirements set, click the **Delete** button. To confirm, click **Yes**.

Link daily requirements to a period

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select a department.
3. Select the **Daily requirements** tab.
4. In the **Daily requirements [department]** section, click the **New** button.
5. In the **Attach daily requirements to period** window, define a period. Enter a **From** and (optional) a **To** date. During this period, the daily requirements will be valid.
6. From the **Daily requirements** drop-down list, select a daily requirements set.
7. Click **OK**.

 If there's a potential period overlap problem, ORTEC WS will highlight it.


5.2.7 Skill requirements

The **skill requirements** feature enables planners to define skill requirements on top of duty demands. The main purpose of the skill requirements feature is to facilitate a better self-scheduling process in which having the right skills for the right shifts is important. It's especially useful when employees have multiple skills. In some cases, allowing an employee to choose a shift with a specific required skill may not be the best option due to factors such as the employee's additional skills and the skills of other employees.

Skill requirements make it possible to create generic duties (like a 'Day' duty) but still take skill requirements into account. An employee can just choose the generic Day shift and isn't bothered with choosing a skill as well. The skill requirements feature helps in getting the skill requirements covered with a smart algorithm to determine what skills are still needed. It simplifies the self-scheduling process for employees by limiting their options based on their skills and it helps both the planner and employee with additional counters and insights.

Example

With the skill requirements feature it's possible to define that out of 12 Day shifts (the regular duty demand), you need 4 shifts with skill A, 5 with skill B, 2 with skill C and 1 shift without a skill requirement.

 An employee can cover only one skill requirement at a time.

Skill matching algorithm

An algorithm is used to determine how many skills are still missing based on the skill requirements for a specific shift type and all employees (and their skills) assigned to that shift type on a given day. The algorithm determines the fulfillment of skill requirements and identifies any missing skill requirements. When the assigned employees change, the algorithm re-calculates the missing skills based on the new set of employees and their skills. The output of the algorithm is a number of missing skills and a list of skills needed to improve the missing skills.

Example

It's possible that only one skill is missing for a shift, but there may be multiple skills that could fulfill that requirement:

For duty C50 with a duty demand of 5, the following skill requirements have been defined:

- 2 CT
- 2 MRI
- 1 Angiography

The following employees - including their skills - are currently assigned to duty C50:

- Employee 1, with skill MRI
- Employee 2, with skills CT and Angiography
- Employee 3, with skill CT
- Employee 4, with skill MRI

The skill matching algorithm determines that employee 1, 3 and 4 - each having only one skill - can cover the 1 CT and 2 MRI skill requirements. It further recognizes that employee 2 can only cover one out of the two remaining skill requirements (1 CT & 1 Angiography), which means 1 skill is missing. It determines that one extra employee with either skill Angiography or skill CT can solve the missing skill requirement. This is a very simplified case which gets increasingly more complex the more skill requirements and employee skill combinations are added to the problem.

Output of the skill matching algorithm in this example:


- Missing skill requirements: 1
- Skill needed to solve/improve the missing skill requirements: Angiography or CT

The output of the algorithm is used in the various components of the skill requirements feature.

Manage skill requirements

1. Create one or more "Duty sets" on page 121.
2. Per duty set, define the "Duty demand" on page 132 per day and per duty. Or, in other words, the number of shifts required per shift type. For each demand that has been set, you can also set the **Demanded duty skills**. See step 8 and 9 in the "Duty demand" on page 132 topic.
3. Make sure the missing skills counter is visible in the plan board in the **ORTEC WS** client. An extra option is added for displaying the shift counters, including the number of missing skill requirements.
 - Go to **General > Plan board settings**.
 - Select the **Display settings** tab.
 - Select and open a settings set.
 - In the **General** tab, select the **Shift counters** tab.
 - In the **Text** field, select the calculation **Assigned / Request according to duty demand / Skill requirements**.
 - In the **Compare the number of assigned duties with** field, select **Request according to duty demand / Skill requirements**.

- In the **Faction** section, select **Duty name**.

 The shift counters options which shows the skill requirements only works correctly when the **Faction** is set to **Duty name**. In the plan board, the hint text of the shift counter shows the number of missing skills and the skills needed to improve/solve the missing skills.

4. Make sure the skills counter is visible in the **ESS 7** self-scheduling functionality.
 - Go to **General > Data Management view**.
 - Go to **Scheduling round > List scheduling round**.
 - Double click on a scheduling round to edit it.
 - Select the checkbox **Show number of missing skills**.
 - Repeat this for each scheduling round.

Example

The screenshot below shows the skills counter on the right; 1 skill is still missing. Which skill remains vacant is not provided, because this can change at any instance during self-scheduling.



5. To limit the options an employee has to (de)select shifts during self scheduling, define the **Skill staffing** criterion in the shift proposal criteria set(s) used for self scheduling. This criterion is typically used during round 2. For more information, see ["Shift proposal criteria" on page 43](#).
6. To help the planner in the **ORTEC WS** client during round 3 to assign the appropriate employee for a shift that has skill requirements, define the **Skill understaffing** criterion in the criteria set used for the **Candidates for shift** functionality. It shows whether or not the employee improves the missing skill requirement(s). For more information, see ["Shift proposal criteria" on page 43](#).

5.3 Scheduling

Scheduling is done on the plan board and starts after the [" Plan board settings" on page 3](#) have been defined.

Scheduling includes adding, adjusting, and deleting shifts and/or activity types. Requests are handled and sick leaves are registered. Scheduling also involves shift realization, which makes it possible to make last minute adjustments.

5.3.1 Open a schedule

To create a schedule, you can choose to apply duty demands (specifying the number of employees needed for each shift) and/or a cyclical schedule (rotating shift patterns) or skip them altogether. Schedules can be viewed, created and updated for an entire department or for individual employees.

Open regular schedule

Open a regular schedule while applying duty demand and/or cyclical schedule.

A duty demands outlines the number of employees needed for a specific shift on a specific day of the week. By applying the duty demand, you can view on the plan board how many shifts are (still) needed.

A cyclical schedule involves rotating patterns of shifts, which can be assigned to individual employees. By applying a cyclical schedule, the rotating patterns of shifts will be rolled out automatically on the plan board.



- Applying duty demands or a cyclical schedule is optional when scheduling. To start scheduling without applying duty demands and/or a cyclical schedule, just ["Open a plan board" on page 104.](#)
- Make sure duty demands are defined. For more information, see ["Duty demand" on page 132.](#)
- Make sure a cyclical schedule is defined.

1. Go to **Planning > Schedule management > Scheduling periods** tab.
2. Make sure the correct **Department** is selected.
3. Add a new scheduling period or select an existing one:
 - When adding a new scheduling period:
 - a. Click the **New** button.
 - b. (Optional) Adjust the **Period**.
 - c. Click the checkbox **Apply cyclical schedule** and/or **Apply duty demand**.
 - d. Click **OK**.
 - When opening an existing schedule:
 - a. Select a **Scheduling period**.
 - b. Click the **Apply duty demand** button.
 - c. (Optional) Adjust the **Period**.
 - d. Click **OK**.
 - e. Click the **Apply cyclical schedule** button.
 - f. Click **OK**.
4. Click the **Open** button.
5. (Optional) Adjust the **Period**.
6. Click the **Plan board** button.

The plan board with the selected scheduling period appears. The required shifts are

displayed in the **Shift counters** section on the plan board. For more information, see "[Shift counters](#)" on page 12.

One-off adjustments to shift counters

With the schedule open, you can make one-off adjustments to the applicable staffing requirements. This is done by modifying the requirement for the day in question in the **Shift counters** component of the open schedule.

If the **Shift counters** component isn't displayed, go to **View > Plan board components**, and select **Shift counters**.

Make an one-off increase or decrease

1. In the **Shift counters** component, select the counter that applies to the shift you're concerned with on the relevant day.
2. Right-click on the selected shift; a menu will pop up.
3. From the shortcut menu, select **Increase day specific demanded duty** or **Decrease day specific demanded duty**.



Adjusting the staffing requirement doesn't automatically lead to a change in the **Vacant Shifts** component. The **Vacant Shifts** component will therefore have to be adjusted separately. Shifts can be added to or removed from the component.

Switch to another schedule with F9 or F10

You can switch to another schedule using the F9 or F10 function key. To enhance clearness and avoid confusion, the system will retain the selection on the employee that was selected in the previous schedule. This is also the case if you change the sorting or filtering. If the system cannot find that employee, the first employee in alphabetic order will be selected in the new schedule.

Open personal schedule


Open a personal schedule of a single employee:

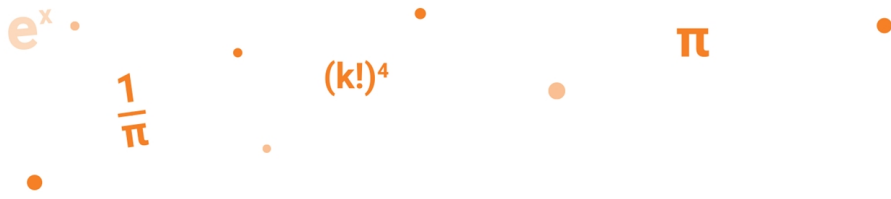
1. Go to **Employee > Personal schedule**.
2. In the **Select a person and a period** window, select a department, employee, and period.
3. Click **OK**. A plan board will appear with the personal schedule of the selected employee.



- Data is displayed on a weekly or monthly basis, as defined in **General > Plan board settings > Display settings** tab. For more information, see "[Settings](#)" on page 12.
- The same (right-click) functionalities are available as when viewing a regular schedule.

Alternative method

1. Go to **Planning > Master schedule**, or select the shortcut icon  in the toolbar.
2. Make sure the appropriate **Department** is selected.
3. (Optional) Adjust the **Scheduling period** and/or **Period**.
4. Select an employee to open the personal schedule.



5. Click the **Plan board** button.
6. View and adjust the personal schedule of this employee.

5.3.2 Schedule shifts

Scheduling starts with adding shifts. After that, shifts can be adjusted by - for example - merging, splitting or reassigning them.

Add shifts

There are a number ways to add shifts to a schedule. Which method you choose depends on personal preference.



Authorization violations

When initiating a planning action like adding shifts, the system verifies if the user has the authorization to potentially violate rules. If the action would cause a violation that the user lacks authorization for, a message indicates insufficient permissions, and the action is not carried out.

If a schedule already contains violations the current user isn't authorized for, this user is only allowed to unassign a shift.

Drag-and-drop

Add a shift by drag-and-drop:

1. "[Open a schedule](#)" on page 139.
2. In the **Vacant Shifts** component, click on the shift you want to enter on the schedule and keep the mouse button pressed.
3. Drag the shift to the row for the person you want to assign the shift to; make sure you stay within the same column.
4. Release the mouse button. You have now moved the shift from the **Vacant Shifts** component to the schedule.

Filter vacant shifts

Simplify shift selection by filtering vacant shifts before drag-and-drop. Vacant shifts can be filtered on department, position, activity type, and workstation in two ways: dynamic or static filtering.

Dynamic filtering


Dynamic filtering means that the availability of departments or positions in the filter list depends on the departments or positions related to the vacant shifts.


Example

1. Go to **General > Plan board settings > Display settings** tab.
2. Select the proper **General display setting** and click on **Open**.
3. Go to **Planning board > Other** tab.
4. Select - in the **Filter** field - the desired filter type.
5. Click on **OK** twice.

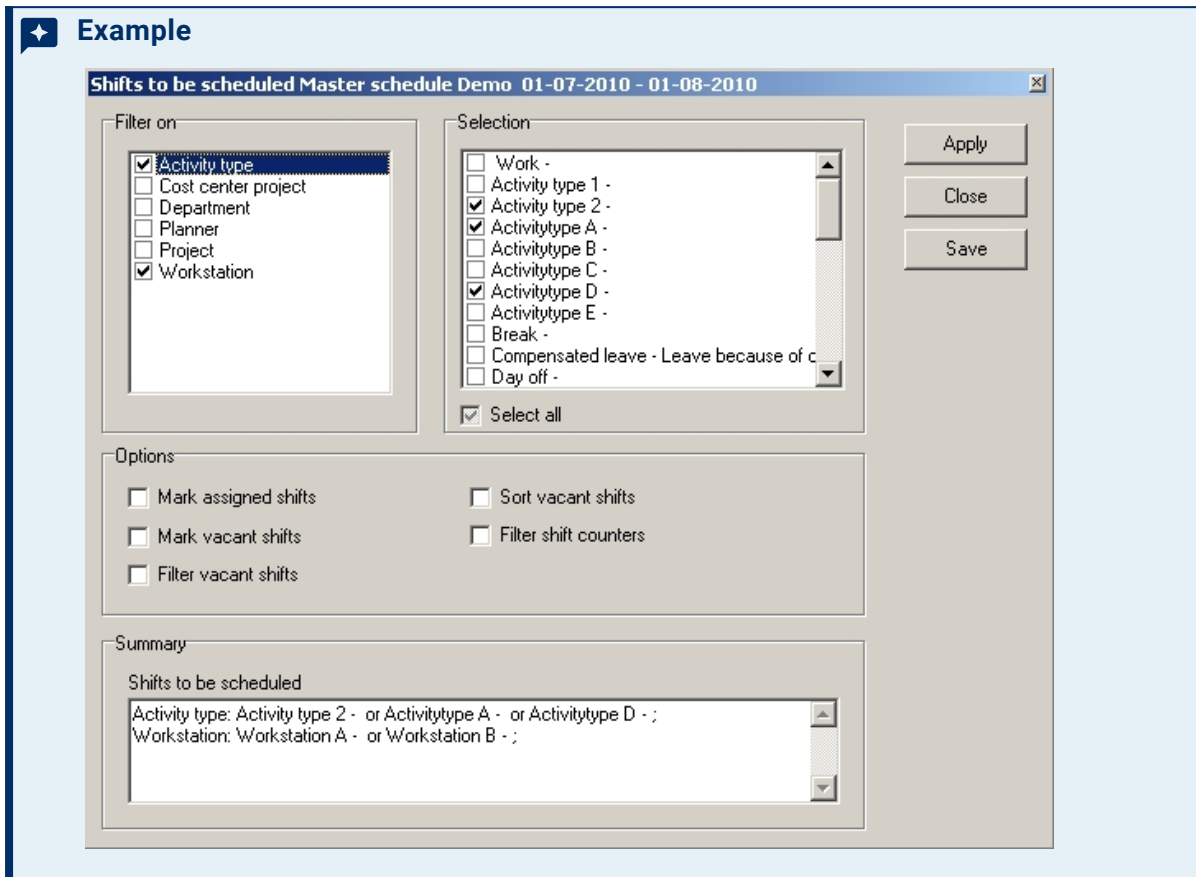
Static filtering

You can also filter vacant shifts in a static way.


1. In the plan board toolbar, select the  **Filter vacant shifts** icon.

 If this icon isn't available, activate it via the little arrow on the far right of the plan board toolbar. Select **Add or Remove Buttons** and select **Filter vacant shifts**.

- In the **Shifts to be scheduled** window, select in the **Filter on** section one or more filters.




- Select in the **Selection** section the necessary items.

 In the **Summary** section you'll find the result of what will be filtered.

- (Optional) Choose from 5 different checkbox options:

- **Mark assigned shifts:** changes the color of the assigned shifts in the plan board.
- **Mark vacant shifts:** changes the color of the vacant shifts.
- **Filter vacant shifts:** vacant shifts are filtered based on the selection
- **Sort vacant shifts:** vacant shifts are sorted based on whether or not they're selected in the filter.
- **Filter shift counters:** shift counters are filtered based on the selection.

 To support the first two options, select **Shift filter** when setting the color, e.g. background color or cell border color, at the **Display settings**. For more information, see "[Planning board](#)" on page 15.

- (Optional) To save these filtering settings for other schedules within the same department, click **Save**.
- Exit with **OK**.

Typing

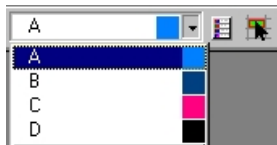
Add a shift by typing into the matrix:

1. "Open a schedule" on page 139.
2. Select the cell in the schedule matrix where you want the shift to be entered; either with your mouse or the arrow keys on your keyboard.
3. Type in the name of the shift, exactly as it appears in the **Vacant Shifts** section (paying particular attention to capitalization, spaces, punctuation marks, etc).
4. When you're finished, press Enter or select another field.
You've now entered the shift on the schedule.

Duties list

Add a shift via the **Duties** list:

1. "Open a schedule" on page 139.
2. Pull down the **Duties** list:



3. Select the shift that you want to add to the schedule; the selected shift is displayed in the **Duties** field.
4. Click the cell where the employee's row intersects with the desired day's column to assign the shift.
5. Press function key F4.
You've now entered the shift on the schedule.

Duty pallet

Add a shift via the **Duty pallet**:


1. "Open a schedule" on page 139.
2. Click on the **Duty pallet** icon on the tool bar; a window will open, which has two tabs: **Shifts** and **Special duties**.
3. Select the shift or special duty that you want to add to the schedule.
4. Click on the cell in the schedule matrix where you want the shift to be entered.
5. Press function key F4. You've now entered the shift on the schedule.



If you select several days in the schedule matrix before pressing the F4 key, you can add a shift on several days at once.

Click to add

Easily add multiple shifts with the **Plan in with a mouse click** icon:

1. "Open a schedule" on page 139.
2. Select a shift from the **Duties** list or the **Duty pallet** on the toolbar.
3. Select the **Plan in with a mouse click** icon  on the tool bar to activate the click-to-add feature.
4. Click on the cells in the schedule matrix where you want the shifts to be entered.



After you've finished adding shifts, click the **Plan in with a mouse click** icon again to deactivate the feature.

Roll out selection

Add shifts by rolling out (repeating) a selection for one or multiple weeks:

1. ["Open a schedule" on page 139.](#)
2. Add a number of shifts for an employee, using one of the other scheduling methods.
3. On the row for the employee in question, click on the first day of the period you want to repeat.
4. While holding your keyboard [Shift] key down, click on the last day of the period you want to repeat.
5. Right-click on the selected period; a menu will pop up.
6. From the shortcut menu, select **Copy selected shifts**; the **Select a period** window will open.
7. Define the period in which the copied shifts should be rolled out.



This period must be within the period covered by the open schedule.

8. Click **OK**.

Add shift command

Add a shift via the **Add shift** menu command:

1. ["Open a schedule" on page 139.](#)
2. Select the matrix cell in which you want to add a shift.
3. Right-click on the selected cell; a menu will pop up.
4. From the shortcut menu, select **Add shift**; the **Add new shift** window will open.
5. Select the appropriate shift from the list.
6. Click **Add**; the shift is added to the schedule in the appropriate cell.

Candidates for shift

Select the best employee for a shift:

1. ["Open a schedule" on page 139.](#)
2. From the **Vacant Shifts** section, select the shift that you want to add to the schedule.
3. Right-click on the selected shift; a menu will pop up.
4. From the shortcut menu, select **Candidates for shift**; the **Candidates for shift** window will open.

Example

Candidates for shift Night (23:00 - 07:30), 21-06-2023

Shift proposal criteria: **Shift proposal criteria**

Shift Night: 23:00 - 07:30 Withdraw shift

| Employee | Preferred employee | ExtraCosts | Replace | New | #Violation | #OnCallS | #Shifts | DayOff | Not Req | Required |
|-----------|--------------------|------------|-----------|-------|------------|----------|---------|--------|---------|----------|
| Buckley | No | 0.00 | Afternoon | Night | 1 | N/A | 1 | No | Yes | No |
| Haney | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Tucker | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Bassett | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Beach | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Rosac | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Clegg | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Broughton | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Howarth | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | No |
| Merritt | No | 0.00 | | Night | 3 | N/A | 0 | Yes | No | No |

Refresh

Contact

Cancel


Proposal details for employee Buckley

| Employee | Preferred employee | ExtraCosts | Replace | New | #Violation | #OnCallS | #Shifts | DayOff | Not Req | Required |
|----------|--------------------|------------|-----------|-------|------------|----------|---------|--------|---------|----------|
| Buckley | No | 0.00 | Afternoon | Night | 1 | N/A | 1 | No | Yes | No |

Current shifts for employee Buckley

| 18-06-2023 | 19-06-2023 | 20-06-2023 | 21-06-2023 | 22-06-2023 | 23-06-2023 | 24-06-2023 | 25-06-2023 |
|------------|------------|------------|------------|------------|------------|------------|------------|
| - | - | - | Afternoon | Afternoon | - | - | - |

- From the **Shift proposal criteria** section in the top-left corner, select the set of shift proposal criteria of your choice.

 It's possible to define several shift proposal criteria sets. You can, for example, use criteria set 'A' first and criteria set 'B' next, etc. You'll decide the order of use of these sets.
Learn how to create sets of shift proposal criteria: "[Shift proposal criteria](#)" on [page 43](#).

- Use the **Open** button, to edit the selected shift proposal criteria set.
 - Use the **Refresh** button to update the list with the proposed employees after selecting a different set of criteria. The criteria rules inside a **Shift proposal criteria set** determine which columns are shown and in which order.
- If a selected employee from another department is confirmed with the **OK** button, a window will appear for you to choose the shift assignment option:
 - Borrow employee
 - Subcontract shift
 - Subcontract and plan concept
 - Subcontract and plan final
 These options are only displayed if the corresponding authorizations are assigned to the user.
 - Click **OK**.

It's also possible to send an email or text message to one or multiple employees available in the candidates for shift window. This is typically used to send the employees a message to ask if they will be able to work an additional shift.

Shift proposal

Select the best shift for an employee:

1. "Open a schedule" on page 139.
2. Select - in the row of a specific employee - one or more days in the schedule.
3. In the **Employees** or **Employee calculations** section, right-click in the row of this employee.
4. From the shortcut menu, select **Shift proposal**; the **Shift proposal for employee** window will open.

Example

Shift proposal for employee Bassett

Shift proposal criteria: Shift proposal criteria

Period: From: 05-06-2023 To: 17-06-2023

| 05-06-2023 | 06-06-2023 | 07-06-2023 | 08-06-2023 | 09-06-2023 | 10-06-2023 | 11-06-2023 | 12-06-2023 | 13-06-2023 |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| - | - | - | - | - | - | - | - | - |
| | | Night | Morning | Night | Night | Night | | |
| | | | Night | | | | | |

Proposal details for shift Night (08-06-2023)

| Employee | Preferred employee | ExtraCosts | Replace | New | #Violation | #OnCallS | #Shifts | DayOff | Not Req | R |
|----------|--------------------|------------|---------|-------|------------|----------|---------|--------|---------|---|
| Bassett | No | 0.00 | | Night | 2 | N/A | 0 | Yes | No | N |

5. From the **Shift proposal criteria** section in the top-left corner, select the set of shift proposal criteria of your choice.




It's possible to define several shift proposal criteria sets. You can, for example, use criteria set 'A' first and criteria set 'B' next, etc. You'll decide the order of use of these sets.

Learn how to create sets of shift proposal criteria: "[Shift proposal criteria](#)" on page 43.

- Use the **Open** button, to edit the selected shift proposal criteria set.
 - Use the **Refresh** button to update the list with the proposed shifts after selecting a different set of criteria. The criteria rules within the **Shift proposal criteria** set determine which columns are shown in the **Proposal details** section and in which order.
6. (Optional) Adjust the period.

7. Select a shift.

 The first gray row contains the current schedule of the employee. The second row contains the dates. All other white rows contain all unique shifts that the employee can work based on the shift proposal criteria. The best shifts are on top.

8. View the details of the selected shift in the bottom part.
9. Click **Assign**.

Multiple shifts on one day

Add two or more shifts on a given day via one of the following procedures:

Procedure I: Add shift menu command

1. "[Open a schedule](#)" on page 139.
2. Add a shift to the schedule.
3. Right-click on the selected day: a menu will pop up.
4. From the shortcut menu, select **Add shift**; the **Add new shift** window will open.
5. Select the appropriate shift from the list.
6. Click on the **Add** button; the shift is added to the schedule.


Procedure II: Drag-and-drop vacant shifts

1. "[Open a schedule](#)" on page 139.
2. Add a shift to the schedule.
3. Select - in the **Vacant shifts** section - the shift that you want added on the same day.
4. While keeping your keyboard's [Ctrl] key pressed, drag the shift to the cell that is to be shared. The two shifts are now both scheduled for the day in question.

Example

Cell with two scheduled shifts on one day:



- 
- You cannot place multiple shifts on the same day if their times overlap.
 - When two shifts are scheduled for the same day, they are not immediately merged to form a single shift. To learn more: "[Merge shifts](#)" on page 150
 - If you open the **Realization** feature for a day on which two shifts are planned, you should first specify which of the shifts you want to realize.
 - If an employee is assigned to multiple shifts on a day, the hint text for that day will show the information per shift. With the mouse one can select the shift for which the hint text needs to be shown.

Remove or delete shifts

Removing a shift from the schedule involves moving it to the **Vacant Shifts** section, while deleting a shift means completely eliminating it from the schedule.

Remove shifts


To remove a shift from the schedule, move it to the **Vacant Shifts** section. If an employee has multiple shifts in a day and you want to unassign one, choose the specific shift to unassign. This can be done through dragging and dropping, using the shortcut menu, or cutting and pasting.

Drag-and-drop


1. ["Open a schedule" on page 139.](#)
2. Click on the shift to be removed and keep the mouse button pressed.
3. Drag the shift to the **Vacant Shifts** section, being careful to stay in the same column.
4. Release the mouse button. The shift has now been removed from the schedule.

Shortcut menu

1. ["Open a schedule" on page 139.](#)
2. Click on the shift to be removed.


 Hold the [Shift] key to select adjacent shifts, and use the [Ctrl] key to select non-adjacent shifts.

3. Right-click on the selected shift; a menu will pop up.
4. From the shortcut menu, select **Remove**. The shift has now been removed from the schedule.

 Alternatively, use your keyboard [Delete] key.

Cut-and-paste

1. ["Open a schedule" on page 139.](#)
2. Click on the shift to be removed.


 Hold the [Shift] key to select adjacent shifts, and use the [Ctrl] key to select non-adjacent shifts.

3. Right-click on the selected shift; a menu will pop up.
4. From the shortcut menu, select **Cut**; the selected shift will remain visible.
5. Either using your mouse or the arrow keys on your keyboard, select any empty cell in the **Vacant Shifts** section.
6. Right-click on the selected cell; a menu will pop up.
7. From the shortcut menu, select **Paste**. The shift has now been removed from the schedule.

Delete shifts

Deleting a shift removes it completely from the schedule, not just move it to the **Vacant Shifts** section. You can also delete shifts directly from the **Vacant Shifts** section, and delete multiple shifts simultaneously.

1. Select a shift in the schedule or in the **Vacant Shifts** section.

 Hold the [Shift] key to select adjacent shifts, and use the [Ctrl] key to select non-adjacent shifts.

2. Right-click on the selected shift; a menu will pop up.
3. From the shortcut menu, select **Delete**; you will be asked to confirm that you want to proceed.
4. Click on the **OK** button; the selected shift has now been deleted.

Merge shifts

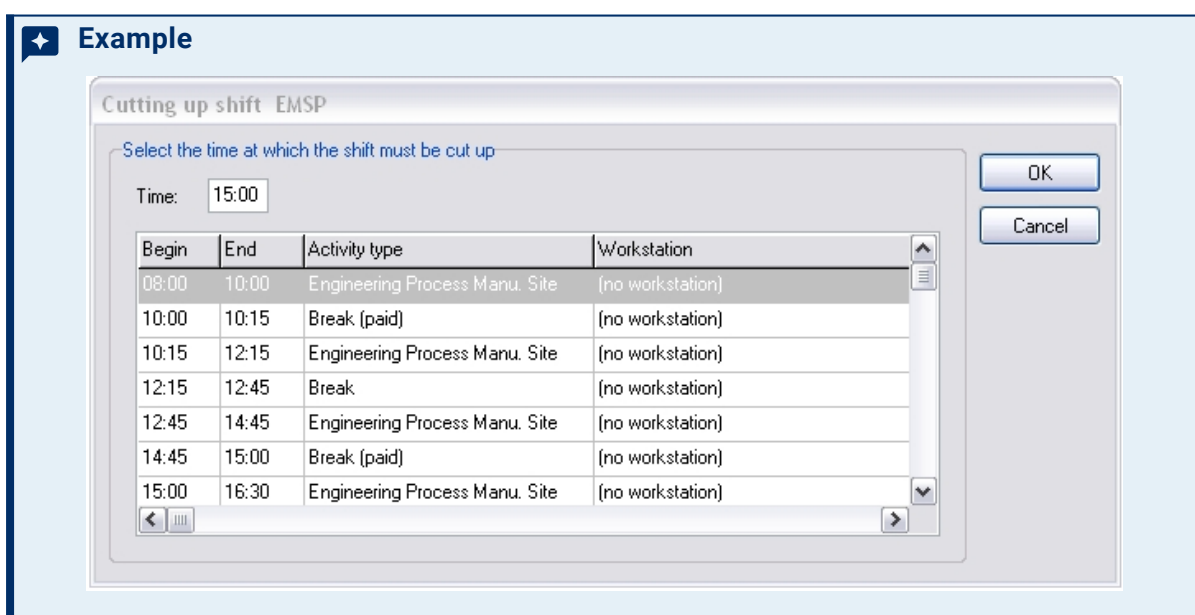
Merge two or more shifts scheduled for the same day to treat them as one, preventing working hour violations. The time between the end and the start of a shift is considered a break.

1. Two or more shifts are scheduled on a given day. Learn how: "[Multiple shifts on one day](#)" on page 148
2. Click on the cell in the schedule matrix containing the shifts.
3. Right-click on the selected cell; a menu will pop up.
4. From the shortcut menu, select **Merge shifts**; you will be asked to confirm that you want to proceed.
5. Click on the **OK** button; the shifts are now merged.

Split shifts

Split a shift at any point within it to create two separate shifts:

1. Select a shift in the schedule or **Vacant shifts** section.
2. Right-click on the selected shift; a shortcut menu appears.
3. Select in this menu the **Cut up shift** command; the **Cutting up shift [name]** window appears with the shift data.



4. Enter the splitting time in the **Time** field and click **OK**; the shift is displayed in the schedule as two separate shifts on one day.

Now you can plan these two shifts separately. First move one or more of the shifts to the **Vacant shifts** section.

Copy and replace shifts

Copy and replace both planned and realized shifts on the planning board:

1. Select the shift or shifts you want to copy or replace.
 - Copy using Ctrl+C or the right-click menu command **Copy**.
 - Cut using Ctrl+X or the right-click command **Cut**.
2. Select a new location for the shift; multiple locations must be side by side.
3. Paste using Ctrl+V or the right-click command **Paste**.



- If the pasted shifts overlap with an already scheduled shift, an error message will be displayed, and the action will be undone.
- Realize copies of one-time shifts simultaneously. Select the right-click command **Duty set** for a one-time shift or one of its copies. After adjusting the shift, all copies will be adjusted in the same way. The availability of the **Duty set** command depends of a general setting.

Switch shifts

You can switch shifts on the plan board while the master schedule remains in plan status.

When you switch shifts in a published master schedule, it's called a revision. A revision initiated by an employee is a requested change or swap, while one initiated by the organization is a required change or alteration.

Shifts can be switched between two employees or between the schedule matrix and the **Vacant Shifts** section. A switch can be made either by the dragging-and-dropping or cutting-and-pasting.

Drag-and-drop

1. ["Open a schedule" on page 139.](#)




When switching shifts in a published schedule, press function key F2 to specify whether the revision is requested (swap) or required (alteration); the specified form is indicated at the bottom of your screen. A swap is displayed in red lettering; an alteration is displayed in blue lettering. All revisions made to a published master schedule are recorded in a history.

2. Select a shift (for example, shift A); this may be a shift that is already assigned to an employee in the schedule matrix or a shift in the **Vacant Shifts** section.
3. Holding the mouse button down, drag the shift to a cell that contains another shift (for example, shift B); this must be in the same day-column, but may be either in the schedule matrix or in the **Vacant Shifts** section.
4. Release the mouse button. Shifts A and B have now been switched.

Cut-and-paste

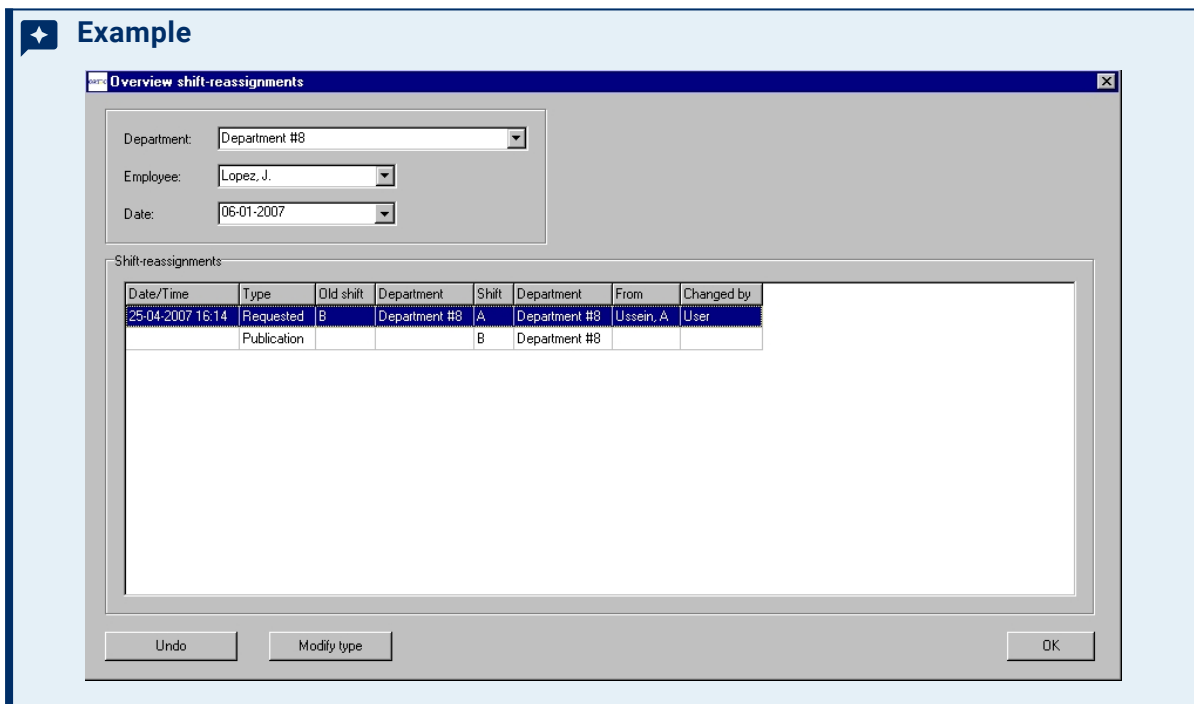
1. "Open a schedule" on page 139.

 When switching shifts in a published schedule, press function key F2 to specify whether the revision is requested (swap) or required (alteration); the specified form is indicated at the bottom of your screen. A swap is displayed in red lettering; an alteration is displayed in blue lettering. All revisions made to a published master schedule are recorded in a history.

2. Select a shift (for example, shift A); this may be a shift that is already assigned to an employee in the schedule matrix or a shift in the **Vacant Shifts** section.
3. Right-click on the selected shift; a menu will pop up.
4. From the shortcut menu, select **Cut**; the cut shift remains visible, but its status is 'cut'.
5. Select another shift (for example, shift B) from the schedule or the **Vacant Shifts** section.
6. Right-click on the selected shift (B); a menu will pop up.
7. From the shortcut menu, select **Paste**; the shifts have now been switched.

View history and undo revisions

1. "Open a schedule" on page 139.
2. Select an altered shift in the published master schedule.
3. Right-click on the selected shift; a menu will pop up.
4. From the shortcut menu, select **Overview shift reassignments**; the **Overview shift reassignments** window will open.




5. Modify the revision as appropriate:
 - To change the type of the selected revision, click on the **Modify type** button; a requested revision (swap) will become a required revision (alteration) and vice versa.
 - To delete (undo) the selected revision, click on the **Undo** button; the revision is undone and the master schedule immediately updated accordingly.



You can also open the **Overview shift reassignments** window from the **Overview** menu. If you open the history from the menu, the active department, employee and date then have to be selected.

Undo scheduling action

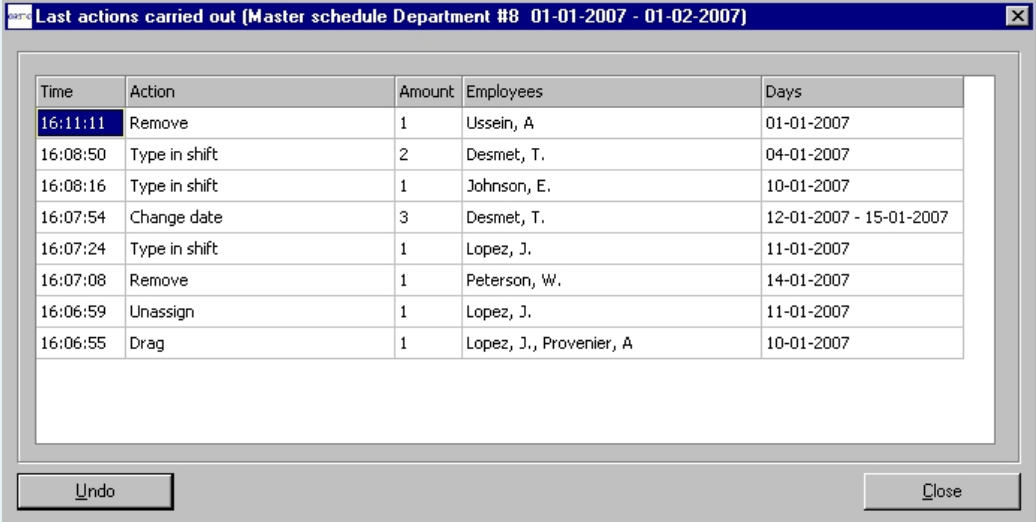
Undo scheduling actions, such as adding, removing or deleting shifts.

1. "Open a schedule" on page 139.
2. Click on the **Undo** button ; the **Last actions carried out** window will open.



You can also undo actions using the keyboard combination Ctrl+Z.

Example



The screenshot shows a window titled "Last actions carried out (Master schedule Department #8 01-01-2007 - 01-02-2007)". It contains a table with the following data:

| Time | Action | Amount | Employees | Days |
|----------|---------------|--------|-------------------------|-------------------------|
| 16:11:11 | Remove | 1 | Ussein, A | 01-01-2007 |
| 16:08:50 | Type in shift | 2 | Desmet, T. | 04-01-2007 |
| 16:08:16 | Type in shift | 1 | Johnson, E. | 10-01-2007 |
| 16:07:54 | Change date | 3 | Desmet, T. | 12-01-2007 - 15-01-2007 |
| 16:07:24 | Type in shift | 1 | Lopez, J. | 11-01-2007 |
| 16:07:08 | Remove | 1 | Peterson, W. | 14-01-2007 |
| 16:06:59 | Unassign | 1 | Lopez, J. | 11-01-2007 |
| 16:06:55 | Drag | 1 | Lopez, J., Provenier, A | 10-01-2007 |

At the bottom of the window, there are two buttons: "Undo" and "Close".

3. Click on the row showing the action you want to undo.
4. Click on the **Undo** button.
5. (Optional) Repeat step 3 and 4.
6. Click on the **Close** button.




- The **Undo** feature remembers actions only for the current session. Once a schedule is closed, you cannot reopen it to undo previous actions.
- When undoing a sick-leave registration, you may encounter an error message because the shift is considered 'fixed.' To undo this fixation, select the shift, right-click to access a shortcut menu, and uncheck the **(Un)mark as fixed shift** option.

Find assigned employee

Find out quickly who worked or is scheduled to work a particular shift on a particular date.


1. From the **Planning** menu, select **Find**; the **Find** window will open.
2. Enter the date of the shift that you're interested in.

- From the pull-down lists, select the **Department** and the **Shift** that you're interested in. The person who worked or is scheduled to work the selected shift on the specified date will appear in the **Employee(s)** section.

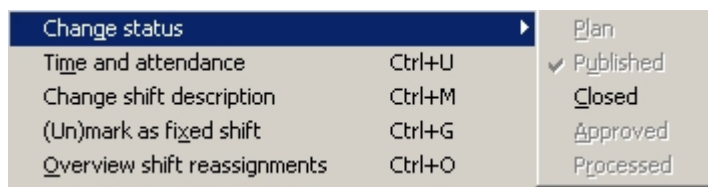
 Use the **Go to shift** button to select the shift and employee on the plan board.


Change status of a shift

Modify - with the proper authorization - individual shift statuses on the planning board. The status you choose should be higher in precedence than the current scheduling period's status. The order of precedence is: Plan, Published, Closed, Approved, and Processed.

 You cannot directly alter a status date; it can only be changed by updating the scheduling period's status.

- Select one or more shifts you want to change.
- Right-click the selection: a shortcut menu appears.
- Click on **Change status** and select an available new status from the list.



- 
- Gray status indicates insufficient authorizations.
 - The available status options depend on the scheduling period's current status, which is marked with a check.
 - You can only change the status one step at a time, so only the status following the current one is available.

5.3.3 Schedule activity types

In addition to scheduling shifts, you can also schedule activity types. There are two ways of doing this:

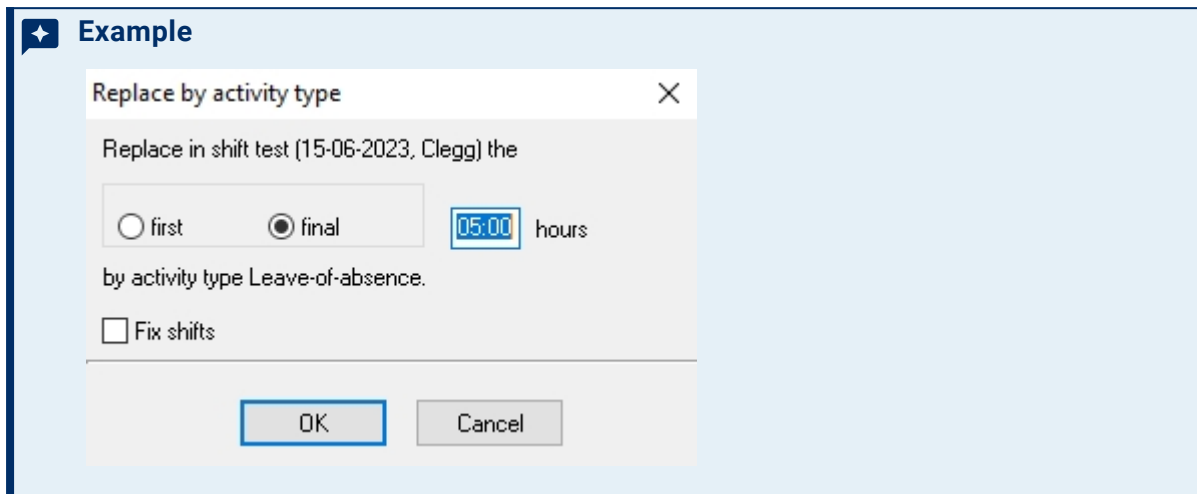
- Replace**
Change the activity type associated with a shift.
- Plan**
Directly schedule an activity type without associating it with a shift.

Replace activity types


Change the activity type associated with a shift:

- Select the shift whose activity type you want to change.
- Right-click on the selected shift; a menu will pop up.
- From the shortcut menu, select **Replace by activity type**; the **Select an activity type** window will open.


4. Select an activity type from the pull-down list. Click on the **OK** button; the **Replace by activity type** window will open.




5. Specify the time block for the replacement (first or final hours of the shift).
6. Adjust the number of hours that must be replaced.

 To replace the activity type for all working hours during the shift, leave the number of hours unaltered.

7. (Optional) Select **Fix shifts**.

 You can set per activity type that shifts have to be fixed automatically or manually when replacing. This is set for the concerning activity type(s) via the **Fix shifts when replacing by an activity type** option on the **Activity type** tab of the **Organization** window. For more information, see "[Activity types](#)" on page 36.

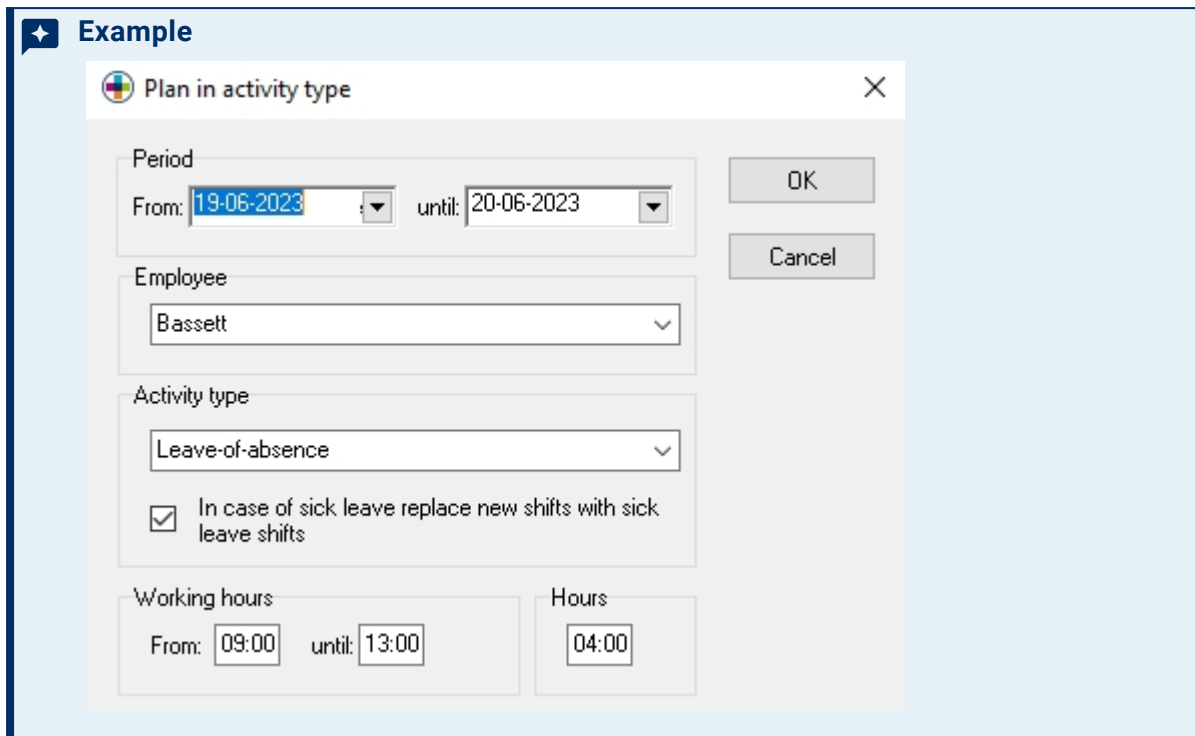
8. Click on the **OK** button; the activity type of the shift has now been changed.

- 
 - If your change applies to only a part of a shift, its code will be underlined on the plan board.
 - If you've altered the activity for the entire shift, the plan board will display the activity type, and you can access the original shift details through a pop-up text.

Plan in activity type

Directly schedule an activity type for an individual even if no shift has been assigned yet. This feature makes it easy to, for example, schedule special leave.

1. Select the first day that you want to schedule an activity type for a particular individual.
2. Right-click on the selected day; a menu will pop up.
3. From the shortcut menu, select **Plan in activity type**. The **Plan in activity type** window will open.



4. (Optional) Adjust the **Period** and/or select a different **Employee**.
5. Select the **Activity type** you want to schedule.
6. (Optional) Adjust the number of hours to be scheduled per day.
7. Click on the **OK** button.

A shift of the selected activity type will be assigned to the selected person on every weekday for the duration of the specified period. The length of each daily shift will be calculated by taking the number of hours that the person is contracted to work per week and dividing this number by five. The short name of the activity type will be used as the name of each shift scheduled in this way.

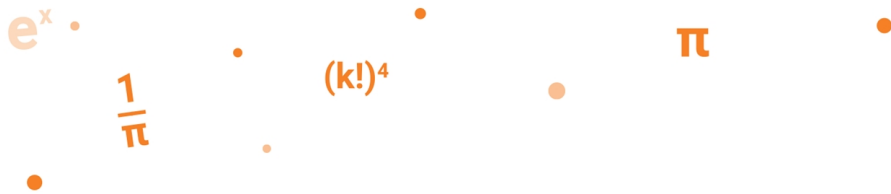
5.3.4 Handle requests

Address employee requests individually, including one-off, recurring, or shift-specific requests. Templates are also available for use. Requests can be given a 'requirement' status.

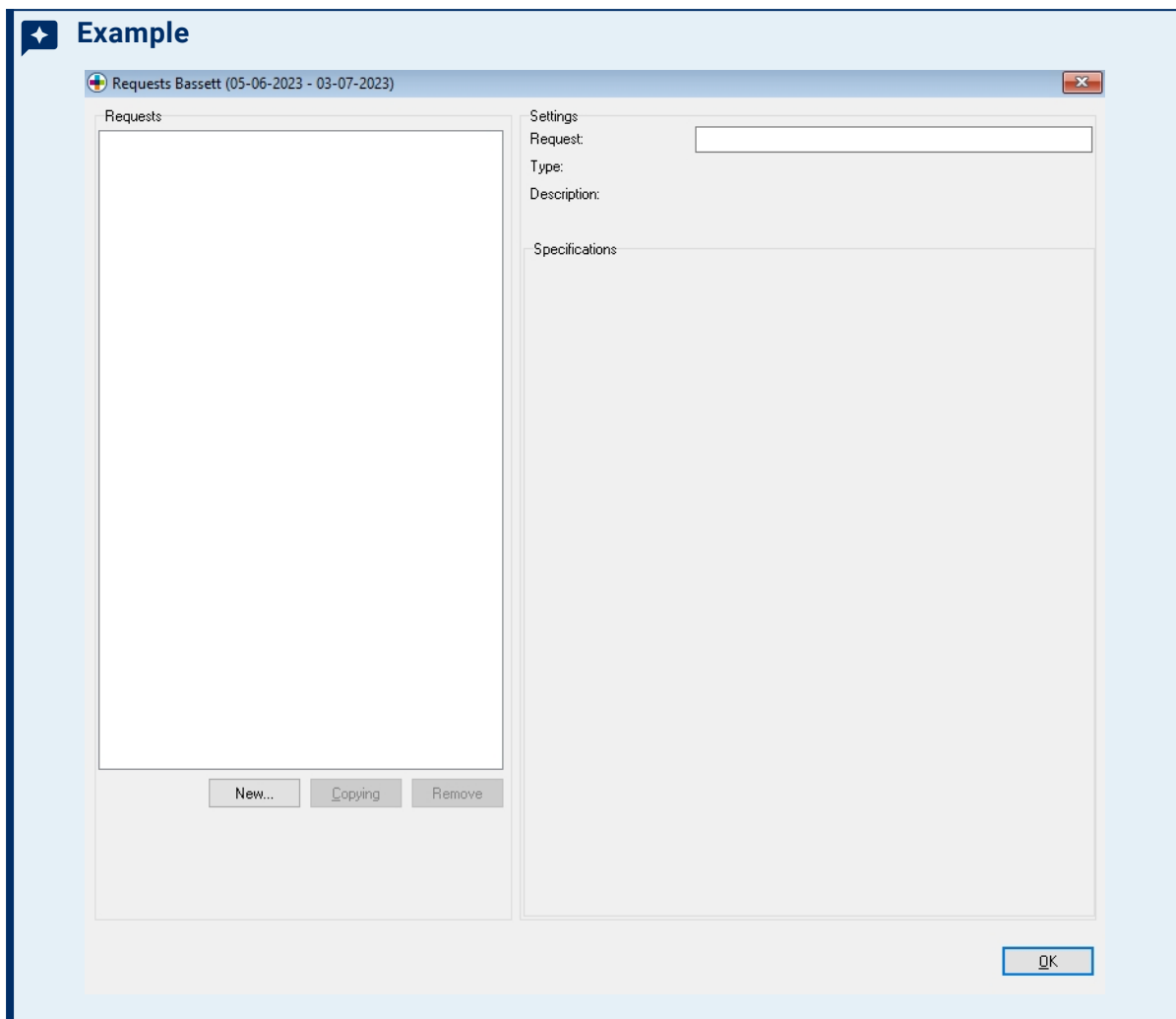
On the master schedule, shift cells with employee requests are highlighted in yellow by default, but you can choose a different color. If a request isn't fulfilled, the shift cell is outlined in blue (light blue for regular requests, dark blue for requirements).

Open requests window

1. In the menu toolbar, go to **Employee > Requests**; the **Select an employee and a period** window will open.
2. Select the **Department, Employee** and **Period** to which the request relates.



3. Click on the **OK** button; the **Requests** window will open.




Alternative method: via opened schedule

1. "Open a schedule" on page 139.
2. Select the (row of an) employee.
3. Right-click on the selected cell; a menu will pop up.
4. From the shortcut menu, select **Requests**; the **Requests** window will open.


Switch to requests view

The plan board has a requests view that displays registered requests instead of shifts. It uses colored backgrounds and codes from the requests template to highlight individual requests. Use this view to register and remove requests in the system.

1. Go to **Planning > Master schedule**. Select the relevant scheduling period and click the **Plan board** button.
2. Click on the **Open requests view** button  or press function key F12 on your keyboard.

3. Example

Any requests already registered will be displayed using the appropriate colors and codes.

| Requests Department #8 01-01-2007 - 01-02-2007 | | J | a | n | u | a | r | y |
|---|-------------|---|---|---|---|---|---|---|
| Employees  | | M | T | W | T | F | S | S |
| name | position | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Desmet, T. | Controller | | | | | | | |
| Johnson, E. | Controller | | | | | | | |
| Lopez, J. | Manager | | | | | | | |
| Peterson, W. | Sales persc | | | | | | | |
| Provenier, A. | Controller | | | | | | | |
| Ussein, A. | Sales persc | | | | | | | |
| Wineberg, D. | Marketeer | | | | | | | |



Click on the **Close requests view** button to return to the normal schedule view.

Schedule one-off requests

Two types of one-off requests can be defined:

- Requesting to work or not work during a specific period is a **(No) work during a period** request.

Example

An employee asks to be off on January 2nd between 18:00 and 23:00 hours.

- Requesting to work or not work during a particular shift on a specific day is a **Shift request**.

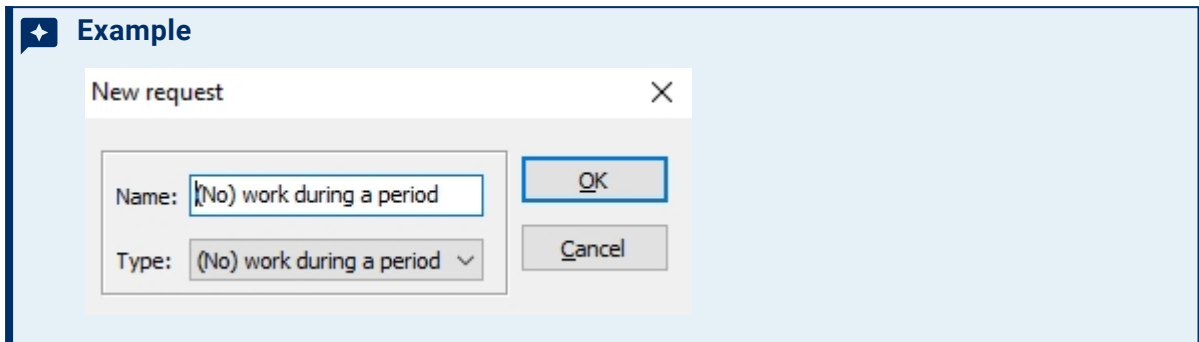
Example

An employee asks to work a day shift on January 3rd.

Register (No) work during a period request

- "Switch to requests view" on page 157.
- Select a cell in the schedule matrix.
- Right-click on the selected cell; a menu will pop up.
- From the shortcut menu, select **Requests**; the **Requests** window will open.


5. Click on the **New** button; the **New request** window will open.



6. Select - from the dropdown list in the **Type** field - the **(No) work during a period** type.
7. (Optional) Change the **Name** of the request.
8. Click **OK**. The selected request type will now be displayed by the selected employee in the **Request** field.
9. (Optional) Adjust the request parameters as appropriate:
 - Enter a description for the request; this will be displayed in the schedule matrix when **Requests view** is enabled.
 - Enter the date and time when the person does or doesn't want to work.
 - Indicate whether this employee does or doesn't want to work in the specified period.
 - Adjust the **Date request**, **Status request**, **Date approval/rejection**, and **Explanation**.
 - Adjust the default color of the request by clicking on the color field.
 - If the request is to have requirement status, select the checkbox **Required**.
 - Define the weight of the request.
10. Click **OK**. The request has now been registered and will appear on the plan board.

Alternative method

Quickly register day specific requests directly from the plan board, eliminating the need to open the **Requests** window for each request. Requests made through the plan board are automatically included in the **Requests** window for easy reference later.


 Make sure General setting **UseInsertWish** is enabled.

1. "[Switch to requests view](#)" on page 157.
2. Select the schedule matrix cell for the relevant person and day. Right-click on the cell; a menu will pop up.

- From the shortcut menu, select **Insert day specific request**.

Example

- (Optional) Adjust the **Time**, **Kind of request**, and **Importance** (request type and priority rating).
- Click **OK**; the day specific request has been registered.

 To adjust the other parameters of the request, double-click on the request in the matrix once it has been registered.

Register Shift request

- "Switch to requests view" on page 157.
- Select a cell in the schedule matrix.
- Right-click on the selected day; a menu will pop up.
- From the shortcut menu, select **Requests**; the **Requests** window will open.
- Click on the **New** button; the **New request** window will open.
- Select - from the dropdown list in the **Type** field - the **Shift request** type.
- (Optional) Change the **Name** of the request.
- Click **OK**. The selected request type will now be displayed by the selected employee in the **Request** field.
- Adjust the request parameters as appropriate:
 - Enter a description for the request; this will be displayed in the schedule matrix when **Requests view** is enabled.
 - Define the shift that the employee does or doesn't want to work.
 - Adjust the **Date request**, **Status request**, **Date approval/rejection**, and **Explanation**.
 - Adjust the default color of the request by clicking on the color field.
 - Define the weight of the request.
- Click **OK**. The request has now been registered and will appear on the plan board.

Schedule leave requests

When an employee wishes to take time off on a specific day, they submit a leave request. For instance, employee A is getting married and is eligible for two days of special leave. Each leave request is a one-off request and relates to one or more full consecutive days.

Use the method below to plan in advance (with or without planned shifts):

1. ["Switch to requests view" on page 157.](#)
2. Select a cell in the schedule matrix.
3. Right-click on the selected cell; a menu will pop up.
4. From the shortcut menu, select **Requests**; the **Requests** window will open.
5. Click on the **New** button; the **New request** window will open.
6. Select - from the dropdown list in the **Type** field - the **Leave request** type.
7. (Optional) Change the **Name** of the request.
8. Click **OK**. The selected request type will now be displayed by the selected employee in the **Request** field.
9. Adjust the request parameters as appropriate:
 - Enter a description, this will be displayed in the schedule matrix when the request view is enabled.
 - Select the appropriate leave type.
 - Enter 'from' and 'to' dates.
 - Enter whether it's leave for part of a shift.
 - Adjust the **Date request**, **Status request**, **Date approval/rejection**, and **Explanation**.
 - Adjust the default color of the request by clicking on the color field.
 - If the request is to have requirement status, select the checkbox **Required**.
 - Define the weight of the request.
10. Click **OK**. The request has now been registered and will appear on the plan board.

Replace planned shift by leave of absence

Right-click on a shift and select the **Replace by leave of absence** option. The activity type for which the checkbox **Relevant to leave request** is selected will be assigned to the shift. For more information, see ["Activity types" on page 36.](#)

Schedule recurrent requests

Two types or recurrent requests can be defined:

- If an employee never or always wants to work on a particular day or at a particular time, this is known as a **recurrent request**.

Example


An employee never wants to work on Mondays between 07:00 and 12:00 hours.

- A **recurrent shift-specific request** is a request to always or never work a particular shift on a particular day of the week or month.

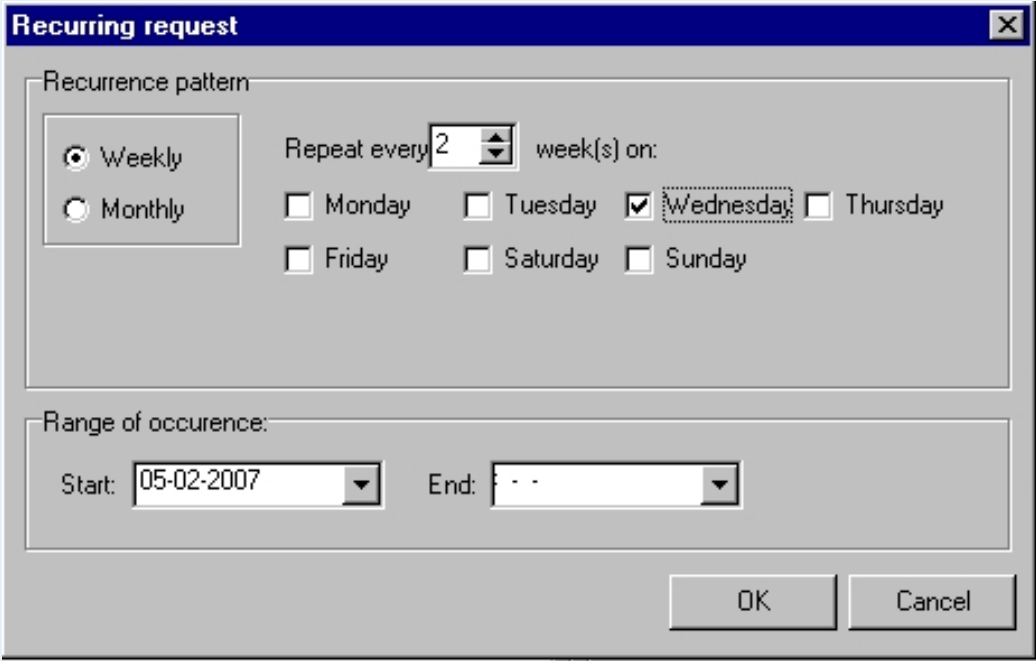
Example

An employee wants to work a night shift every Friday.

Register (No) work during a recurrent request

1. "Switch to requests view" on page 157.
2. Select a cell in the schedule matrix.
3. Right-click on the selected cell; a menu will pop up.
4. From the shortcut menu, select **Requests**; the **Requests** window will open.
5. Click on the **New** button; the **New request** window will open.
6. Select - from the dropdown list in the **Type** field - the **Recurring (shift) request** type.
7. (Optional) Change the **Name** of the request.
8. Click **OK**. The selected request type will now be displayed by the selected employee in the **Request** field.
9. Adjust the request parameters as appropriate, just as if it were a non-recurrent request.
 - Enter a description, this will be displayed in the schedule matrix when the request view is enabled.
 - Enter the duration.
 - Enter whether it's a request to work or not work.
 - Adjust the **Date request**, **Status request**, **Date approval/rejection**, and **Explanation**.
 - Adjust the default color of the request by clicking on the color field.
 - If the request is to have requirement status, select the checkbox **Required**.
 - Define the weight of the request.
10. Click on the **Recurrence** button . The **Recurring request** window will open:

Example



- Select the appropriate command: **Weekly** or **Monthly**.
 - Specify the parameters of the request by selecting the appropriate checkboxes and setting the period for which the recurrent request remains valid.
 - Click **OK**.
11. Click **OK**. The request has now been registered and will appear on the plan board.

Schedule template requests

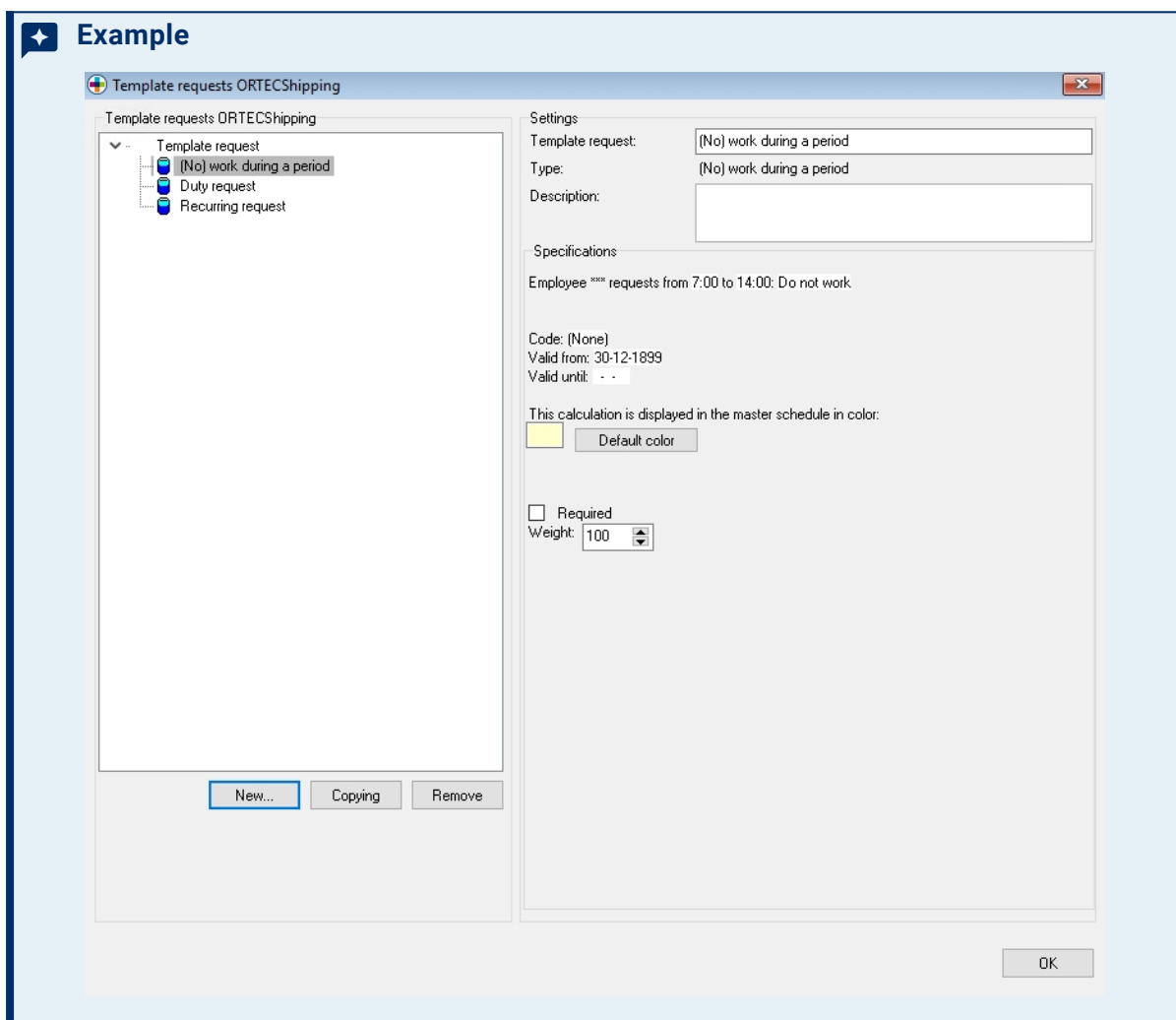
Template requests are preformatted requests you frequently encounter. Assign a color to each template for easy identification of similar requests in the schedule. To use a template request in the schedule, first define the template, which is a one-time setup for each template.



The parameters of a template request are defined in exactly the same way as the parameters of ordinary requests.

Define template requests

1. From the **Maintenance** menu, select **Template requests**.




2. Click on the **New** button; the **New template desired** window will open.
3. Select - from the dropdown list in the **Type** field - a request type.
4. (Optional) Change the **Name** of the request.
5. Click **OK**. The selected request type will now be displayed in the **Template requests** field.
6. Adjust the request parameters as appropriate.
7. Click **OK**. The newly defined request will be added to the list in the left-hand frame of the **Template requests** window.
8. Repeat the procedure for each template request you wish to define.

Schedule a template request

1. "Switch to requests view" on page 157.
2. Pull down the list of template requests by clicking on the down arrow in the **Template requests** field at the top of the window.




3. Select the template request you want to schedule.
4. On the relevant employee's row of the matrix, select the day(s) to which the request applies.
5. Press the F4 key, or click on the **Plan in with a mouse click** button  to activate the click-to-add feature.
6. Click on various days to enter the request on those days.

The template request has now been scheduled and is shown on the matrix by the code and color that you assigned to it.

Remove request

Remove a request from a schedule:

1. "Switch to requests view" on page 157.
2. Right-click on the request that you want to remove; a menu will pop up.

 **Example**

| Requests | Ctrl+Alt+W |
|-----------------------------|------------|
| Repeat | F4 |
| Delete request | Ctrl+W |
| Insert day specific request | |

3. From the shortcut menu, select **Delete request**; the request has now been removed.



You can also remove a request via the **Requests** option.

5.3.5 Register sick leaves

When someone reports sick and later fit for work again, these instances can be registered.

Register sick leave

1. "Open a schedule" on page 139.
2. Click on the first day of the sick leave period, on the relevant person's row in the matrix.
3. Right-click on the name of the employee who you want to register as sick.

- Select **Sick-leave**; the **Sick-leave** window will open.

Example

The top section of the window has four pre-filled fields: **Date** (of registration), **Department**, **Employee** and **Employee number**. In the **Illness or recovery notice** tab, the **Sick-leave from** checkbox is selected by default.

The screenshot shows a window titled "Sick-leave" with the following fields and options:

- Date:** 14-06-2023
- Department:** Building
- Employee:** Broughton
- Employee number:** 105
- Buttons:** OK, Cancel, Apply, Delete
- Illness or recovery notice tab:**
 - Sick-leave from: 14-06-2023 00:00
 - Illness type:** Sick leave
 - Remark:** (empty field)
 - This applies to all contracts
 - Processing in master schedule:**
 - Process the illness in the master schedule until: 15-06-2023
 - Illness replace type:** Planned shifts
 - Reporting date:** 18-09-2023
 - Recovered from: 15-06-2023 00:00
 - Processing of sick shift in master schedule:**
 - Leave as it is
 - Delete and don't reset original shifts
 - Delete and reset original shifts only if still available

- Enter the time that the absentee's sick leave began.

If there are more shifts on the registration date, the system can determine which shift(s) should be replaced, by using the time of registration.

- (Optional) To replace the default illness type, select another **Illness type** from the pull-down list.

It's possible to set different default illness replace types per illness type. If an illness type is selected at entering a sick-leave for an employee, the settings about how to process the illness will be defaulted to the way of the selected illness type. An extra addition is that the name of the illness shift can be defined. In this way a different shift name can be set for each illness type. Authorization applies for this functionality, i.e. ILLNESS_CHANGE_REPLACETYPE.

- If you adjust the illness type of an existing illness registration, a warning appears about possible consequences for replaced shifts.

7. (Optional) In the **Remark** field, enter other relevant information.

 The illness type and remarks are included in the **Sick report**.

8. In the **Processing in master schedule** section > **Process the illness in the master schedule until** checkbox, define if and when scheduled shifts are replaced by sick-leave shifts.
- You don't have to replace scheduled shifts with sick-leave shifts immediately. You can make the replacement at a later date if you wish; if you want to do so, clear the checkbox.
 - Enter the date up to which you want the employee treated as off sick in the master schedule.
 - All the absentee's shifts are replaced in the period from the **Sick leave from** date till the **Process the illness in the master schedule until** date (inclusive). You can also return later and change the date if you wish.
9. In the **Illness replace type** field, define how shifts should be replaced:
- Replace **Planned shifts** with sick leave shifts: the shifts originally assigned to the absentee are returned the **Vacant Shifts** section, so that they may be reassigned to someone else. The details of the scheduled shift are retained.
 - Sick leave hours according to **Contract**: the number of hours that the absentee is registered as off sick is to be calculated proportionate to the employee's contracted work hours.
 - Sick leave hours according to average **Hours worked in last [n] days**: hours will be calculated on the basis of the absentee's average working hours over a specified number of days.

 **Example**

The system calculates sick leave based on the average hours worked in the past 7 days. For instance, if an employee worked 5 hours from Monday to Friday and 3 hours on Sunday, totaling 28 hours, and then calls in sick this week, the system will allocate 5 hours and 36 minutes of sick leave for each weekday. This results in 28 sick leave hours being distributed on weekdays and not on weekend days.

10. Click **OK**; the absentee is registered as off sick.

The plan board uses a green bar to represent an employee's sick leave, which spans the entire duration of their absence. Initially, you don't have to specify a return-to-work date. If none is provided, the green bar extends until the end of the scheduling period.

Replacing shifts with sick leave shifts: Attention points

- Shifts can be replaced with sick leave shifts within a period, with the flexibility to make replacements and date adjustments at a later time.
- Replacement of a shift with a sick leave shift is also possible by right-clicking on a shift and selecting **Replace by leave of absence**. If multiple shifts on one day exist, choose the shift(s) you want to replace.
- A shift is only removed if in the properties of a duty the **Replace by sick leave in case of sick leave** command has been selected. For more information, see ["Duty sets" on page 121](#) and ["Properties" on page 127](#). If replacement in the event of sickness isn't activated, the scheduled shift remains on the plan board. In such cases, unsocial hours allowance may be inadvertently paid for the shift when it shouldn't be.

- It's possible to specify whether or not an activity type should be replaced with its corresponding illness activity type in case of illness. For more information, see step 18 in "Activity types" on page 36.

Register work therapy or limited work

1. "Open a schedule" on page 139.
2. Click on the first day of the work therapy or limited work period, on the relevant person's row in the matrix.
3. Right-click on the name of the employee.
4. From the shortcut menu, select **Sick-leave**; the **Sick-leave** window will open.
5. Open the **Work therapy / Limited work proposal** tab.

Example

Sick-leave

Date: 18-06-2023

Department: Building

Employee: Beach

Employee number: 125

OK

Cancel

Apply

Delete

Illness or recovery notice | Illness properties | **Work therapy / Limited work proposal**

| Kind | Available | Starting from | Remarks |
|------|-----------|---------------|---------|
| | | | |

New Change Delete

5. Click on the **New** button; the **Work therapy/Limited work proposal** window will open.
6. Enter the following:
 - **Type of report (Work therapy or Limited work proposal)**
 - The availability **Percentage**.
 - The **From** starting date.
 - Any relevant **Remarks** (which will be displayed as a pop-up text on the plan board).
7. Click **OK**.

Registration is complete; on the plan board, the relevant period is denoted by a light green background. The availability percentage, the type, the starting date and the remarks are included in the **Sick report**.

Register return to work

1. "Open a schedule" on page 139.
2. Select the person who you want to register as fit for work again.
3. Right-click on the name; a menu will pop up.
4. From the shortcut menu, select **Sick-leave**. The **Sick-leave** window will open.
5. Select the checkbox **Recovered from**; then enter the date and time.
6. Select one of the three commands, to indicate what should happen regarding sick-leave shifts on the master schedule.

Example

Recovered from: 19-06-2023 00:00

Processing of sick shift in master schedule

Leave as it is

Delete and don't reset original shifts

Delete and reset original shifts only if still available

- Leave them as they are.
 - Delete them without restoring the shifts originally planned.
 - Delete them and restore any of the originally planned shifts that are still available.
7. Click **OK**. The absentee is now registered as fit for work again and the green line on the plan board ends at the day that the employee becomes available.

Remove sick report

1. "Open a schedule" on page 139.
2. Select the person you want to remove the sick report for.
3. Right-click on the name; a menu will pop up.
4. From the shortcut menu, select **Sick-leave**. The **Sick-leave** window will open.
5. (Optional) Click **Apply**.
6. Click **Delete**; the **Remove a sick report** window will open.
7. Select one of the three commands, to indicate what should happen regarding sick-leave shifts on the master schedule:

Example

Remove sick report

Are you sure you want to delete the selected sick leave?

Leave as it is

Delete and don't reset original shifts


Delete and reset original shifts only if still available

- Leave them as they are.
- Delete them without restoring the shifts originally planned.
- Delete them and restore any of the originally planned shifts that are still available.

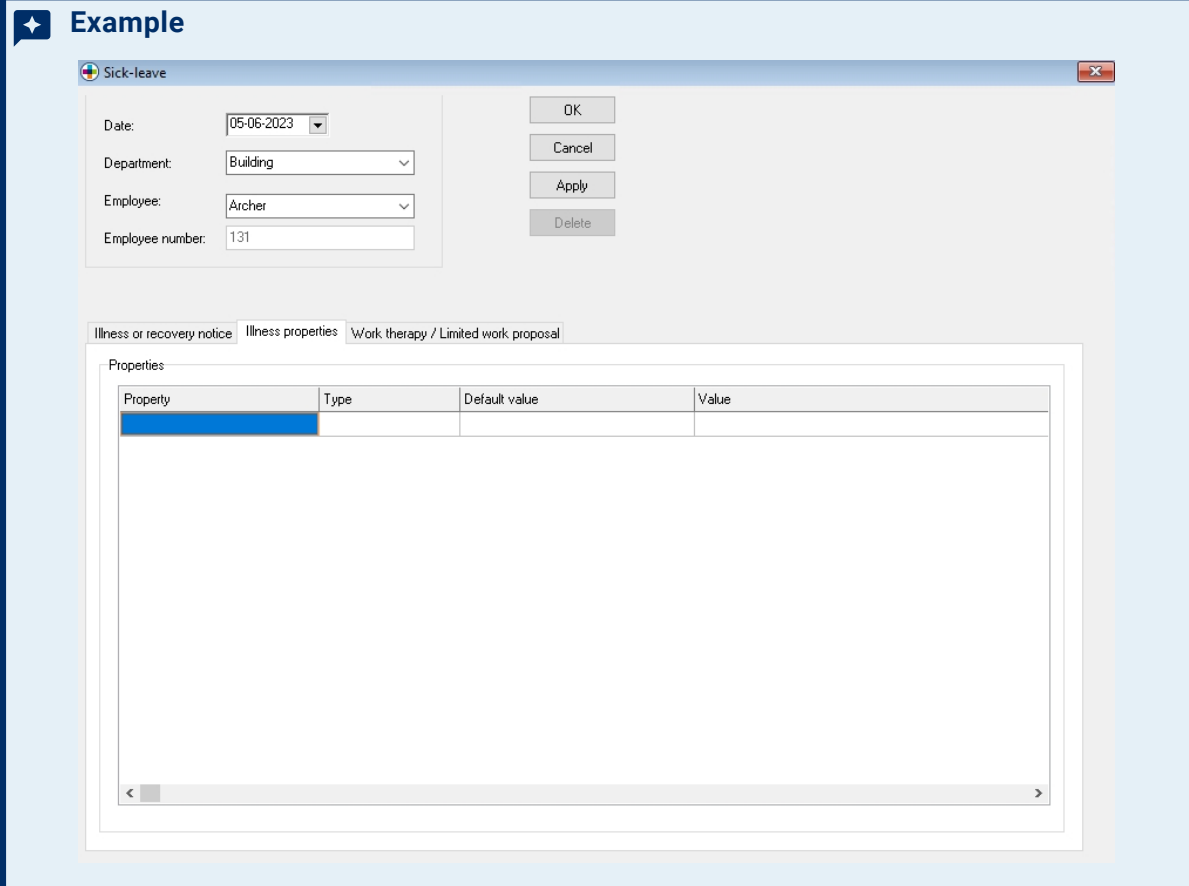
8. Click **Yes**; the sick report is removed.

Illness properties

Enter or adjust the values of the illness properties when you "[Register sick leave](#)" on page 164. The properties and their values are presented in the messages that users receive when they have subscriptions to illnesses.

 Users can subscribe to sick leave notifications for both manual entries and entries made through an interface. When a sick leave entry is created or modified, a message containing relevant information will be sent to the subscribed user.

1. "[Open a schedule](#)" on page 139.
2. Click on the first day of the sick leave period, on the relevant person's row in the matrix.
3. Right-click on the name of the employee who you want to register as sick.
4. Select **Sick-leave**; the **Sick-leave** window will open.
5. Select the **Illness properties** tab.



Example

Sick-leave

Date: 05-06-2023
Department: Building
Employee: Archer
Employee number: 131

OK
Cancel
Apply
Delete

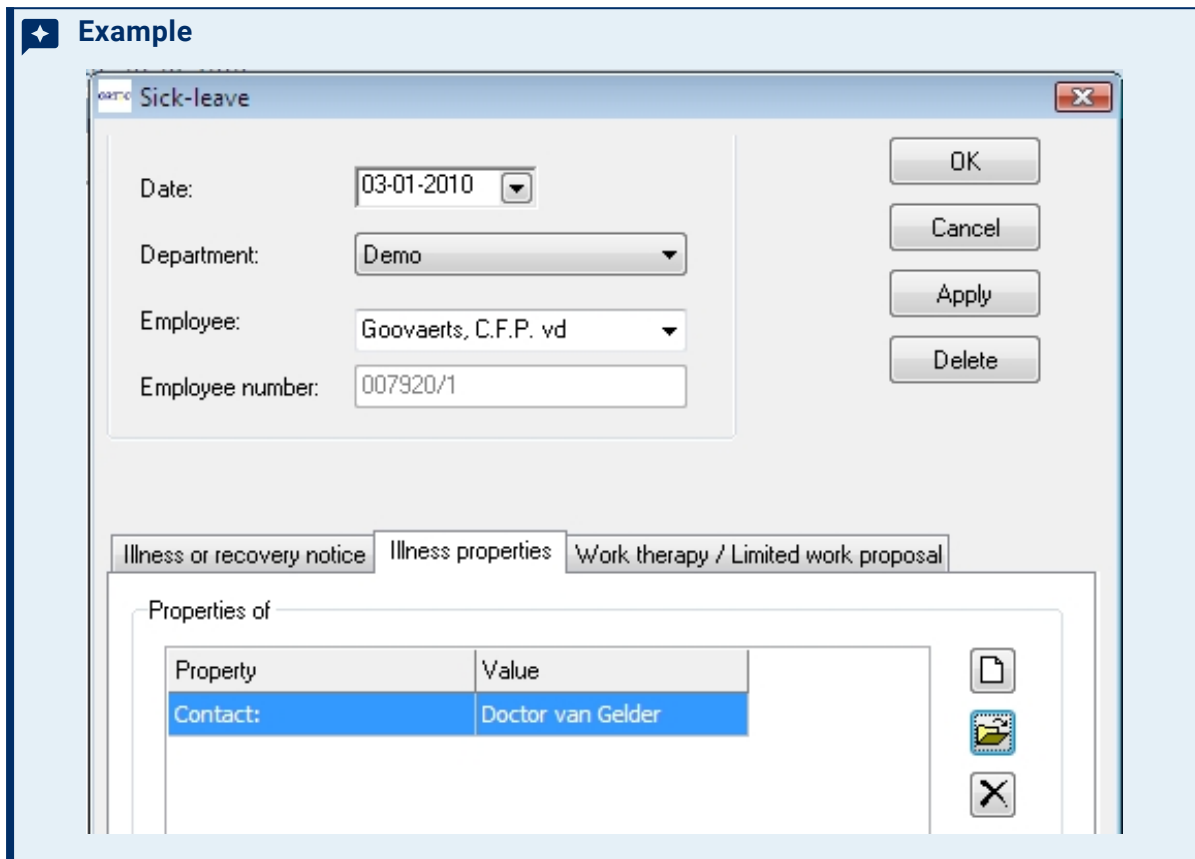
Illness or recovery notice | **Illness properties** | Work therapy / Limited work proposal

Properties

| Property | Type | Default value | Value |
|----------|------|---------------|-------|
|----------|------|---------------|-------|

6. (Optional) Add or edit properties via **Maintenance > Illness definitions**.
 - a. Select the **Illness properties** tab.
 - b. To add a new property, click **New**. Existing properties can be edited by double clicking on the row.
 - c. Define a **Name** and click **OK**.

- d. (Optional) To restrict access to the values of a property, select the checkbox **Use read and write authorization to shield values for this feature**. The application manager needs to grant the necessary rights.
 - e. (Optional) To limit the allowed values, define the allowed values in the **Restrictions** section.
7. Enter or adjust the value(s) per **Property**.

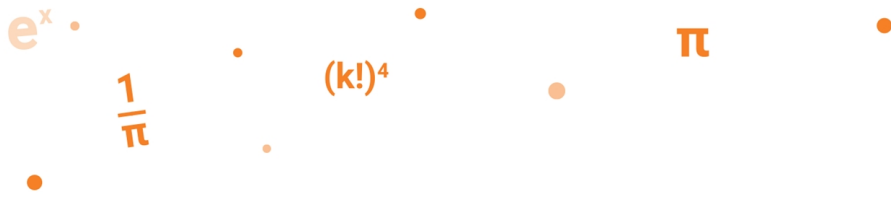


Second sick leave entry

If a second sick leave is entered for an employee, the user can indicate in the sick leave window what needs to happen to the already existing sick leave entry. This functionality allows you, for instance, to easily change the illness type of a sick leave that was already entered. For example: If an employee marked off "sick", but after investigation it is decided that the employee should have been marked "injured on the job", it is easy to adjust the original entry.


5.3.6 Shift realization after scheduling

In the schedule employee shifts are assigned for a specified time period, but adjustments are often needed due to various reasons like extended work, time off, or illness. ORTEC WS's shift realization feature allows changes to daily or employee-specific shifts, accommodating special circumstances like early starts, overtime, leave, or on-call duty.



Realization is by default possible for shifts with the **Plan** or **Published** status, and not supported for shifts in the **Approved** or **Processed** status. However, you can grant users permission to enter realizations for shifts with these statuses.

Generally, you cannot realize or modify shifts in other departments, but you can view their shift realizations. In specific situations, you can realize shifts in other departments if you have the 'Realisation_Other_Department_Write' authorization.

 When a shift is modified and the realization is implemented, the shift name will be underlined in the schedule. For more information on each status of a scheduling period and the difference between a scheduled and realized schedule, see "[Manage scheduling periods](#)" on page 115.

Shifts with status Closed or higher

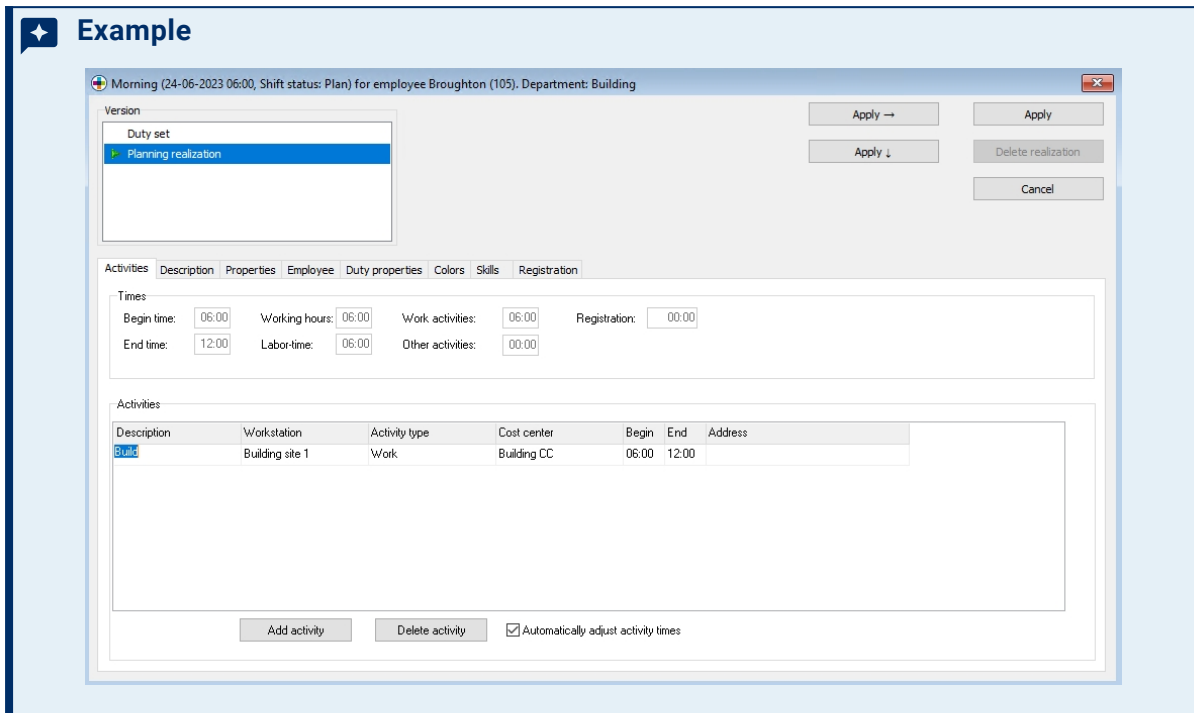
Shifts can be adjusted having the **Closed** or higher status. However, making adjustments to such shifts may conflict with existing bookings for the related employee and shift. Therefore, it's not possible to adjust a shift without consideration.

In the **Employee** window, within the **Employment conditions** tab, there is an **Entries for approved schedules known until:** date field. For more information, see "[Employment conditions](#)" on page 99. This date marks until which entries have been saved on accounts. To adjust a shift with a **Closed** or higher status, the date of the shift must be after this displayed date, as adjustments made before that date will not be automatically reflected in the accounts.

Open shift realization window

1. "[Open a schedule](#)" on page 139.
2. Select a shift in the schedule.

- From the **Edit** menu, select **Realization**. Or, right-click on the shift and select **Realization**.



When you click the **Apply** button to process a realization, the system checks for concurrent data processing by other users, user authorization for potential violations (when authorization is necessary), and conflicts between shift realizations. If no issues arise, the window will close, confirming the realization. However, if processing isn't possible due to the mentioned reasons, an error message will appear, displaying the original data. You can close the window without saving changes using the **Cancel** button, or remove the realization entirely with the **Delete Realization** button.

Activities

All shift details can be modified, but in practice, you mostly need to adjust the activities.

- "Open shift realization window" on page 171.
- On the **Activities** tab, click on the down-arrow in the **Activity type** field, then select an activity type from the list.

Example

| Activity type | Begin | End |
|---------------------------|-------|-------|
| Work | 15:00 | 19:00 |
| Day-off | 19:00 | 19:30 |
| Leave-of-absence | | |
| Parental leave-of-absence | 19:30 | 23:30 |
| Pause | | |
| Rest | | |
| Sick leave | | |
| Sick leave (no labor) | | |
| Work | | |

- (Optional) Change one or more of the following items:
 - Description** of the activity: enter a new name.
 - Workstation**: select from the list of available workstations; the workstation you select will determine which activity types you can choose from.
 - Cost center**: select the budgetary entity, to which costs may be charged. For more information, see ["Cost center" on page 27](#).
 - Begin**: enter a new starting time (this is only possible for the first activity of the shift).
 - End**: enter a new finishing time.
 - Address**: location of activity.

Change begin and/or end times

- ["Open shift realization window" on page 171](#).
- On the **Activities** tab, select the scheduled starting or end time of the shift you want to change.
- Enter the new time.




- Each shift is made up of one or more activities. The end time of one activity is always the same as the starting time of the next. Therefore you can change the end times of all activities in a shift, but only the starting time of the first activity.
- At the bottom of the window, you'll see the checkbox **Automatically adjust activity times**. When selected, changing the times of one activity has the effect of changing the times of all subsequent activities as well.

Example

| Activity type | Begin | End |
|---------------|-------|-------|
| Work | 15:00 | 19:00 |
| Pause | 19:00 | 19:30 |
| Work | 19:30 | 23:30 |

Change begin and/or end times of multiple shifts


1. Select multiple shifts. For example, 10 employees will start earlier tomorrow.
2. Select right mouse menu option **Adjust times**.
3. Choose to adjust either the begin time or the end time of the selected shifts.
4. Enter the new begin or end time and click **OK**.

 After changing the begin time (or end time) of multiple shifts, all shifts will have the same begin time (or end time) even if these shifts originally had different begin times (or end times).

Add activity types

Add a new activity before or after a scheduled activity. The shift can thus be made to start an hour earlier than originally scheduled, or to end an hour later.

1. ["Open shift realization window" on page 171](#).
2. Select the starting or end time of the activity that is to be preceded or followed by the new activity:
 - Select the starting time to add an activity before the selected activity.
 - Select the end time to add an activity after the selected activity.
3. Click on the **Add activity** button; an activity lasting one hour is added.

 Once you have added an activity, you may wish to change the begin and/or end times of the shift's activities; see ["Change begin and/or end times" on page 173](#).

Delete activity types


1. ["Open shift realization window" on page 171](#).
2. Select the activity you want to delete.
3. Click on the **Delete activity** button.

 You're not asked to confirm the delete command.

Description

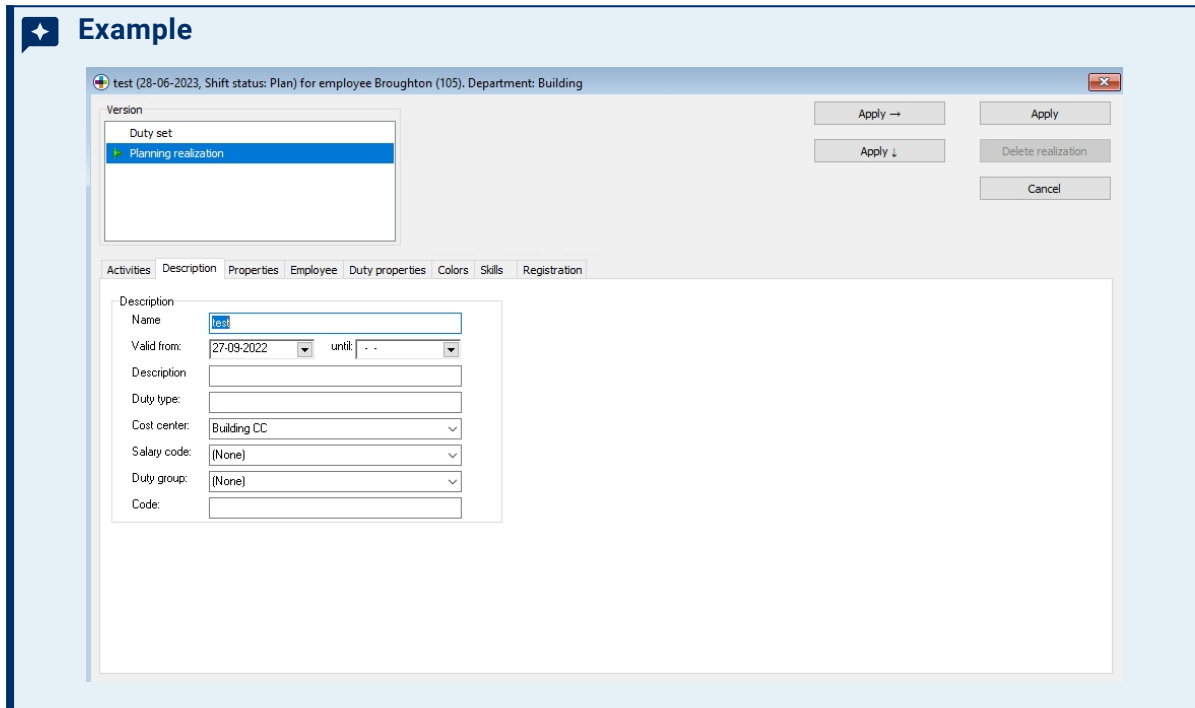
As long the schedule has not yet been closed, the details of a shift can be adjusted.

1. ["Open shift realization window" on page 171](#).
2. On the **Description** tab; adjust one or more of the following items:
 - **Name**
 - Validity period: enter a new **Valid from** date and/or a new **Until** date either by typing straight into the field or by using the calendar feature.
 - **Description**

 The text you enter in the **Description** field will appear as a pop-up text on the plan board if the user moves the mouse pointer over the relevant shift. To swiftly add or modify a description, right-click on the shift and select **Change shift remark**. This method is also effective when applying the same description to multiple selected shifts simultaneously.




- **Duty type:** edit the text in the field. Defining a duty type enables horizontal calculations to be performed.
- **Cost center:** select from the pull-down list.
- **Salary code:** select from the pull-down list.
- **Duty group:** select from the pull-down list. For more information, see ["Duty sets" on page 121](#).
- **Code:** edit the text in the field to exchange the information defined here with an external system.




Properties

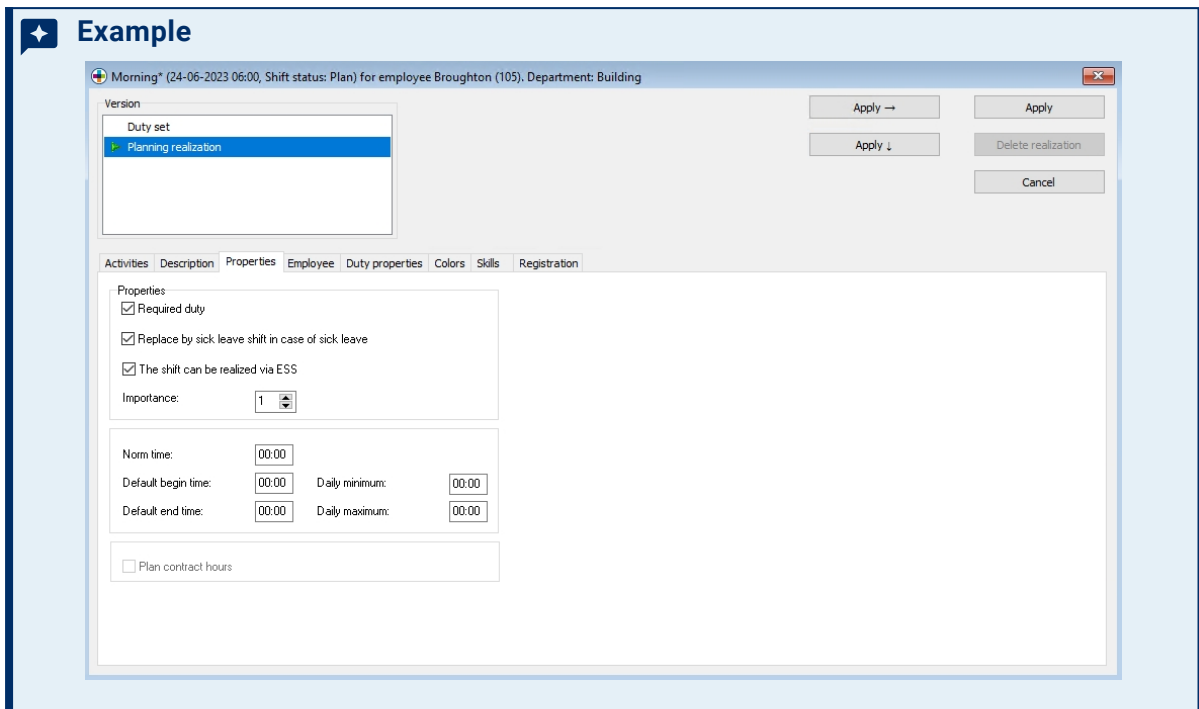
1. ["Open shift realization window" on page 171](#).
2. On the **Properties** tab, adjust one or both of the following items:
 - **Required duty:** select or clear checkbox.
 - **Replace by sick leave shift in case of sick leave:** select or clear checkbox.

 Enabling **Replace by sick leave shift in case of sick leave**, results in all the work hours of the shift being treated as sick leave hours.

- **The shift can be realized via ESS:** select or clear checkbox.
- **Importance:** increase or decrease the number by clicking on the arrow buttons, or type in a figure between 1 and 10.

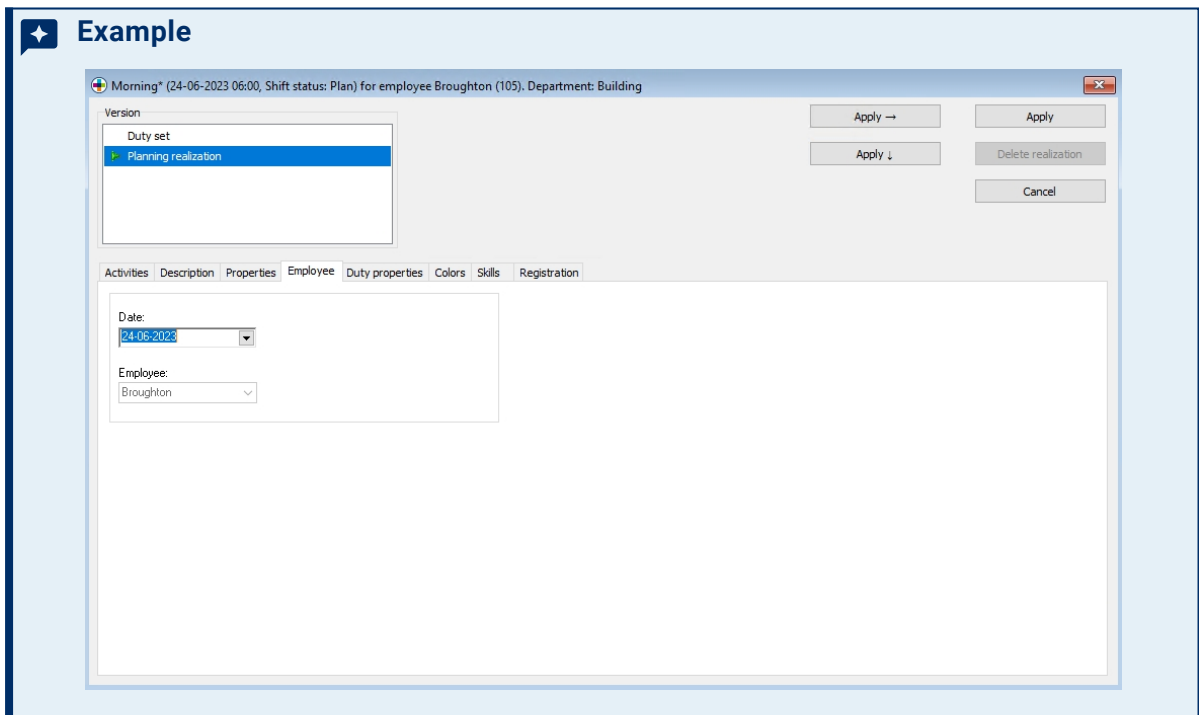
 The automatic scheduler gives priority to shifts with higher importance ratings.

- **Times**
- **Plan contract hours:** select or clear checkbox.



Employee assignment date

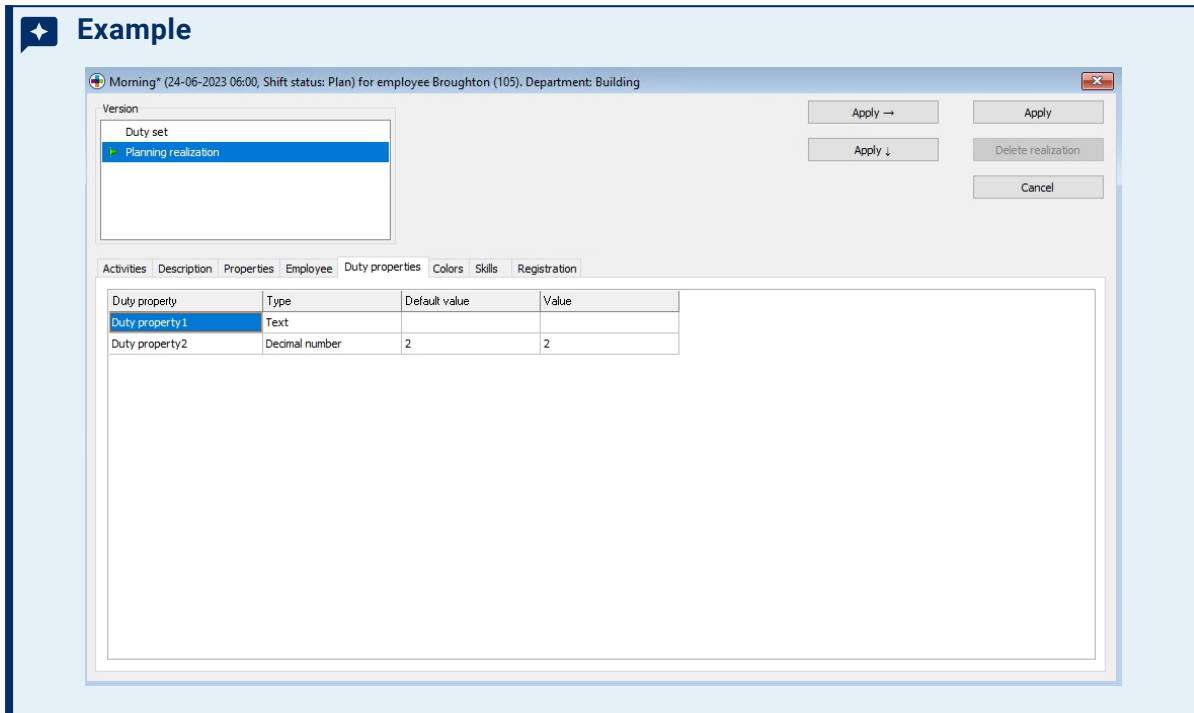
1. "Open shift realization window" on page 171.
2. On the **Employee** tab, change the assignment date. Two restrictions apply:
 - The shift cannot be made to overlap with an existing shift.
 - The new date must be within the defined schedule period.



In this window, you cannot change the person to whom the shift is assigned.

Duty properties

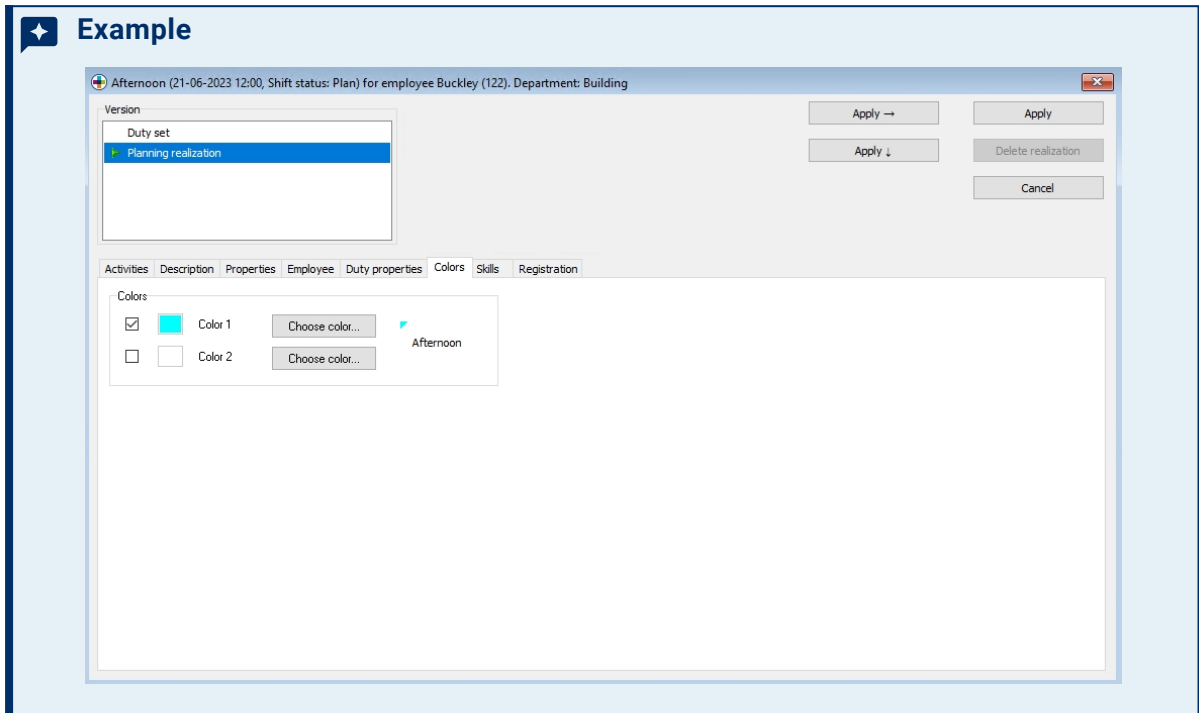
1. "Open shift realization window" on page 171.
2. On the **Duty properties** tab; adjust the information in the **Value** column as appropriate:



- The properties listed on the **Duty properties** tab are as defined elsewhere in **ORTEC WS**. The attributes shown in the figure are purely illustrative. For more information, see "[Duty properties](#)" on page 51.
- Duty properties are used for various horizontal calculations. Shifts with a given attribute can be included in a calculation.
- The value of a Duty property with type Yes/No can be adjusted directly from the right mouse menu on a shift as well. Right-click a shift and select **Duty properties**. In the pop-up menu select the relevant duty property to adjust the value of this property. A checkmark indicates that the value of this duty property is **Yes**. No checkmark means that the value is **No**.

Colors

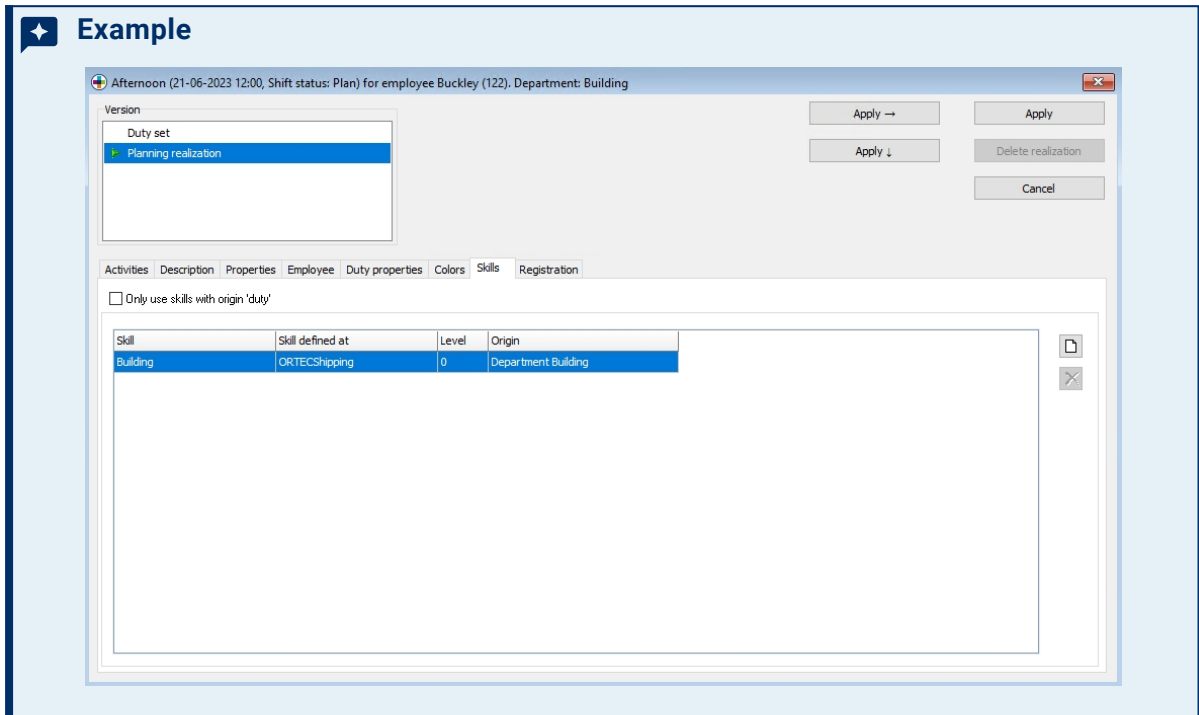
1. "Open shift realization window" on page 171.
2. Open the **Colors** tab.



3. Select the checkbox for the corner whose color assignment you wish to change.
4. Click on the **Choose color** button; the **Color** window will open.
5. Select a color.
6. Click **Apply**. The new color has now been assigned to the shift.

Skills

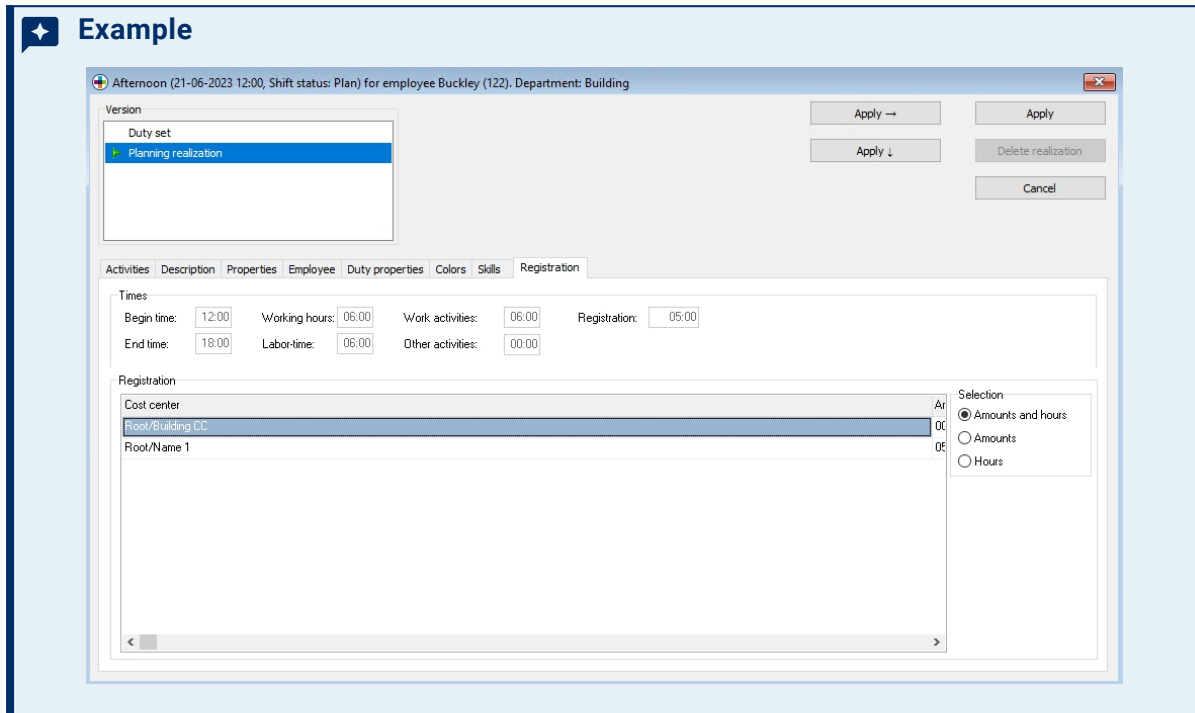
1. "Open shift realization window" on page 171.
2. Open the **Skills** tab.



3. (Optional) Select the checkbox **Only use skills with origin 'duty'**.
4. Click on the **New** button; the **Skills** window will open.
5. Select a **Department** to filter on skills.
6. Select a **Skill** and a **Level**.
7. Click **OK**. The skill has been added to the shift.

Registration

1. "Open shift realization window" on page 171.
2. Open the **Registration** tab.



3. View the registered times and cost center information.
4. Make a selection to see **Amounts and hours**, only **Amounts**, or only **Hours**.

5.3.7 Display original shift

An original shift represents the planned schedule before any realizations. You can see the initial shift details in the master schedule.

1. "Open a schedule" on page 139.
2. Click on a shift.
3. Right-click on the selected shift; a menu will pop up.
4. Select **Shift set** from the shortcut menu; the **Shift set** window will open.



The **Shift set** window is intended primarily for viewing data. Any changes made at this stage will impact all shifts with the same name in master schedules, cyclical schedules, and calendars.

5.4 Master schedule

View the master schedule via **Planning > Master schedule**.

6 Accounts

A system of accounts is used in **ORTEC Workforce Scheduling (ORTEC WS)** to register data from schedules. It enables you to track various types of data entered in your schedules, especially when certain information needs to be collated separately for entitlement calculations or operational significance.

When creating a schedule in **ORTEC WS**, comprehensive information is available for planned and completed activities, including holidays, sick leave, and overtime. This information can be summarized on accounts to provide an overview of taken holidays, sick leave instances, and more.

Accounts are generated at the organizational level and consist of account categories that group account entries. For example, a holiday account may include categories like 'Starting entitlement balance' and 'Holiday entitlement used.'

6.1 Create accounts

The accounts you need to generate depends on what information your organization needs to keep track of. Three examples are **Annual time and attendance account**, **Leave account**, and **Unsocial hours account (allowances)**.



Generating accounts is a one-off procedure, which has to satisfy a number of conditions:

- The account must be complete, with at least one heading under which the data can be booked.
- Compensation rules must be defined, detailing how data from the staff schedule are to be recorded in the account.
- The compensation rules must be incorporated into a set of employment rules.
- These employment rules must be associated with an employment rules group for the appropriate period.
- The employees who belong to the relevant employment rules group during the period in question must be specified.
- The schedule for the employees in question must contain shift data of the kind to be recorded in the account.

1. Go to **Accounts > Account management**.
2. Select one of the following types:
 - **Compensation account**
When defining compensation rules (as part of a set of "[Employment conditions](#)" on [page 99](#)), the user can associate these rules only with accounts whose type is set as 'Compensation Account'.
 - **Invoicing account**
When defining invoicing rules, the user can associate these rules only with accounts whose type is set as 'Invoicing Account'.

■ Reporting account

When defining reporting rules, the user can associate these rules only with accounts whose type is set as 'Reporting Account'.



Make sure module **modManInfoPP** and setting **UseReportingRemunerations** are activated. Contact your ORTEC representative when needed. Contact your ORTEC representative when needed.

3. Click **New**.
4. Define a **Name** and click **OK**.
5. Add a **Description**.
6. Fill out the **Account categories**, **Type of entries**, and **Options** tab.
7. Click **OK**.



For compensation rules which transfer booking (also called UCW rules), certain restrictions apply with regard to the accounts from which a booking may be transferred (the 'From' account):

- Compensation rules: only transfers from compensation accounts are permitted.
- Invoicing rules: only transfers from compensation accounts or invoicing accounts are permitted.
- Reporting rules: transfers from all three account types are permitted.

6.1.1 Annual time and attendance account



The following example serves solely for illustrative purposes. It demonstrates a method of establishing an annual time and attendance account but doesn't reflect the latest best practices.

Example use case

In the Dutch hospitals sector, people are typically employed to work a certain number of hours per year. This system has been in use since 2002. The annual working hours system recognizes gross and net hours. The starting balance (variable from year to year, based on a thirty-six hour working week) is the gross number of hours to be worked. Hours spent on holiday, off sick, or other forms of leave and off work on public holidays are all deducted from this total, giving a net number of hours.

For each staff member, information such as the following may be included on the annual time and attendance account:

- Starting balance of hours to be worked
- Compensation public holidays
- Paid leave
- Hours worked
- Holiday entitlement used
- Sick leave



The account categories listed above are examples; other types of information may also be included.

ORTEC WS uses a special account for annual time and attendance data. The information included on the account depends on the compensation rules you define.



Example

Example of an annual time and attendance account.

| Entry | Reference | Hours | % | Value | (in dec.) | Remark |
|------------------------|-----------|---------|---------|---------|-----------|--------|
| Helmink, P.H.J. | | 4060.00 | | 1530.40 | 1530.66 | |
| 01. Starting balance | | 1878.00 | | 1878.00 | 1878.00 | |
| 01-01-2006 Sun... | | 1878.00 | 100 | 1878.00 | 1878.00 | |
| 02. Compens. publ. ... | | 1878.00 | | -43.20 | -43.34 | |
| 01-01-2006 Sun... | | 1878.00 | -2.3077 | -43.20 | -43.34 | |
| 04. Hours worked | | 304.00 | | -304.00 | -304.00 | |
| 01-01-2006 Sun... | C | 08:00 | -100 | -08:00 | -8.00 | |
| 03-01-2006 Tue... | C | 08:00 | -100 | -08:00 | -8.00 | |
| 05-01-2006 Thur... | C | 08:00 | -100 | -08:00 | -8.00 | |
| 06-01-2006 Friday | C | 08:00 | -100 | -08:00 | -8.00 | |
| 09-01-2006 Mon... | A | 03:00 | -100 | -03:00 | -3.00 | |
| 09-01-2006 Mon... | A | 05:00 | -100 | -05:00 | -5.00 | |
| 10-01-2006 Tue... | A | 08:00 | -100 | -08:00 | -8.00 | |

Create annual time and attendance account

1. Go to **Accounts > Account management > Compensation account**.
2. In the **Compensation account** window, click the **New** button.
 - In the **Name** window, enter a name for the account. For example, 'Time and attendance'.
 - Click **OK**.
 - Read the **Information** box and click **OK**.
3. On the **Account categories** tab, click the **New** button.
 - In the **Name** window, enter a name for the account category to be included. For example, 'Starting balance', 'Compensation public holidays', 'Paid leave', 'Hours worked', etc.
 - Click **OK**.
 - Repeat step 3 to add more categories.
4. Close the **Compensation account** window, by clicking the **OK** button.



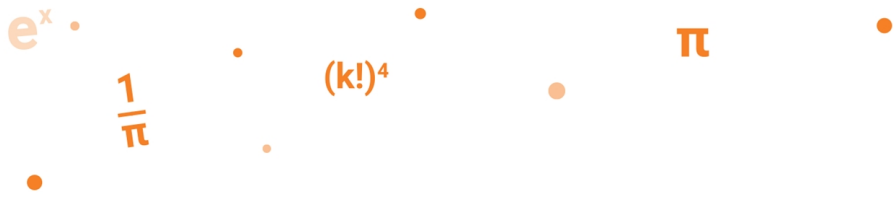
Assign the applicable authorizations for this account to the user groups that need access to this account in **Access Control**, so users will be able to use it.

Define compensation rules

Compensation rules determine what is included under the account categories on the annual time and attendance account. A given compensation rule may be associated with more than one account category.

Starting balance of hours to be worked

1. Go to **Maintenance > Employment conditions > Labor rules** tab.
2. In the **Compensation** section, create a new set of compensation rules. For more information, see "[Employment conditions](#)" on page 54.
3. In the **Compensation rules** window, click the **New** button.
4. To add the starting balance of hours to be worked, select - in the **New compensation rules**



window - the **Type** 'Annual value based on employment hours'.

5. Click **OK**.

e^x $\frac{1}{\pi}$ $(k!)^4$ π

★ Example

Define the compensation rule:

- Enter the annual number of hours to be worked by someone on a full-time contract (A).
- In the 'Account' column, select 'Time and attendance' (B).
- In the 'Account category' column, select 'Starting balance' (C).
- Calculate the appropriate percentage (D). This figure varies from one organization to another. (Annual working hours system, gross number of hours to be worked = 100%).

Settings

Compensation rule: Annual value based on employment hours

Type: Annual value based on employment hours

Description:

Specifications

The weekly labor-time for full-time employees equals 36 hours. The yearly labor-time for full-time employees equals 1872 hours. The credits below will be based upon the annual labor-time. Part-time employees will be paid out proportionally.
This rule applies for employees with a salarygroup between (None) en (None)

| Account | Account category | Percentage |
|---------------------|------------------|------------|
| Time and attendance | Starting balance | 100 |

Save entries

Save entries when approving a schedule

OK

Compensation public holidays

1. In the **Compensation rules** window, click the **New** button.
2. To automatically deduct the public holiday compensation from the starting balance, select - in the **New compensation rules** window - the **Type** 'Annual value based on employment hours' again.

3. Click **OK**.

Example

Define the compensation rule:

- Enter the annual number of hours to be worked by someone on a full-time contract.
- In the 'Account' column, select 'Time and attendance'.
- In the 'Account category' column, select 'Compensation public holidays'.
- Calculate the percentage as follows: multiply the number of public holidays by 7.2, then divide the resulting figure by 1% of the gross annual number of hours. In this example, with six days of public holidays in the year ahead, the calculation is $6 * 7.2 / 18.78 = 2.3077$

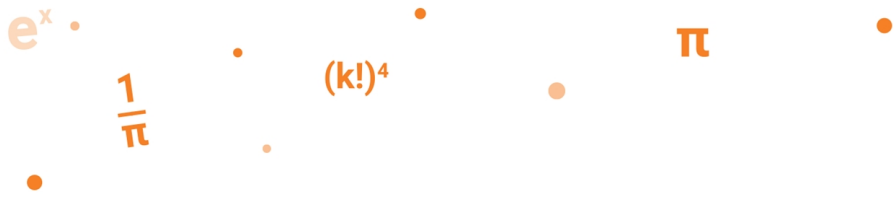
If you make this figure negative, this percentage is deducted from the total on the account.

Note: This is valid where entitlement to public holiday compensation is divided evenly.

Paid leave, Hours worked, and Sick leave

1. In the **Compensation rules** window, click the **New** button.
2. To automatically deduct the public holiday compensation from the starting balance, select -

in the **New compensation rules** window - the **Type** 'Variable entry for an activity class' again.



3. Click **OK**.

$$\sum_{n=0}^{\infty} \frac{x^n}{n!}$$

$$\sum_{n=0}^{\infty} \frac{x^n}{n!}$$

Example

Define the compensation rule:

- Select the relevant activity class (Work, Leave, Sick leave, etc.).
- In the 'Account' column, select 'Time and attendance'.
- In the 'Account category' column, select the account category corresponding to the activity group.
- Enter '-100' as the percentage to deduct it from the total on the account.
- Repeat the procedure described above until all the account categories on the account have been linked to compensation rules.

★

Settings

Compensation rule:

Type:

Description:

Specifications

Whenever a shift contains elements like

| | |
|---|---|
| <input type="checkbox"/> Overtime (for money) | <input checked="" type="checkbox"/> Sick leave |
| <input type="checkbox"/> Picket | <input type="checkbox"/> Sick leave (no labor) |
| <input type="checkbox"/> Presence | <input type="checkbox"/> Sick leave (no labor, no rest) |
| <input type="checkbox"/> Rest | <input type="checkbox"/> Sick leave (no rest) |
| <input type="checkbox"/> Saturday off | <input type="checkbox"/> Sick leave (no work) |

entries will be made as indicated below:
 This rule sums entries for activities within the same shift when the following properties are equal: activity type, cost center, workstation.
 For this rule, do not take the transition from daylight savings time to standard time into account.

| Account | Account category | Percentage | |
|---------------------|------------------|------------|---|
| Time and attendance | Sick leave | -100 | ✕ |
| | | | |

Save entries
 Save entries when approving a schedule


Holiday entitlement used

To enter particular activities which don't come under a general class, e.g. Holiday, Antenatal maternity leave, etc., you should use the rule 'Variable booking for an activity type'.

Result

Once you have linked all your account categories to the appropriate remuneration rules, close the **Compensation rules** window. The account is now active and you can view the entries on the account from the **Accounts** menu.

6.1.2 Leave account

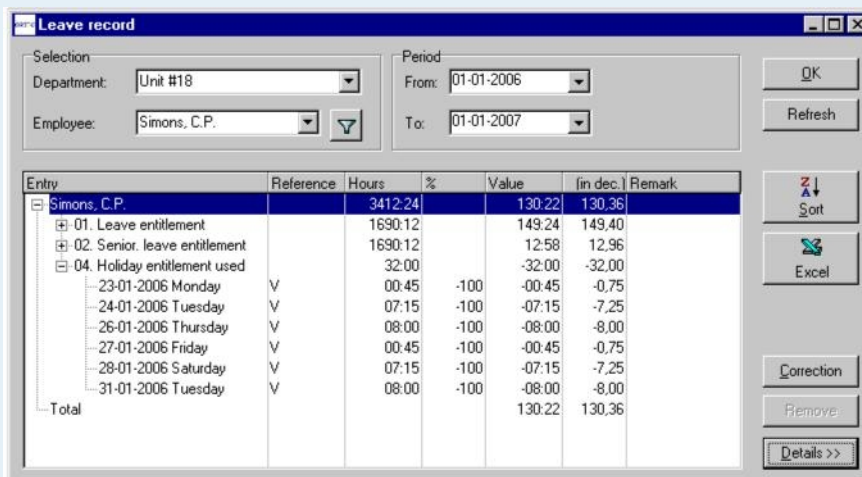
 The following example serves solely for illustrative purposes. It demonstrates a method of establishing a leave account but doesn't reflect the latest best practices.

The leave account shows the holiday entitlement balance and the number of hours' entitlement used. The number of hours' holiday that a staff member is entitled to depends on age and FTE percentage. For each employee, the following information has to be recorded:

- Leave entitlement
- Seniority leave entitlement
- LGPB hours
- Holiday entitlement used

Example


Example of a leave account.



| Entry | Reference | Hours | % | Value | (in dec.) | Remark |
|-------------------------------|-----------|---------|------|--------|-----------|--------|
| Simons, C.P. | | | | | | |
| 01. Leave entitlement | | 1690.12 | | 149.24 | 149.40 | |
| 02. Senior. leave entitlement | | 1690.12 | | 12.58 | 12.96 | |
| 04. Holiday entitlement used | | 32.00 | | -32.00 | -32.00 | |
| 23-01-2006 Monday | V | 00.45 | -100 | -00.45 | -0,75 | |
| 24-01-2006 Tuesday | V | 07.15 | -100 | -07.15 | -7,25 | |
| 26-01-2006 Thursday | V | 08.00 | -100 | -08.00 | -8,00 | |
| 27-01-2006 Friday | V | 00.45 | -100 | -00.45 | -0,75 | |
| 28-01-2006 Saturday | V | 07.15 | -100 | -07.15 | -7,25 | |
| 31-01-2006 Tuesday | V | 08.00 | -100 | -08.00 | -8,00 | |
| Total | | | | 130.22 | 130.36 | |

Create leave account

1. Go to **Accounts > Account management > Compensation account**.
2. In the **Compensation account** window, click the **New** button.
 - In the **Name** window, enter a name for the account. For example, 'Leave record'.
 - Click **OK**.
 - Read the **Information** box and click **OK**.
3. On the **Account categories** tab, click the **New** button.
 - In the **Name** window, enter a name for the account category to be included. For example, 'Leave entitlement'.
 - Click **OK**.
 - Repeat step 3 to add more categories. For example, 'Seniority leave entitlement', 'LGPB hours', and 'Holiday entitlement used'.
4. Close the **Compensation account** window, by clicking the **OK** button.

 Assign the applicable authorizations for this account to the user groups that need access to this account in **Access Control**, so users will be able to use it.

Define compensation rules

Compensation rules determine what is included under the account categories on the annual time and attendance account. A given compensation rule may be associated with more than one account category.

Leave entitlement

1. Go to **Maintenance > Employment conditions > Labor rules** tab.
2. In the **Compensation** section, open a set of compensation rules. For example the set created when defining the annual time and attendance account.
3. In the **Compensation rules** window, click the **New** button.
4. In the **New compensation rules** window, select the **Type** 'Annual value based on employment hours'.
5. Click **OK**.

Example

Define the Leave entitlement compensation rule:

- Enter the annual number of hours to be worked by someone on a full-time contract.
- In the 'Account' column, select 'Leave record'.
- In the 'Account category' column, select 'Leave entitlement'.
- Calculate the percentage as follows: divide the annual number of leave hours by 1% of the annual number of hours to be worked. Applied to the leave entitlement, this gives: $166 \text{ hours} / 1878 = 8.8392$.

Settings

Compensation rule:

Specifications

The weekly labour-time for full-time employees equals 36 hours. The yearly labour-time for full-time employees equals 1878 hours. The credits below will be based upon the annual labour-time. Part-time employees will be paid out proportionally.
This rule is valid for employees in a salary group between (None) and (None)

| Account | Account category | Percentage | |
|----------------------------|-----------------------------|------------|--|
| Annual time and attendance | 02. Compens. publ. holidays | -2,3077 | |
| Leave record | 01. Leave entitlement | 8,8392 | |

Seniority leave entitlement

1. In the **Compensation rules** window, click the **New** button.
2. To enter the seniority leave percentage applicable to the 'Seniority leave entitlement' account category on the leave account, select - in the **New compensation rules** window - the **Type** 'Annual value based on age'.
3. Click **OK**.

Example

Define the compensation rule:

- Enter the maximum number of working hours per week and per year.
- Specify the applicable age range by entering the relevant figures.
- Specify when seniority leave should be added to the account: at the end of the calendar month or calendar year.
- In the 'Account' column, select 'Leave record', and in the 'Account category' column select 'Senior. leave entitlement'.
- Calculate the percentage as follows: divide the annual number of seniority leave hours by 1% of the annual number of hours to be worked. For the seniority leave percentage for the 45 to 50 age range, this gives: 14.4 hours / 18.78 = 0.7668.
- Repeat this procedure until all the age bands have been included in the compensation rule.

LGPB hours

1. In the **Compensation rules** window, click the **New** button.
2. To enter the seniority leave percentage applicable to the 'LGPB hours' account category on the leave account, select - in the **New compensation rules** window - the **Type** 'Annual value based on age'.
3. Click **OK**.

Example

Define the compensation rule:

- Enter the maximum number of working hours per week and per year.
- Specify the applicable age range by entering the relevant figures.
- Specify when LGPB hours should be added to the account: at the end of the calendar month or calendar year.
- In the 'Account' column, select 'Leave record', and in the 'Account category' column select 'LGPB hours'.
- Calculate the percentage as follows: divide the annual number of LGPB hours by 1% of the annual number of hours to be worked. For the LGPB hours percentage this gives: 108 hours / 18.78 = 5.7508.

Holiday entitlement used

When you schedule holiday for an employee, the number of hours' entitlement used has to be deducted from starting balances. This can be done using the remuneration rule 'Variable entry for an activity type'.

1. In the **Compensation rules** window, click the **New** button.
2. In the **New compensation rules** window, select the **Type** 'Variable entry for an activity type'.

3. Click **OK**.

Example

Define the compensation rule:

- Choose a department.
- In the 'Type' field, select 'Holiday'.
- In the 'Account' column, select 'Leave record'.
- In the 'Account category' column, select 'Holiday entitlement used'.
- In the 'Percentage' column, enter '-100', so that the number of hours' holiday taken is deducted from the entitlement balance.

Result

Once you have linked all your account categories to the appropriate compensation rules, close the **Compensation rules** window. The account is now active and you can view the entries on the account from the **Accounts** menu.

6.1.3 Unsocial hours account



The following example serves solely for illustrative purposes. It demonstrates a method of establishing an unsocial hours account but doesn't reflect the latest best practices.

The unsocial hours account shows the hours worked by each employee that qualify for unsocial hours allowance.

Example

Example of an unsocial hours account.

| Entry | Reference | Hours | % | Value | (in dec.) | Remark |
|-------------------|-----------|-------|-----|-------|-----------|--------|
| Petersen, H.J. | | 32:30 | | 32:30 | 32,50 | |
| 22% | | 07:00 | | 07:00 | 7,00 | |
| 52% | | 25:30 | | 25:30 | 25,50 | |
| 07-01-2006 Sat... | C | 08:00 | 100 | 08:00 | 8,00 | |
| 21-01-2006 Sat... | B | 04:00 | 100 | 04:00 | 4,00 | |
| 28-01-2006 Sat... | D | 00:45 | 100 | 00:45 | 0,75 | |
| 10-06-2006 Sat... | C | 08:00 | 100 | 08:00 | 8,00 | |
| 17-06-2006 Sat... | D | 00:45 | 100 | 00:45 | 0,75 | |
| 24-06-2006 Sat... | B | 04:00 | 100 | 04:00 | 4,00 | |
| Total | | | | 32:30 | 32,50 | |

Create unsocial hours account

1. Go to **Accounts > Account management > Compensation account**.
2. In the **Compensation account** window, click the **New** button.
 - In the **Name** window, enter a name for the account. For example, 'Unsocial hours'.
 - Click **OK**.

- Read the **Information** box and click **OK**.
3. On the **Account categories** tab, click the **New** button.
 - In the **Name** window, enter a name for the account category to be included. For example, 22%.
 - Click **OK**.
 - Repeat step 3 to add more categories. For example, 38%, 47%, 52%, and 60%.
 4. Close the **Compensation account** window, by clicking the **OK** button.



Assign the applicable authorizations for this account to the user groups that need access to this account in **Access Control**, so users will be able to use it.

Define compensation rules

Compensation rules determine what is included under the account categories on the social hours account. A given compensation rule may be associated with more than one account category.

Unsocial hours per time interval

1. Go to **Maintenance > Employment conditions > Labor rules** tab.
2. In the **Compensation** section, open a set of compensation rules. For example the set created when defining the annual time and attendance account.
3. In the **Compensation rules** window, click the **New** button.
4. In the **New compensation rules** window, select the **Type** 'Allowances per time interval'.
5. Click **OK**.

6. Enter the parameters.

Example

Repeat the parameters as displayed in the image below for all the unsocial hours percentages that have been incorporated into the compensation rule.

Settings

Compensation rule:

Type:

Description:

Specifications

For the spent time between 6:00 and 7:00 hours on a Monday, Tuesday, Wednesday, Thursday, Friday where the activities have classes

| | |
|--|--|
| <input type="checkbox"/> Sick leave (no work, no rest) | <input type="checkbox"/> Unpaid work |
| <input type="checkbox"/> Spare | <input checked="" type="checkbox"/> Work |
| <input type="checkbox"/> Special leave | <input type="checkbox"/> Work (stand by) |
| <input type="checkbox"/> Sunday off | <input type="checkbox"/> WTR |
| <input type="checkbox"/> Training | |

for employees in a salary code between (None) and (None) the following entry is made.

Exceptions:

This rule is only valid if the worked shift started before 0:00 hours.

This rule is only valid if the worked shift has ended after 0:00 hours.

This rule is only valid if at least half of a shift is after 0:00 hour.

This rule is only valid in the first 0 calendar week(s) of a sick leave.

This rule is not valid on a public holiday.

This rule is valid always.

Sum entries for consecutive activities within the same shift when the following properties are equal: activity type, cost center, workstation.

All entries for a shift will be entered on the begin date of the shift.

For this rule, do not take the transition from daylight savings time to standard time into account.

This rule applies only to employees for whom the employee property (None)...

Calculations will be based upon Realized master schedule

| Account | Account category | Percentage | |
|-------------------------------|------------------|------------|----------------------------------|
| Unsocial hours | 22% | 100 | <input type="button" value="X"/> |
| <input type="text" value=""/> | | | |

Save entries

Save entries when approving a schedule

Note: Unsocial hours allowance is not payable in respect of time worked on a public holidays. Such time qualifies for a compensation rate of 60%. You therefore need to tick the option 'This rule is not valid on a public holiday'.

Unsocial hours per time interval on a given date

The collective labor agreement provides for a variety of unsocial hours compensation percentages, not all of which can be booked on an account using the rule 'Unsocial hours per time interval'. If, for example, an employee works after 18.00 hours on 24 or 31 December, he or she qualifies for a 60% unsocial hours allowance.

For percentages that apply on particular dates, there is a special compensation rule

To incorporate these percentages, you need to use the rule 'Non-social hours allowances in period on date'. Using this rule, you can specify a date on which your specified percentage applies. There is also has a rule named 'Non-social hours allowances per month per day' which can be used in more complex cases.

Result


Once you have linked all your account categories to the appropriate compensation rules, close the **Compensation rules** window. The account is now active and you can view the entries on the account from the **Accounts** menu.

6.2 Work with accounts

Account entries (also called bookings) can be filtered, sorted, and viewed. Corrections can be added and/or deleted. It's also possible to detect cycles, add weekly and/or period budgets, and export account entries.

6.2.1 Filter, sort, and view account entries

1. From the **Accounts** menu, select the account you want to view; the account will open.
2. Select a department from the pull-down list in the **Department** field.
3. Either select an individual from the pull-down list in the **Employee** field or select the command **All employees**.

 If you selected 'All departments' in the **Department** field, you must select one or more employees.

For a selection of multiple employees, select the **Filter employees** button. This will allow you to filter on Department, Position, etc. Within those filters you can make additional selections.

- In the **Summary** at the bottom of the window, view the selected conditions that will be filtered on.
 - (Optional) Click **Save** to remember this selection for the currently selected department.
 - Click **OK**.
4. Select the starting and end date of the **Period** you want the account to cover.
 5. (Optional) Filter entries by selecting the **Filter** button on the right-hand side. Filter on one or more condition(s). Within those filters you can make additional selections.
 - In the **Summary** at the bottom of the window, view the selected conditions that will be filtered on.
 - (Optional) Click **Save** to remember this selection for the currently selected department.
 - Click **OK**.

6. (Optional) Sort entries by selecting the **Sort** button on the right-hand side. Sort by Employee name, Activity type, etc. Move selections up/down with the arrow buttons. Entries will be sorted based on the order defined here.
 - In the **Summary** at the bottom of the window, view how entries will be sorted.
 - (Optional) Click **Save** to remember this selection for the currently selected department.
 - Click **OK**.
7. Click **Refresh**; the account data is displayed.



It's possible to adjust the width of the columns by dragging the dividing lines between the column headings.

8. (Optional) View the details of an entry:
 - Select the entry whose details you want to view.
 - Click the **Details >>** button; a frame will be added to the window, giving details of the entry.



- In the field **Created by** you can view the compensation rule used to create this entry or the username of the user that entered the account entry (in case of a correction/manually entered budget). In the hint text, when putting your cursor in the field, you can view the **Compensation rule set** this rule is part of. For more information on how to create and define such a set, see "[Employment conditions](#)" on [page 54](#).
- It depends on how a compensation rule is configured, what information is available here.
- When using the compensation rule **Transferbooking based upon an expression**, any specific information about Workstation, Activity type, Cost center and Address registered on the source account category is only carried over to the destination account category when the value following from the expression is carried over per **entry** or **shift**.


6.2.2 Add corrections




You cannot adjust automatically calculated account entries. However, you can add corrections.

1. Open the account you want to add a correction to.
2. Click the **Correction** button; the **Create correction** window will open.
3. In the **Employee** field, select the appropriate individual.
4. Select a **Date**.
5. Select an **Account category**.


6. Select a compensation rule or **None**.

 A compensation rule can be selected only if **Corrections based on compensation rules are allowed** has been selected for the relevant account category in **Account management**. If this command is enabled, the pull-down list in the **Compensation rule** field will include all the compensation rules that contribute to the data included under this account category.


7. Enter a figure in the **Amount** field.
8. If possible and appropriate, enter a value in the **Percentage** field.

 You cannot enter anything in the **Value** field. The value is calculated automatically.


9. Define the "**Cost center**" on page 27 that should be associated with this entry.

 The **OWS** system will determine the correct cost center when you select the checkbox **Calculate cost center**. Often, this will be the cost center associated with the main department, or, in other words, the department where the employee works the most hours. Also see "**Properties**" on page 33.

10. Click on the **OK** button to finalize the correction. The window will close and the correction will appear in the entries list in the account window. You can recognize corrections by the pencil icon in front of it, and the value 'Correction' in the column 'Reference.'

 Most of the **Details** can be adjusted. For example, the correction might need to be approved by selecting the checkbox **Approve**.

6.2.3 Delete corrections

 Only corrections can be deleted. Automatically created entries, cannot be deleted. When those entries aren't needed anymore, the compensation rule should be deleted.

1. Open the relevant account.
2. Select the correction to be deleted.
3. Click **Remove**; you'll be asked to confirm that you want to proceed.
4. Click **OK**; the correction will be deleted from the account.

6.2.4 Detect cycles

Circular references in compensation rules occur when the calculation of a compensation element depends on itself directly or indirectly. This creates a loop where the value of the compensation element is needed to calculate itself, leading to a never-ending cycle.



In some cases, circular references might not be detected or, on the other hand, might be wrongly identified as a cycle, as the expressions used in some of the compensation rules are not taken into account. These expressions can cause a cycle (in which case it's not detected), but can also remove a cycle (in which case the detect cycles functionality returns a false positive). The functionality can be used as an additional aid to check your configuration, but should not be fully relied on when creating the configuration.

6.2.5 Weekly & Period budget

Used to manually add multiple budgets at once, which can be used in calculations in the schedule (for example, budget against costs per day). When adding Weekly or Period budgets, they are automatically approved (see the **Details** section of the added entries). Only after deselecting this approval, you can delete these entries.

Weekly budget

As of a specific **Start date**, **Account**, and **Department**, add the budget per **Account category** for a week.

Period budget

For a specific **Account category** and **Period**, add the dates and budgets for each day on a new line, where date (dd-mm-yyyy) and budget is separated by a space. For example, 31-01-2024 1000.

6.2.6 Export account entries

You can either export to Excel or a .csv file. Contact your ORTEC representative when needed.



This depends on the setting **EXPORTTOEXCEL** (OWS Settings Manager > Other settings > Options > Runningaccounts). When the value is set to **Y**, you can export to Excel, but only with the Excel application installed on the machine you're using to perform your export (see update below). With the value set on **N**, you can export to a .csv file.

With setting **MAIEXPORTTOEXCEL** set to **Y**, the export file can be mailed to someone. When set to **N**, the export file will be stored locally.

Update (release 1614627 - September 2024)

To export data to Excel from a running account or clocking form, the OWS Win32 Client previously required Microsoft Excel to be installed on the same machine. Without it, the export would fail. This limitation has now been addressed on all hosting environments with this update level.

The OWS Win32 Client can export to Excel without needing Microsoft Excel installed. This functionality is controlled by the feature toggle **USEHARMONYFLEXCELREPORT**, which is disabled by default because it might interfere with existing (on-prem) use of the Excel export.

To use this functionality, first set the feature toggle **USEHARMONYFLEXCELREPORT** to **Y** and then enable the following OWS Settings Manager options:

- OPTIONS\CLOCKINGS\EXPORTTOEXCEL=Y – For exporting clocking information.
- OPTIONS\RUNNINGACCOUNTS\EXPORTTOEXCEL=Y – For exporting running account information.

Additionally, ensure the DEFAULT_USR\INTERFACE\EXCEL settings (DateFormat, NumberFormat, TimeFormat, and SumFormula) match the regional settings of the users generating the Excel files. Please be aware that the standard NumberFormat needs to be changed to #,##0.00 to make sure Excel is displaying the decimals correctly when using the new Excel export. While incompatible settings will not prevent the report from being generated, errors may occur when opening the file in Microsoft Excel.

6.3 Leave requests

To request leave, employees can indicate the duration and type of leave they need. The system checks if they have enough balance, and if not, they receive a warning and the request is denied. If they have enough balance, the request is submitted for approval by the planner or manager. After approval, the leave shift with the correct hours is automatically added to the schedule.

In this section, we'll explain how to set up this process of leave requests.

6.3.1 Add leave balance account

After an employee has requested leave, the leave balance account of this employee is checked. To make this possible, a leave balance account needs to be added. This account represents the current balance for the selected leave type, but also includes the hours of new leave requests.

1. Go to **Accounts > Account management**.
2. In the **Compensation account** window, click the **New** button.
 - Enter a **Name**. For example, 'Leave balance check'.
 - Click **OK**.
 - Restart the **ORTEC WS Client** to obtain the rights to view and configure the new account.
3. (Optional) Enter a **Description**.
4. On the **Account categories** tab, add some categories.

Example

A typical setup of a leave balance account could include the following categories:

- Leave entitlement
- Leave taken (approved requests and/or leave shifts in the schedule)
- Leave requests (open requests)

5. (Optional) When creating an account to book only full day, non-partial leave requests, select the **Type of entries** tab. Specify the account as an 'amount' type, otherwise you'll not be able to book leave days on this account.
6. In the **ORTEC WS Settings manager** enable the setting **UseCheckLeaveBalance**. Restart the processes in the **System Configuration**.



The new leave balance account can be checked via **Accounts > Leave balance check**. Once compensation rules have been defined, you can view (per selected department, employee and period) the leave hours.

6.3.2 Link account and activity type

The leave balance account needs to be linked to the corresponding activity type.

1. Go to **Maintenance > Organization > Activity type** tab.
2. In the left pane, select the highest level of the organizational structure.
3. Select the activity type **Leave of absence**.
4. Select the checkbox **Relevant to leave request**.
5. From the **Account** drop-down list, select the newly created leave balance account.

Example

The screenshot shows the 'Activity type' configuration window. The 'Leave of absence' activity type is selected in the left pane. The 'Relevant to leave request' checkbox is checked and circled in red. The 'Account' dropdown is also circled in red and set to 'Leave balance check'.

| Skill | Level |
|-------|-------|
| | |

Properties

Belongs to: None

Abbreviation: LOA

Export code:

Import code:

Class: Leave-of-absence

Valid from: - -

Valid until: - -

Account: Leave balance check

Description:

Show in pop-up menu of the planning board

Fix shifts when replacing by an activity type

Available for realizations in ESS

Relevant to leave request

Entering address is allowed

Replace by sick leave shift in case of sick leave

Entering a workstation is required

Entering a workstation is not allowed

Workstation planning: display when removing the workstation

OK

6.3.3 Period for which leave balance is checked

The available leave balance is checked for a predefined department period, giving the user more control over the exact period for which the check is done. For more information, see ["Department periods" on page 46](#).

If such a department period doesn't yet exist, it must be created.

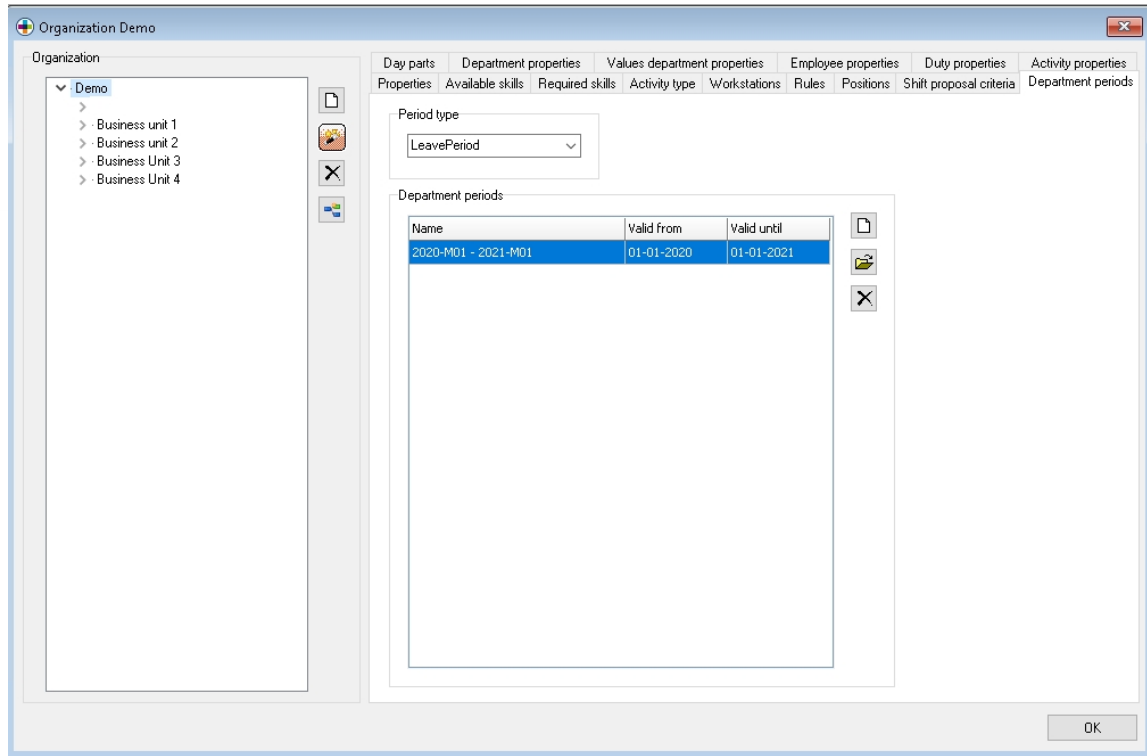
1. First create period types. Go to **Maintenance > Period types**.
2. Create a period type. For more information, see ["Period types" on page 89](#).

The screenshot shows a dialog box titled "Period types". It has a standard Windows-style title bar with a close button. The dialog is divided into several sections:

- Name:** A dropdown menu currently displays "LeavePeriod". To its right is a small icon of a hand holding a pencil. Below this section are three buttons: "New", "Delete", and "OK".
- Description:** An empty text input field with a small icon of a hand holding a pencil to its right.
- Kind of period:** A dropdown menu currently displays "months".
- Maximum number of periods:** A spinner box (up/down arrows) currently displays the number "12".
- Interruptions between periods:** A checkbox labeled "Allow nonconsecutive periods" which is currently unchecked.

3. To create department periods, go to **Maintenance > Organization**.
4. In the left pane, select the highest level of the organizational structure.
5. Select the **Department periods** tab.
6. Select the correct **Period type** from the drop-down list.
7. In the **Department periods** section, click the **New** button.

8. Set the begin- and end dates and click **OK**.



6.3.4 Leave requests processing

After approval of a leave request, leave shifts are created based on the leave request processing settings in **ORTEC WS Settings Manager**, which can be different depending on the status of the schedule.

Example

Schedules with status **Planning** - Shifts are typically not known to the employee, so we would recommend to create leave shifts based on contract hours, work patterns, or cyclical schedules.

Schedules with status **Published** or higher - Existing assigned shifts are considered known to the employee and can be replaced by leave shifts with the same duration and time.

Processing methods

Cyclical schedule

- Leave shifts will be created with the same duration and time as the cyclical schedule shifts.
- If no cyclical shifts exists, no leave shifts will be created.

Contract hours

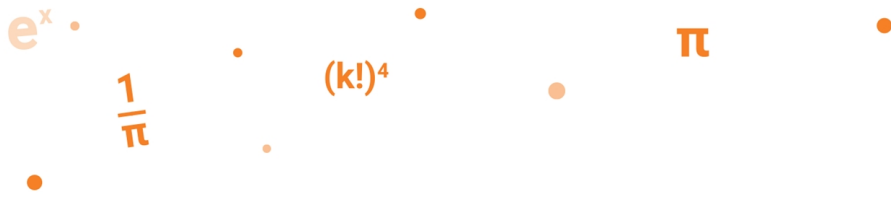
- Leave shifts are created based on the contract hours of the employee.
- Leave shifts are only created on weekdays (Monday to Friday).
- The length of each leave shift = 1/5 of weekly contract hours.

Work pattern

If an employee has a work pattern assigned, leave shifts will be created with the same duration and time as the work pattern hours.

Replace existing shifts

- If existing assigned shifts are present in the schedule, they will be replaced by leave shifts with the same duration and time.
- If no existing assigned shifts exists, no leave shifts will be created.



7 Overview

Depending on your configuration a number of overviews can be accessed via the **Overview** menu option. Below are some examples.

7.1 Overview shift reassignments

For an example use case, see ["View history and undo revisions" on page 152](#).

7.2 Clock times

The **Clock times** window displays clock times for one or more staff members from a shift group. Staff members can be filtered if required.

7.3 Search concept planned shifts

This is a Flexpool related overview.

7.4 Workstation occupation analysis

Shows the under- and overstaffing for the selected workstations in the selected period, based on the workstation demands and assignments of the selected department.

8 Central and decentral departments

Create a (central) schedule that combines shifts and employees from multiple (decentral) departments. Employees of decentral departments are automatically available in the central department. The shift functionality mirrors that of flexpool shifts. The planner of the decentral department determines if a shift can be reassigned within the centralized department or the decentralized department's schedule. When reassigning shifts in the central schedule to an employee not belonging to the department the shift originates from, the employee will be automatically lent to this department.

Example

- Optimize the schedule of multiple departments by cross utilizing all employees (manual or with the automatic planner). After the optimal schedule is created it's returned to the decentral department for the execution phase of the schedule.
- Or, first optimize all decentral schedules, and then optimize all remaining vacant shifts by cross utilizing employees from multiple departments.

Required: The general setting UseCentralDepartments. Contact your ORTEC representative when needed.

8.1 Permissions

| Permission | Access mode | Description |
|--|-------------|---|
| DPT_ORGCENTRAL_DPT_READ | Execute | Permission to read the relations between central and decentral departments. |
| DPT_ORGCENTRAL_DPT_WRITE | Execute | Permission to adjust the relations between central and decentral departments. |
| CENTRAL_DEPARTMENT_CANDIDATES_FOR_SHIFTS | Execute | Permission to request a candidate for shift proposal for employees belonging to the central department. |
| SHIFT_SEND_TO_CENTRAL | Execute | Permission to request a candidate for shift proposal for employees belonging to the central department. |

8.2 Define central and decentral departments



- Decentral departments cannot belong to multiple central departments. However, it's possible to change the central department they are linked to. First define an end date (see step 6) to stop the link with the current central department. Then follow the steps below to add the decentral department to another central department.
- It's not possible to link a central department to a central department.
- It's not possible to create shifts in the central department. Shifts are always created and defined in the decentral departments.
- It's not possible to subcontract shifts to or from the central department.

1. Go to **Maintenance > Organization**.
2. In the left pane, select the desired department.
3. Select the **Central departments** tab.



Required: The general setting UseCentralDepartments. Contact your ORTEC representative when needed.

4. To make the selected department the central department, select the checkbox **Is central department**. The tab name changes to **Decentral departments**, and only a few relevant tabs remain.

Example

Sort categories, Properties, Shift proposal criteria, Department periods, Day parts, Values department properties, and the relation (with a validity interval) between central department and other (decentral) department can be defined.

The screenshot displays a configuration window with several tabs: 'Sort categories', 'Properties', 'Shift proposal criteria', and 'Department periods'. The 'Properties' tab is active, showing sub-sections for 'Decentral departments', 'Day parts', and 'Values department properties'. Under 'Decentral departments', there are two main areas:

- Central department:** Contains two checkboxes: 'Is central department' and 'Show borrowed employees'.
- Decentral departments:** A table with three columns: 'Name', 'Valid from', and 'Valid until'. The first row is highlighted in blue. To the right of the table are three buttons: a document icon (New), a list icon, and a close icon (X).

5. To view the employees from all linked decentral departments in the central schedule, select the checkbox **Show borrowed employees**.
6. To link a decentral department, click the **New** button.
 - From the **Decentral department** drop-down list, select a department.
 - Define the **Period**.
 - Click **OK**.
 - Repeat this step to link more decentral departments.

8.3 Send shift(s) to central department



- The periods of the central and decentral department should match for the days that shift(s) are sent.
- A central schedule is in place for the same scheduling period. If this isn't yet the case, create one via **Planning > Schedule management**. Select the central department, and add a scheduling period.
- Schedulers can send shift(s) to the central department from **ORTEC WS for Team Schedulers**.

1. Go to **Planning > Schedule management**.
2. From the **Department** drop-down list, select the department from which you want to send shift(s) to the central department.
3. In the **Scheduling periods** tab, open a scheduling period.
4. In the **Vacant shifts** section, select one or more shifts.
5. Click the right-mouse button.
6. Select **Send to central department**.

8.4 Use of central schedule

To support the planner to generate an optimal schedule for the central schedule, the following options are available:

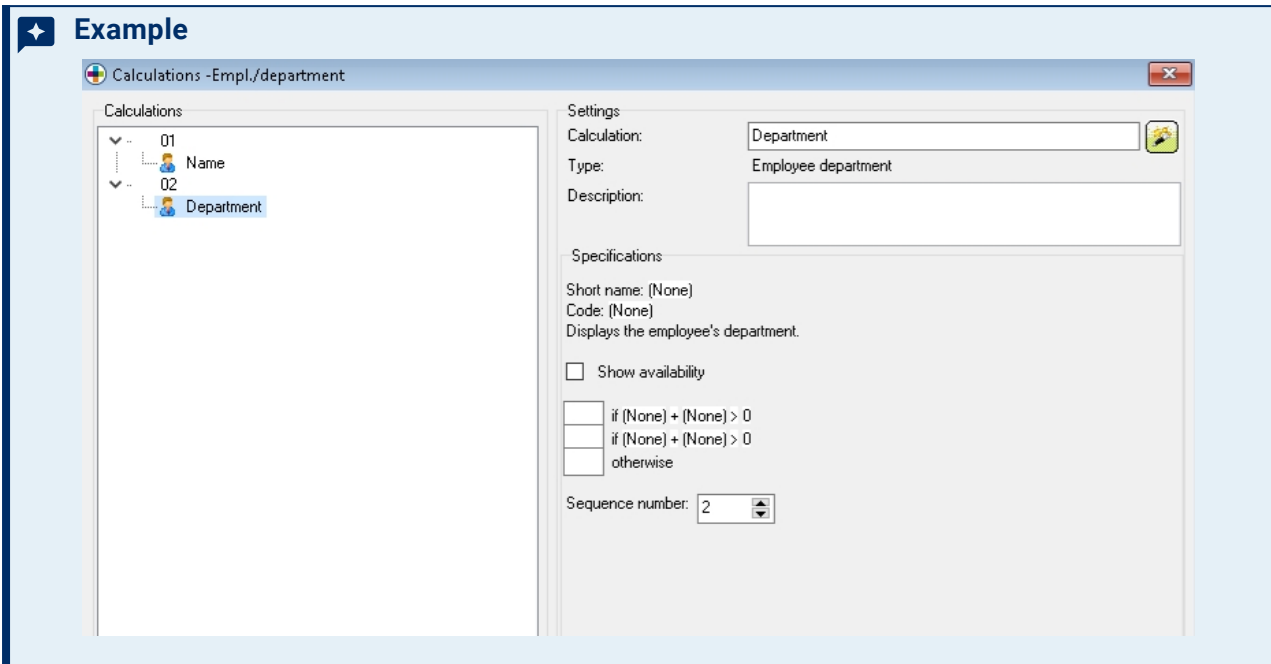
- Horizontal calculation 'Employee department' shows assigned departments
- Use preferences of the employee or planner to let employees work in other departments:
 - Employee preferred department improvements
 - Employee preferred department labor rule
 - Employee preferred department scheduling criteria
 - Preferred or forbidden department candidate for shift criterion
- Grant skills to employee for specific departments



ORTEC WS for Windows display settings like 'Department color' and 'Subcontracted to department' can be used to visualize the original department of a shift and whether the shift can be reassigned in the central schedule.

8.4.1 Employee department

The horizontal 'Employee department' calculation shows the departments the employee is assigned to during the opened schedule. These are the departments shown on the **Departments** tab (**Employee > Employee management > Schedule data > Departments**). This means the department (s) an employee is lent to aren't shown. An option is available whether to show the availability for the department.



8.4.2 Employee preferred department

Add a priority to a preferred department which can be used by the automatic planner and/or candidates for shift proposal criteria. Use these preferences of the employee (or planner) to create an optimal schedule.

Add multiple preferred departments with a default priority. Each preferred department is added as a single line, validity and priority can be set per preferred department. A period filter (default: current day) is available to show only the preferred departments which are active in the selected period. Set the end date of a preference for multiple preferred departments in a single action. For more information, view "[Schedule data](#)" on page 94.

Example

Assume you're using the central planning functionality for 5 decentral departments. An optimal schedule is probably achieved when cross utilizing each employee for all 5 departments. However, the employees and departments itself probably prefer to have a more fixed distribution of lending employees to departments. By configuring preferred departments including priorities this can be achieved.

8.4.3 Employee preferred department labor rule

A labor rule for preferred departments for employees checks whether the department of an assigned shift corresponds with a preferred department of the employee. An extra option in the rule is to only allow preferred departments with highest priority. For more information on defining labor rules, view "[Employment conditions](#)" on page 54.

Example

Settings

Constraint: Preferred department

Type: Preferred department

Description:

Specifications

An employee may only work for a preferred department.

Only allow preferred departments with highest priority for the day of the shift.

The departments the employee is assigned to also count as preferred departments with a priority of 100.

This rule applies only to employees for whom the employee property (None)...

This rule applies only to employees in a salary group between (None) and (None).

This rule applies only to employees aged over 18 years up to 100 years.

This rule applies only to employees with contracthours from 0:00 up to 48:00 hours.

For master schedules this rule is only visible if the status includes:

Scenario

Plan

Published

Closed and higher

OK

8.4.4 Employee preferred department scheduling criteria


The scheduling criteria for preferred departments for employees takes into account whether the department of an assigned shift corresponds with a preferred department of the employee. It avoids planning shifts for departments that don't have the highest priority.

8.4.5 Preferred or forbidden department candidate for shift criterion

The candidate for shift criterion 'preferred or forbidden departments' has an option to only show employees having the department as a preferred department. It's also optional to show the priority of the preferred department in the proposal.

8.4.6 Grant skills to employee for specific departments

Grant skills to an employee for a specific department. The labor rule 'Skills' checks whether these skills are granted to the correct department.

 Skills can also be granted for mid-level departments, the employee has this skill for all departments belonging to this mid-level department.

Example

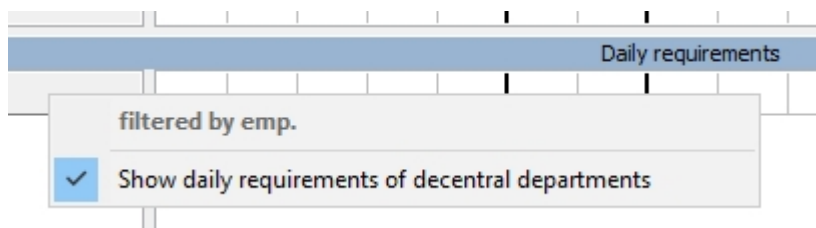
Imagine the departments in **ORTEC WS** are configured as restaurants. Each kitchen has its own characteristics and it requires certain experience for a cook to work in such a kitchen. The 'Cooking' skill will only be assigned to a cook for a specific restaurant in case the employee is experienced enough to work there.

8.4.7 Show daily requirements

For the planner of the central department it's possible to visualize the "Daily requirements" on page 135 of all decentral departments. When using the automatic planner in the central schedule it also takes into account the daily requirements of the decentral department(s).

Show daily requirements of decentral departments

1. Open the plan board of the central department.
2. Make sure the **Daily requirements** component is selected via **View > Plan board components**.
3. In the **Daily requirements** frame, push - in the left pane - the right-mouse button to enable the option **Show daily requirements of decentral departments**.



8.4.8 Candidates for shift proposal

Retrieve a proposal for candidates that are available to work a shift from the central department. This means all employees from the decentral departments that are linked to the central department are included in the proposal.

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π

1. In the plan board, click the right-mouse button on a vacant shift.
2. Select **Candidates for shifts**.
3. Select the checkbox **Use central department**.

Candidates for shift D (07:30 - 16:00), 18-06-2023

Shift proposal criteria:

Proposal from other departments: Use central department

| Name | No. of violations | Day off | Shift to be replaced | Situatie na doorvoeren rooste | Endtime last shift | Request to work | +/- | Skill understaffing |
|------------------|-------------------|---------|----------------------|-------------------------------|--------------------|-----------------|---------|---------------------|
| Backer, B. | 0 | Yes | | D | 28-02-2023 23:00 | - | -158:54 | - |
| Garrison, M. | 0 | Yes | | D | 27-03-2023 16:00 | - | -105:56 | - |
| Peeterson, P. | 0 | Yes | | D | 28-03-2023 17:00 | - | -79:27 | - |
| Gravink, V. de | 0 | Yes | | D | 29-03-2023 16:00 | - | -158:54 | - |
| Mulder, O. | 0 | Yes | | D | 30-03-2023 16:00 | - | -79:27 | - |
| Smith, H. | 0 | Yes | | D | 30-03-2023 16:00 | - | -35:19 | - |
| Heist, A. | 0 | Yes | | D | 30-03-2023 17:00 | - | -148:19 | - |
| Dijck, F. | 0 | Yes | | D | 30-03-2023 17:00 | - | -105:56 | - |
| Boyle, L. | 0 | Yes | | D | 31-03-2023 12:30 | - | -158:54 | - |
| Yilmaz, A. | 0 | Yes | | D | 31-03-2023 16:00 | - | -158:54 | - |
| Miller, W. | 0 | Yes | | D | 31-03-2023 16:00 | - | -105:56 | - |
| Meyer, R. | 0 | Yes | | D | 31-03-2023 16:00 | - | -88:17 | - |
| Reslink, J. | 0 | Yes | | D | 31-03-2023 17:00 | - | -79:27 | - |
| Ramaker, K. | 0 | Yes | | D | 31-03-2023 23:00 | - | -141:15 | - |
| Meyerdink, S. | 0 | Yes | | D | 31-03-2023 23:00 | - | -105:56 | - |
| Broek, A. | 0 | Yes | | D | 01-04-2023 07:30 | - | -158:54 | - |
| Slooten, O, van | 0 | Yes | | D | 01-04-2023 07:30 | - | -141:15 | - |
| Klompenhower, A. | 0 | Yes | | D | 20-05-2023 16:00 | - | -158:54 | - |

Buttons: Refresh, OK, Cancel, Export, Send e-mail, Send SMS

4. Click the **Refresh** button.

8.5 Example use case

Assume you are having department 1A (green) and department 1B (orange) working closely together, but are in **ORTEC WS** separate departments.

Master schedule Department 1A 02-06-2014 - 09-06-2014


| Employees | Mo | Tu | We | Th | Fr | Sa | Su |
|-----------|----|----|----|----|----|----|----|
| Name | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Betty | | 1T | | | 2T | | |
| Collins | | | | | | | |
| William | | | | 2 | | | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 1T | 2 | 1T | 1T | 1T | 1T | 1T |
| | 2 | 2T | 2 | 2T | 2 | 2 | 2 |
| | 2T | 3 | 2T | 3 | 3 | 2T | 2T |
| | 3 | | 3 | | | 3 | 3 |

| Master schedule Department 1B 02-06-2014 - 09-06-2014 | | | | | | | |
|---|----|----|----|----|----|----|----|
| Employee: x | Mo | Tu | We | Th | Fr | Sa | Su |
| Name | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Charles | 2 | | | | | | |
| George | | | | | | 1 | |
| Nancy | | | | 4 | | | |
| | | | | | | | |
| | 1 | 3 | 1 | 2 | 1 | 4 | 2 |
| | 4 | | 4 | | 3 | | 3 |

For department 1A and 1B a central department 'Cluster 1' is configured. This central schedule gives an overview of all assigned shifts of both departments.

| Master schedule Central Cluster 1 02-06-2014 - 09-06-2014 | | | | | | | | |
|---|---------------|----|----|----|----|----|----|----|
| Employees | | Mo | Tu | We | Th | Fr | Sa | Su |
| Employee name | Department | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Betty | Department 1A | | 1T | | | 2T | | |
| Charles | Department 1B | | 2 | | | | | |
| Collins | Department 1A | | | | | | | |
| George | Department 1B | | | | | | 1 | |
| Nancy | Department 1B | | | | 4 | | | |
| William | Department 1A | | | | 2 | | | |
| | | | | | | | | |
| | | | | | | | | |

After the planners of department 1A and 1B decided that their vacant shifts should be planned from the central schedule, these shifts are available as vacant shifts in the central planning (blue). These can now be planned in the central schedule.

 Shifts assigned to employees in decentralized departments can be included in the central schedule, allowing for reassignment if needed. Otherwise, these shift assignments are fixed and cannot be changed.

Now the shifts with the left corner colored blue are available to be planned in the central schedule.

Master schedule Central Cluster 1 02-06-2014 - 09-06-2014

| Employees | | Mo | Tu | We | Th | Fr | Sa | Su |
|---------------|---------------|----|----|----|----|----|----|----|
| Employee name | Department | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Betty | Department 1A | | 1T | | | 2T | | |
| Charles | Department 1B | | 2 | | | | | |
| Collins | Department 1A | | | | | | | |
| George | Department 1B | | | | | | 1 | |
| Nancy | Department 1B | | | | 4 | | | |
| William | Department 1A | | | | 2 | | | |


| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 2 | 1 | 1T | 1 | 1T | 1T | 1T |
| 1T | 2T | 1T | 2 | 1T | 2 | 2 | 2 |
| 2 | 3 | 2 | 2T | 2 | 2T | 2 | 2 |
| 2T | 3 | 2T | 3 | 3 | 3 | 2T | 2T |
| 3 | | 3 | | 3 | 4 | 3 | 3 |
| 4 | | 4 | | | | | 3 |

An optimal schedule can be created by cross utilizing the employees from both departments taking into account skills, preferred departments, labor time rules, daily requirements etc. As a result we see that both Charles and George will work for department 1A.

Master schedule Central Cluster 1 02-06-2014 - 09-06-2014

| Employees | | Mo | Tu | We | Th | Fr | Sa | Su |
|---------------|---------------|--------|----|----|----|----|----|----|
| Employee name | Department | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Betty | Department 1A | | 1T | 2T | 2T | 2T | 2T | 2 |
| Charles | Department 1B | 2T | 2 | 1 | 2 | 1 | 2 | 2T |
| Collins | Department 1A | 1 | 1 | 1 | 3 | 2 | 1 | 1 |
| George | Department 1B | 2 | 2 | 2 | 1 | 1 | 1 | 2 |
| Nancy | Department 1B | 1 4 | | 4 | 4 | | 4 | |
| William | Department 1A | 3 | 3 | 3 | 2 | 3 | 3 | 3 |

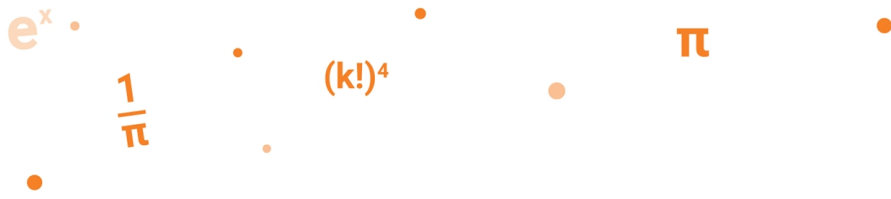
| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 1T | 2T | 1T | 1T | 1T | 1T | 1T | 1T |
| | 3 | | | 3 | | | 3 |

 The planners of the decentral departments 1A and 1B can always see in the schedules of 1A and 1B what is being planned in the central department. However, they cannot reassign shifts that are sent to the central department.

After an optimal schedule is created the shifts are sent back to the decentral departments where it will be followed up by the decentral planners.

| Master schedule Department 1A 02-06-2014 - 09-06-2014 | | | | | | | |
|---|----|----|----|----|----|----|----|
| Employees | Mo | Tu | We | Th | Fr | Sa | Su |
| Name | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Betty | | 1T | 2T | 2T | 2T | 2T | 2 |
| Charles | 2T | 2 | 1 | 2 | 1 | 2 | 2T |
| Collins | 1 | 1 | 1 | 3 | 2 | 1 | 1 |
| George | 2 | 2 | 2 | 1 | 1 | 1 | 2 |
| William | 3 | 3 | 3 | 2 | 3 | 3 | 3 |
| | 1T | 2T | 1T | 1T | 1T | 1T | 1T |

| Master schedule Department 1B 02-06-2014 - 09-06-2014 | | | | | | | |
|---|-----------------|----|----|----|----|----|----|
| Employees | Mo | Tu | We | Th | Fr | Sa | Su |
| Name | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Charles | 2T | 2 | 1 | 2 | 1 | 2 | 2T |
| George | 2 | 2 | 2 | 1 | 1 | 1 | 2 |
| Nancy | 1 ----- 4 | | 4 | 4 | | 4 | |
| | | 3 | | | 3 | | 3 |



Contact information

For further information contact ORTEC, either through your existing ORTEC representative or by using the appropriate contact details listed on www.ortec.com

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