Resource Planner

Planon Software Suite
Version: L105

About this Document

Intended Audience

This document is intended for *Planon Software Suite* users.

Contacting us

If you have any comments or questions regarding this document, please send them to: support@planonsoftware.com.

Document Conventions

Bold
Names of menus, options, tabs, fields and buttons are displayed in bold type.

Italic text
Application names are displayed in italics.

CAPITALS
Names of keys are displayed in upper case.

Special symbols

	Text preceded by this symbol references additional information or a tip.
	Text preceded by this symbol is intended to alert users about consequences if they carry out a particular action in Planon.

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About Resource Planner

What is Resource Planner?

The Planon ProCenter **Resource Planner** is a graphical planning tool. It gives access to one or multiple specially configured planboards, on which you can assign work to available resources quickly and easily. 'Resources', in this case, are the tradespeople carrying out the work.

The orders and work assignments displayed in **Resource Planner** are registered in the Work Orders TSI and include the following order types (or any user-definable types based on these system order types):

- work orders
- planned maintenance orders
- move orders

The resources to whom the work can be assigned in **Resource Planner** are the team members registered in the **Maintenance teams** TSI in Supporting data . The teams are linked to **Resource Planner** in the **Resource Planner Configurations** TSI.

> ℹ️ For more information on creating and linking maintenance teams, see Creating teams and roles and Adding Resource Planner configurations.

Who are the Resource Planner users?

Resource Planner is a tool for two types of end users:

- planners
- workforce

Typically, planners are the *owners* of the configured planboards. They have permissions to edit and create planboard configurations.

The workforce, consisting of engineers / internal tradespeople will have permission to consult the planboards that are relevant to them.

Multiple planboard configurations per user

Resource Planner allows for multiple, authorizable configurations. It is possible to create configurations per team, per region, per country or per any other relevant criterion. You can switch between those **Resource Planner configurations** that are relevant to you, depending on your permissions in **Authorization**. The configuration settings determine which teams and team members are shown. **Resource Planner** users can also adjust parts of the screen as required, for example by switching the period view or showing and hiding columns in the **Unplanned** panel.

> ℹ️ • For more information on the configuration of Resource Planner, see *Resource Planner Configurations*.
> • For more information on the authorization of **Resource Planner**, see *Authorization*.

Resource allocations

Planon provides an additional *licensed* feature that allows for 'bulk planning' of work assignments for specific time slots, per resource. This means that you can pre-allocate specific periods on the graphical planner to the resources and drag the actual work into these allocated periods later.

> ℹ️ For information on working with **Resource allocations**, see Resource allocations and Working with Resource allocations. For information on configuring **Resource allocations**, see Configuring resource allocations.

Resource Planner screen layout

The **Resource Planner** screen is divided into four main sections:
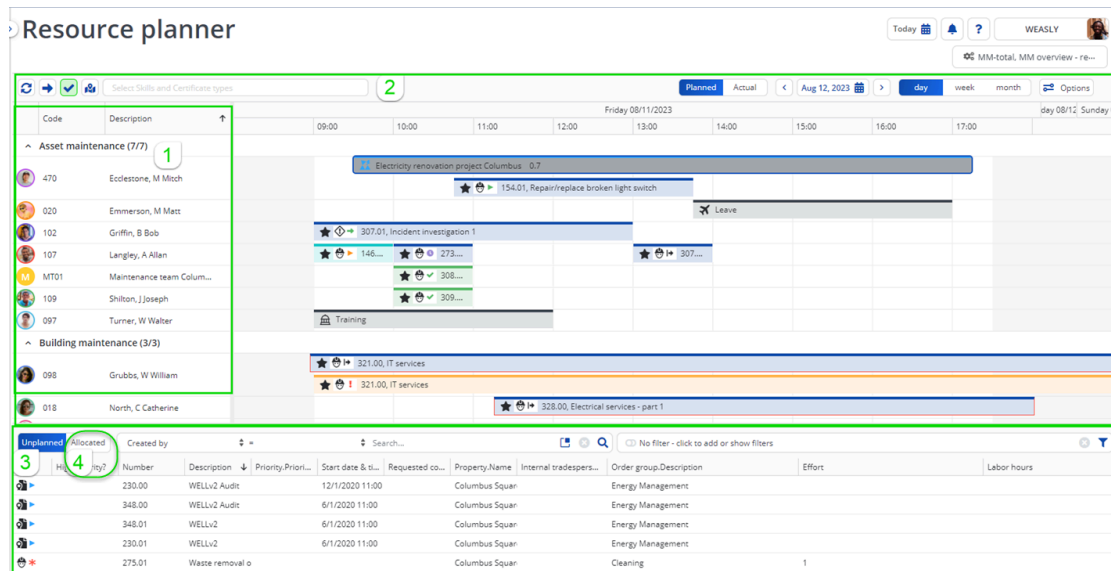
1. **Resources** panel: displays the maintenance teams and team members linked to the current planboard.
2. **Planboard**: displays the time lines of the resources and the work allocated to them.
3. **Unplanned** panel: lists the work that is waiting to be planned.

Note	All orders that are completed (technically / administratively) or canceled are excluded from this panel, because they no longer require planning. If you have enabled the **Multiple work assignments** feature, the panel will also show 'active' orders that have **Original budgeted hours** and **Remaining budgeted hours** filled in, or whose **Planning status** field is set to **Requires planning** even though there are no **Remaining budgeted hours** left. Also see Order fields and Planning status on Orders - conditions.

4. **Allocated** panel: part of the licensed Resource allocations feature; this panel lists the work that has been planned within a resource allocation.

Note In addition to these panels, there are several slide-out panels and views you can activate to obtain information on resources and order details. For information about these features, see:

- Viewing a resource's details on slide-out panel,
- Viewing order details on slide-out panel,
- Using calendar views in Resource Planner,
- Displaying a map view on the planboard,
- Displaying Planned and Actual assignments on the planboard.

Resource Planner screen layout

Resource Planner - overview

The **Resource Planner** interface includes various controls, filters, context menus and other features. Depending on your permissions in **Authorization**, you can use these to:

1. Button to change the status of multiple work assignments to either **Planned** or **Assigned** within a defined period.

2. Toggle button to show or hide completed work on the planboard (green blocks).

3. Toggle button to show a map view (this feature is under a special license). The map shows the geographical locations of a resource's last known, current and / or future work assignments. See Displaying a map view on the planboard.

4. *Service Provider mode only* - Toggle button to *highlight* resources with the required skills / certificates for an order (work assignment). As a prerequisite, the order must have a **Service agreement service** selected and that service agreement service must be linked to the required skills and certificates. If configured on the toolbar, the **Highlight resources suitable for job** toggle button can be used to switch to highlighting the resources:

> See *Service Providers - data set-up* for more information on activating this solution mode.

5. Filter resources by their skills and certificates.

6. Toggle button to switch from **Planned** work to **Actual** work (in progress).

7. Change the calendar view. See also: Using calendar views in Resource Planner.

8. Option to switch to a view with *compressed* non-working hours, to use the planboard space more efficiently.

9. Display work with the **On hold** status (yellow blocks).

10. Display work with a **Temporary fixed** status (light-blue blocks).

11. Add unavailability of resources ('Resource activities'), such as illness, training or special leave (gray blocks).

12. Display work with overlapping periods (red underscore). This overlap might be with other work or with non-working hours. It depends on your **Resource planner configurations** settings if overlaps are allowed and displayed, or not.

13. Filter the **Unplanned work** panel via predefined or personally defined filters.

14. Editing options:

- edit individual work assignments by right-clicking, change their status or remove the work from the planboard.
- edit order details, by double-clicking a block on the planboard.

15. Resource allocation (additional feature with separate license).
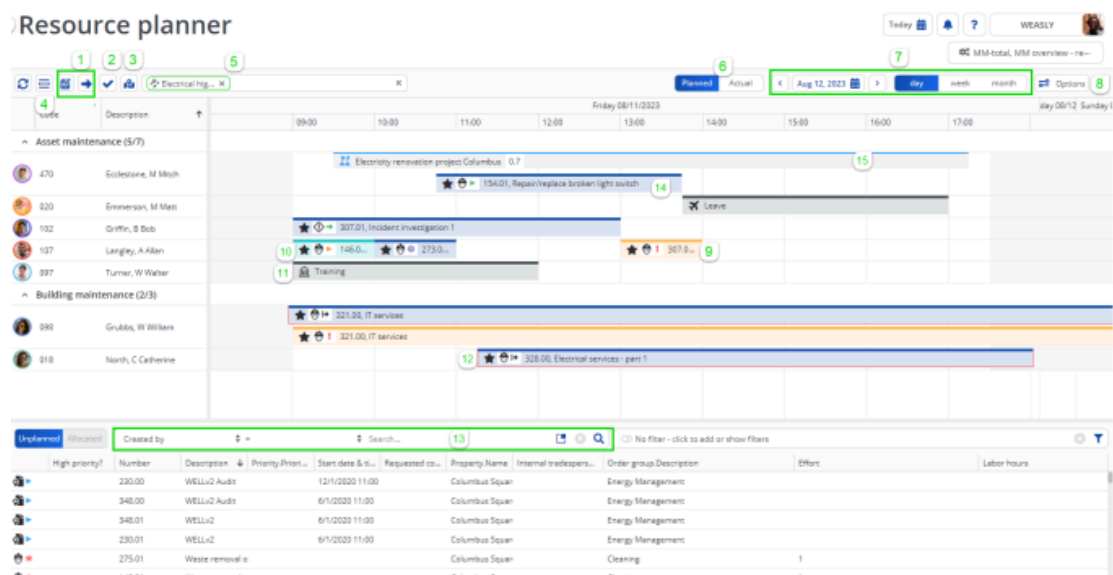
Resource Planner color legend

Colored bars represent an order's work assignment(s) on the **Resource Planner** planboard. The meaning of the colors is explained below:

▬	work = Planned, Assigned, In progress
▬	work = Declined / Stopped; order On hold
▬	Outside working hours
▬	Unavailability of resource (holidays, illness, training etc.)
▬	work = Temporarily fixed
▬	work = Done
▬	Overlapping work

The status of the work assignment is indicated by a symbol within the colored bar, for example:

Wait:

Travel:

Temporary fix:

> ℹ️ The order data of the work on the planboard can be edited by double-clicking a relevant bar and updating the order data or order status in the **Order** dialog window. A work assignment's status can be edited by right-clicking the bar on the planboard and selecting **Edit work assignment**.

Resource allocations

Planon offers the additional *licensed* **Resource allocations** feature, to enable 'bulk planning' of work assignments. The feature allows you to pre-allocate specific periods to the available resources or teams on the graphical planner. Later, when you start with the actual planning, you can 'drag' work from the **Unplanned** panel into these allocated periods.

Typical use cases for **Resource allocations**: pre-allocation of a resource's or a team's working time to projects in specific buildings or to specific customers.

In the standard **Resource planner** you 'plan' the work by dragging an order from the **Unplanned** panel onto a resource (internal tradesperson / field engineer) on the planboard. A work assignment is subsequently created in the given time slot. With a **Resource allocations** license, you can drag multiple orders from the **Unplanned** panel to a pre-allocated time slot, i.e. a **resource allocation**, and thus create multiple work assignments there. If you select the resource allocation on the planboard, the **Allocated** panel is activated, displaying these work assignments. See Resource Planner screen layout for a screen overview.

> ℹ️ The **Allocated** panel is unavailable (grayed out) to unlicensed users.

Planon calculates how many working hours are left within selected resource allocation and displays the remaining hours in a tooltip. Once the work is assigned, the resources themselves have control over which work assignment they pick up first within the allocated period(s).

You can configure and use the **Resource allocations** feature directly in **Resource planner**. On the planboard, a wizard will guide you through the planning and scheduling process. See Adding resource allocations and resource allocation periods for information about adding **Resource allocations**.

The **Resource allocations** feature also includes a separate, supporting **Resource allocations** TSI. This TSI allows planners to add, edit and delete resource allocations (it includes the same functionality as the graphical planner), but the main purpose of this TSI is *monitoring* resource allocations and *reporting* on them. Planon application managers can add this TSI to the appropriate navigation panel(s).

> ℹ️ For information on configuring **Resource allocations**, see Configuring resource allocations.

Working with Resource Planner

Information on how to work with the various features and controls that are available in Resource Planner can be found in the following topics:

Opening a Resource Planner configuration

Filtering resources by skills and certificates

Moving work to a resource's time line

Adjusting the start / end date time of the work on the planboard

Editing order data

Assigning multiple work assignments on the planboard

Planning multiple work assignments on the planboard

Adding temporary unavailability of resources on the planboard

Adjusting the Unplanned panel

> **ℹ** In some cases, browser zooming may affect the functionality of the graphical planner. Setting your browser zoom function to 100% will guarantee optimal functioning of the planboard component. See Supported configurations > Planon Web Client for detailed information on supported screen resolutions and browser zooming.

Opening a Resource Planner configuration

Prerequisites:

• one or more configurations of Resource Planner are available.

• you have the relevant permissions in **Authorization**.

Procedure

1. Open Resource Planner on your navigation panel.

2. In the Resource Planner title bar, click the Select configuration … button on the right.
   The button displays the name of the currently selected configuration. For example:

   The available configurations are listed. You can toggle between the available planboard configurations.

Note	If you want to update a configuration, you can click the **Edit configurations** option that will direct you to the **Resource Planner Configurations** functionality.

3. Select the configuration you require.

   The Resource Planner configuration you selected is displayed.

Adding Resource Planner configurations

In **Resource Planner Configurations**, you can define one or more planboard configurations. This is typically a task for a Planon application manager, but planners (the planboard **Owners**) can also create planboard configurations. You can for example create a separate configuration for each team, or link multiple teams to planboards that are based on practical criteria, such as region or work order group.

The layout of **Resource Planner Configurations** is customizable. For information on a recommended layout, see Creating a layout for Resource Planner Configurations TSI.

Procedure

1. Go to Resource Planner Configurations.

2. Click Add on the action panel.

3. Enter a code and description for the planboard configuration.

4. In the Owner field, select the person doing the actual planning on the planboard.

5. In the Filter for 'Unplanned' panel field, select the filter criteria for the unplanned work list and click OK.

For example, if you want to see the work for particular properties, you can select those properties. Choose any relevant criteria from the dialog or make a combination, using the advanced filter criteria.

6. In the Fields for 'Unplanned' panel field, select the predefined customizable list that determines which fields are shown as columns on the Unplanned panel.

For more information on defining a customizable list, see Configuring the Unplanned panel.

7. In the Fields for planboard tooltip field, select the predefined customizable list that determines which fields are shown in the tooltips on the planboard.

8. Select relevant values in the Start time of planboard and End time of planboard fields, if you want to configure the planboard's day view. The hours between the defined start time and end time of the planboard will be displayed, instead of a 24 hour view.

9. In the Allow overlapping work field, select one of the following options:

   ◦ Overlapping work not allowed - no overlapping work is allowed on the planboard.

   ◦ Overlapping work allowed / occurrences highlighted - overlaps are allowed and the overlapped instances are underscored with a thick red line.

   ◦ Overlapping work allowed / occurrences not highlighted - overlaps are allowed, but the overlapped instances are not marked. This is the default setting.

10. In the Allow planning of overtime? field, select Yes to allow planning outside working hours or No to prevent it. However, if you select No, but orders / work assignments are planned outside working hours somewhere other than on the planboard, they will be displayed with a red border.

11. Save the configuration.

12. On the action panel, click Link teams to link relevant team(s) and click OK.

For more information on creating teams, see Creating teams and roles.

The planboard configuration is now available in the Resource Planner TSI.

If you want to give specific user groups or users access to this **Resource Planner configuration**, proceed as follows:

13. On the action panel, click Link user groups and / or Link users to link specific user group(s) and / or users to the configuration and click OK.

   ◦ the **Resource Planner configuration** will only be visible to those user groups / users who are linked as mentioned in the above step.

   ◦ If no users or user groups are linked to a **Resource Planner configuration**, the standard authorization applies.

You can add more Resource Planner configurations as required. The following usability tips may be helpful:

ⓘ
- Use the **Copy** action to quickly create new configurations for different owners, teams, regions and so on.
- With authorization you can limit the number of configurations a planner can use. For example, authorization on the **Owner** field gives planners access to their own planboards. If required, you can also different fields, such as free fields, for authorization purposes.
- When making changes in either the planboard or the **Unplanned** panel, only the items which are directly impacted are automatically updated, to enhance performance. This *refresh* behavior implies that users may sometimes have to refresh manually. For example, if multiple people are working with the same Resource Planner configuration and they want to see all changes.
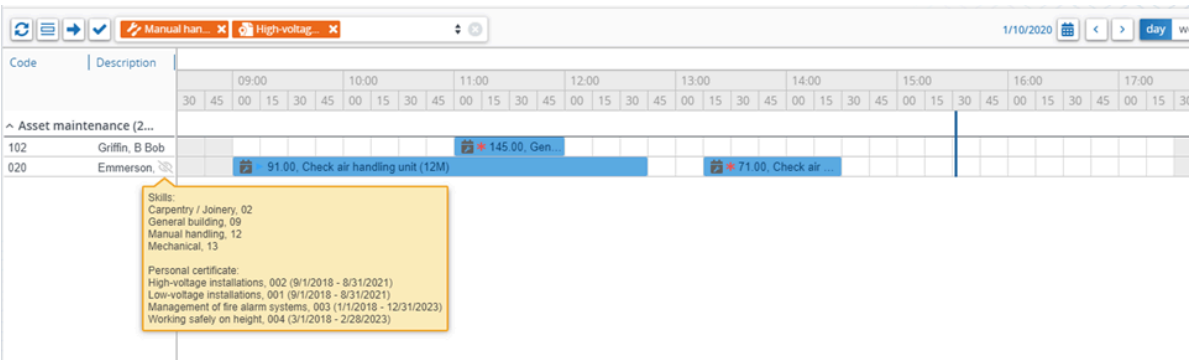
Filtering resources by skills and certificates

You can filter the list of available resources (team members) by the skills and certificate types that are linked to them in the Personnel TSI. By applying this filter, you can quickly assign work to people who are qualified for the job.

Procedure

1. On the planboard, click in the Skills & certificate types filter.
2. Select the required skill(s) / certificate type(s) by which you want to filter the list of resources.

    The filter is automatically applied to the planboard. The active skills and certificate types are highlighted individually in the filter. If you hover over the list of resources, a tooltip will display each person's skills and personal certificates.

Only team members with skills and personal certificates matching the selected filter criteria are displayed on the planboard. You can assign work to these resources.

Note   If the personal certificate of a resource is not valid within the time range displayed on the planboard, the resource is not displayed.

Note   This filter remains active while planning or assigning multiple work assignments (action on selection).

Adding temporary unavailability of resources on the planboard

Temporary unavailability of resources (team members) due to illness, training, holidays, special leave and so on, can be added to the planboard.

For more information on configuring various types of unavailability, see Resource Planner Configurations > Configuring the unavailability of resources.

The actual activity that is the reason for a person's unavailability is called **Resource activity**. Resource activities can also be added to a person in **Personnel** , at Visitors >

Resource activities and will subsequently be displayed on this person's planboard time line.

	Training	☒

Description: Training
Start date & time: 28/11/2016 12:00
End date & time: 28/11/2016 17:00
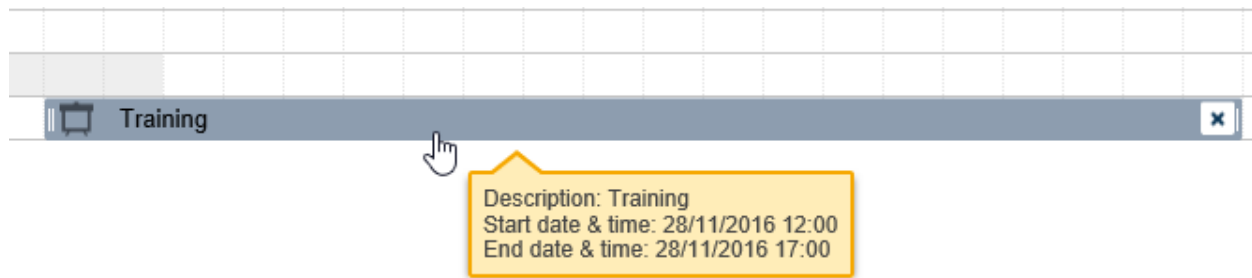
Procedure

1. On the planboard, click on the time line of the resource whose unavailability you want to add.

2. Drag a bar on the time line representing the expected period of unavailability of the resource.

3. Select the type of unavailability from the context menu. The types of unavailability you can assign depend on your configuration.

   The gray bar indicates the resource's unavailability for the selected period. The icon indicates the type of unavailability.

ℹ️ If planners edit the date-time of future work while the planboard is in day view, the system will automatically warn them about work assignments scheduled during periods of unavailability. This allows for appropriate rescheduling actions to be taken.

ℹ️ To obtain clearer overview of working hours on the planboard, navigate to the top of the screen and select **Options**. Enable the **Compress non-working hours** function to display non-working hours in a more concise format.

Resource list - Hiding / unhiding resources and sorting

Sorting

The list of resources (teams and tradespeople) is by default sorted by the description of the resource's role.

Hiding / unhiding

You may want to temporarily hide people or teams from the list of resources and the planboard, because they are:

- already fully booked,
- on holiday,
- on a training course,

- on sick leave,

- etc.

> **i** Planon retains any changes you made to the list of resources during your session and will apply them after you close the application and log in again.

Procedure

1. In Resource Planner, select the relevant Resource planner configuration.

2. In the list, hover over the resource you want to hide.

   A 'crossed-out eye' icon and the Hide resource tooltip are displayed.
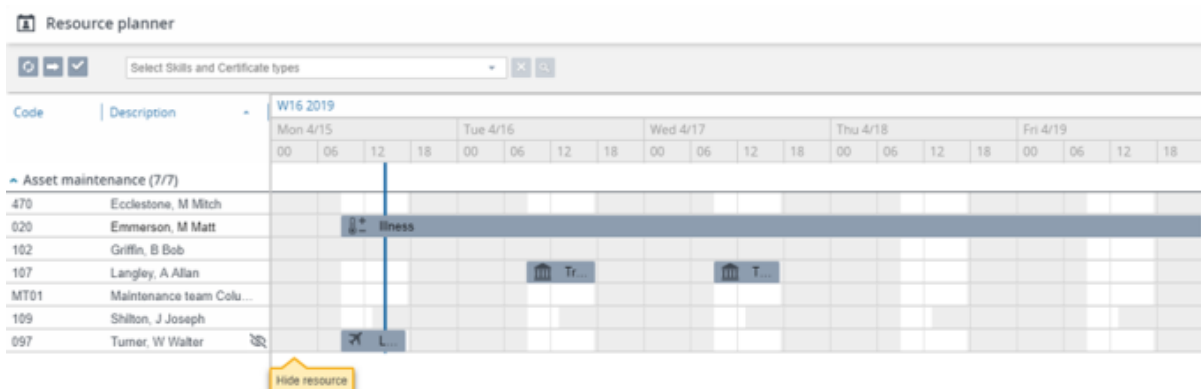
3. Click the 'crossed-out eye' icon to hide the resource.

   The 'crossed-out eye' icon now is displayed at the top of the list of resources, indicating that resources are hidden from the list.

4. To unhide a resource, click the icon with tooltip Show hidden resources.
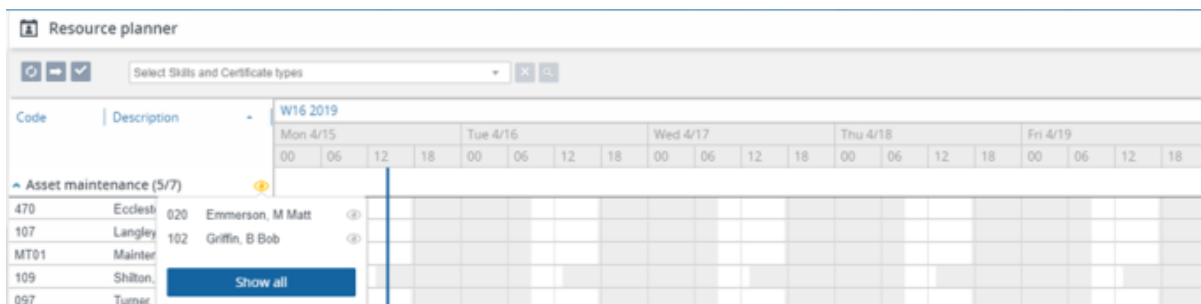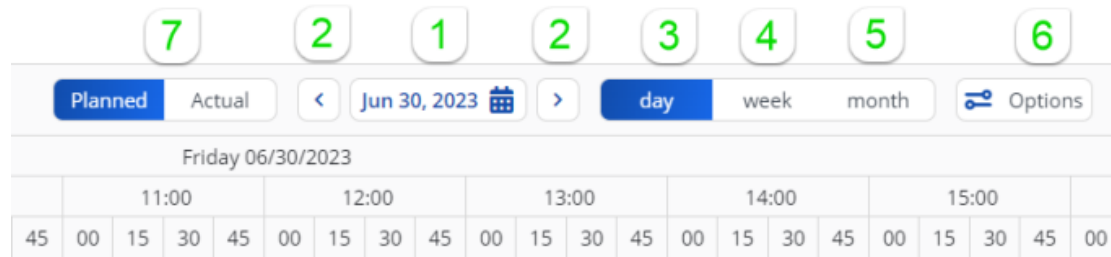

5. Click the individual resources you want to unhide, or click Show all to reveal all resources.

   The resources are displayed again.

Using calendar views in Resource Planner

The top right-hand side of the graphical planner includes several options to change the calendar view:

1. **Selected day** and **Date picker** - use the date picker to change the view to a different day and display the selected day in the current view.

2. **Previous / next** - navigate to the day before or the day after the selected date.

3. **Day** - select this button to show data on the graphical planner for the selected day.

> ℹ️ For your convenience during planning, the **Day** view allows for scrolling to the previous and the next day. This means you can view and 'drag and drop' a work assignment across three days. The **Map** view will only show data of the selected day in the **Day** view.

4. **Week** - select this button to show data on the graphical planner for seven days, starting from the selected day.

5. **Month** - select this button to show data on the graphical planner for a month, starting from the selected week.

   You can select a calendar view by clicking a relevant option. You can also 'drill-down' from one view to another. Use the procedure below to learn how that works. The procedure starts with the biggest time-unit, **Month**, and drills down to **Day** view.

6. Options > Compress non-working hours - Activate this option to free up more graphic space for displaying work assignments, resource activities and resource allocations on the planboard and allow relatively less space for displaying non-working time. Be aware that the non-working time is then no longer shown in a realistic proportion.

> ℹ️ the **Resource allocations** feature is licensed separately. See Resource allocations for more information.

7. **Planned** vs. **Actual** - you can toggle between these two views:

   a. **Planned** displays all planned work assignments based on their **Planned start date-times** and **Planned end date-times**. Their blocks are displayed on the planboard with an accentuating top line.

   b. **Actual** - recalculates the planboard to show which work assignments are actually in progress, based on **Actual start date-times** and **Actual end date-times**. Their blocks are displayed on the planboard without the accentuating top lines.

1. In the calendar bar of the graphical planner, select Month.

   The calendar displays the current month, starting from the current date.

2. Click on a week number in the header.
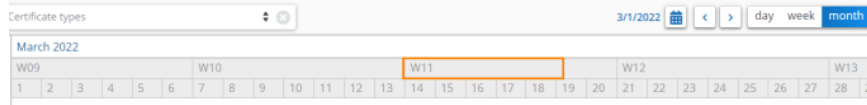
   The calendar view switches from Month to Week and the first day of the selected week is now the selected day.

3. Click on a day in the header.

   The calendar view switches to Day.

Displaying Planned and Actual assignments on the planboard

You can change how work assignments are displayed in **Resource planner** by selecting a toggle button at the top of the planboard. You can select the following views:

- **Planned** - displays all planned work assignments based on their **Planned start date-times** and **Planned end date-times**. Their blocks are displayed on the planboard with an accentuating top line.

- **Actual** - recalculates the planboard to show which work assignments are actually in progress, based on **Actual start date-times** and **Actual end date-times**. Their blocks are displayed on the planboard without the accentuating toplines.

The toggle button works in all calendar views (Day, Week, Month).
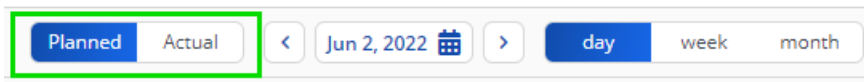
> For more information on the fields **Planned start date-time**, **Planned end date-time**, **Actual start date-time** and **Actual end date-time** of work assignments, see Work assignment fields.

1. In **Resource planner**, open the relevant resource planner configuration.
2. Select the relevant period that you want to view.

By default, the planboard is in Planned view and shows all work assignments based on the dates in the Planned start date-time and Planned end date-time fields. For the work assignments to be displayed, these dates must of course also fall within in the selected period.

3. To display work assignments based on their current status and corresponding date-time information, select the **Actual** button.

The planboard immediately adjusts to the current state of affairs: work assignments that are in progress are rearranged on the planboard, according to their *actual* start date-time and *actual / calculated** end date-time. Note that the accentuating toplines are removed from the corresponding blocks. It is no longer possible to adjust their start date-time. If their end is not based on an Actual end date-time, the end date-time can still be adjusted on the planboard. Work assignments that only have *planned* start and end date-times remain unchanged, but you can still move them on the planboard.

> **Calculated end date-time*:
> • If no actual end date-time is set yet, and a **Planned end date-time** is filled in, the displayed end date-time is calculated as follows by the system: the duration between the work assignment's **Planned start date-time** and **Planned end date-time** is added to the **Actual start date-time** to obtain an expected end date-time.
> • If the **Assigned hours** field contains a value (> 0), while no **Planned start-** or **end date-time** has been filled in, and no **Actual end date-time** has been set either, the displayed end date-time is calculated by adding the **Assigned hours** to the **Actual start date-time**.
> • If the work assignment only has an **Actual start date-time**, the expected end date-time is set to 1 hour later.
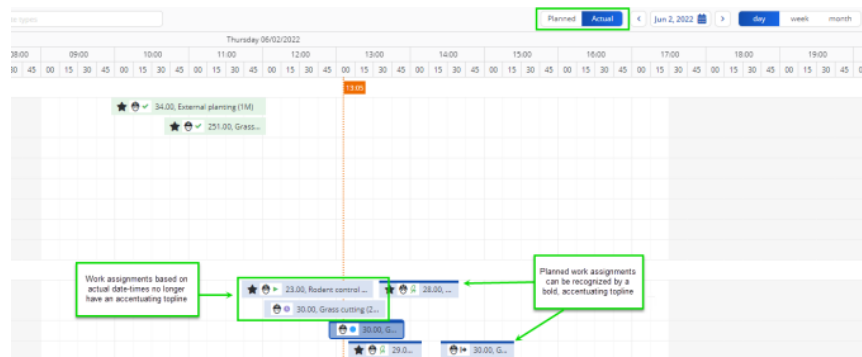
Displaying a map view on the planboard

You can activate a map view on the Resource planner. The map functionality will support you to make an efficient and realistic planning per resource (i.e. tradespeople, engineers), by showing the geographical locations of their last known, current and / or future work assignments.

If you need to plan unexpected or high priority jobs, there is a crucial time element. Knowing where each resource is, will improve the accuracy of your planning and will help engineers to complete work assignments within the contractually agreed times. The map view is a visual aid for making a more feasible and efficient planning per resource. Depending on the selections you make on the planboard you will be able to find the most suitable person for a work assignment by checking:

• where resources are *currently* located, or their *last known location*

- where resources are *located in relation to a job*

> ℹ️ • The toggle button for activating the map view on the planboard, must be made available on the Resource Planner TSI. See **Resource Planner Configurations** > Configuring a map view. This toggle button will only work on the planboard's **Day view**.
> • A resource's / work assignment's location on the map is derived from the GPS coordinates of the property that is filled in on the related order. If no GPS coordinates are known for a location, that part of the planning is shown as a dashed line on the map.

Procedure

1. Go to Resource Planner and open a relevant configuration in Day view.

2. Assuming there is no work planned yet, select a work assignment on the Unplanned panel.

3. On the planboard toolbar, click the Activate map view button.

   A red pin indicates the location of the unplanned work assignment on the map.
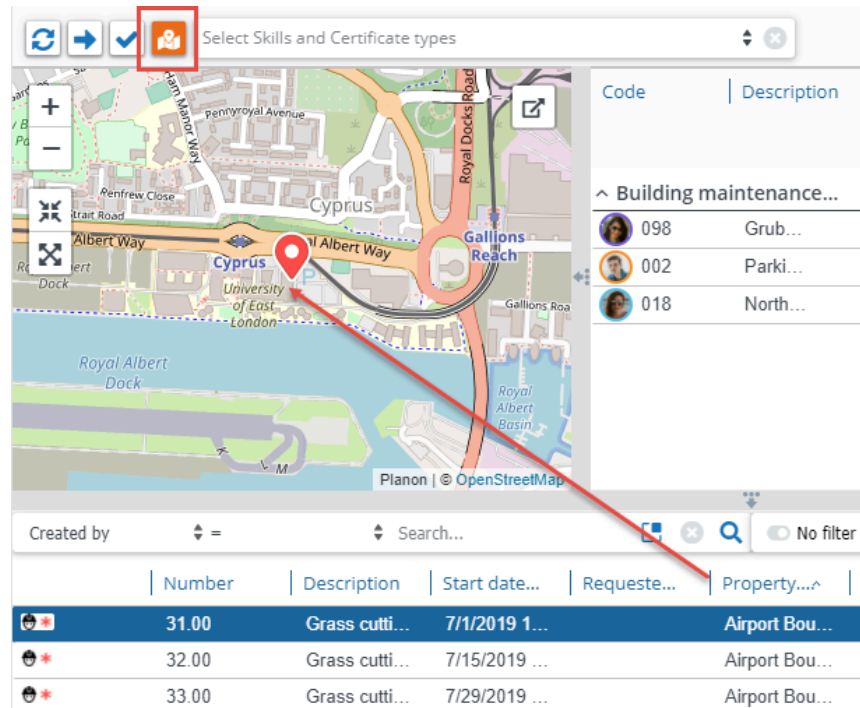
4. With the map view still activated, start planning by moving unplanned work to the planboard.

   If work assignments / resources are linked to the same location, they are now grouped under a cluster marker indicating the total number of work assignments at this location. For a cluster, a total number is shown on the marker, specifying the current number of work assignments in that location/ area. The style of the cluster marker depends on whether there are resources underneath the cluster: if the cluster marker contains at least one resource, it displays a blue background, when it does not contain a resource, it displays a

white background. Resources that are hidden from the list are also hidden on the map.
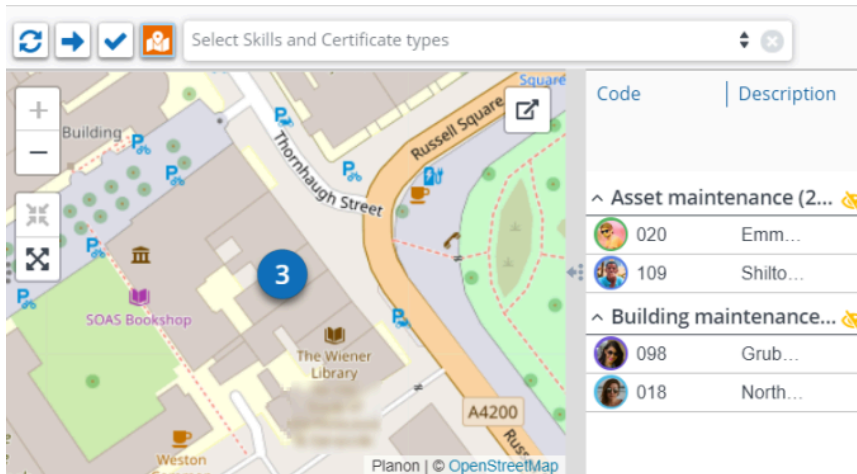
5. Click the cluster marker.

   The cluster marker expands to show the individual resources and their work assignments. For each resource you now see a single pin with either a profile picture, or their initials if there is no profile picture. The pin is either based on their current location, last known location or upcoming/future location.

> ℹ The status of the most recent work assignment determines whether this is a resource's last known, current or expected location. For example: if the most recent status is **Work**, the *current* location is shown. If the most recent status is **Planned**, **Accepted**, **Assigned** or **Travel** the *expected* location is shown. If a person's most recent work assignment status is **Paused**, **Wait**, **Temporary fix**, **Stopped** or **Done**, the *last known* location is shown.
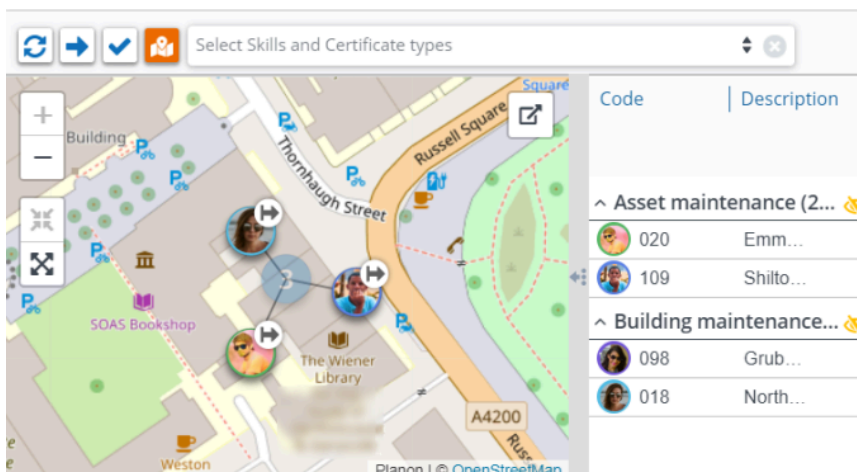
6. Click a pin of an individual resource to show their planned work assignments.

   **A pin with the total number of this resource's work assignments is displayed.**

7. Click this pin again to hide the work.

8. Hover over the pins on the map to view the details of each work assignment.

9. If the locations are too far apart to be shown in the planboard's map view, click the Open in separate window icon to open the map in a separate, bigger window.

The 'undocked' map remains available for the duration of your Planon session, or until you close it manually.
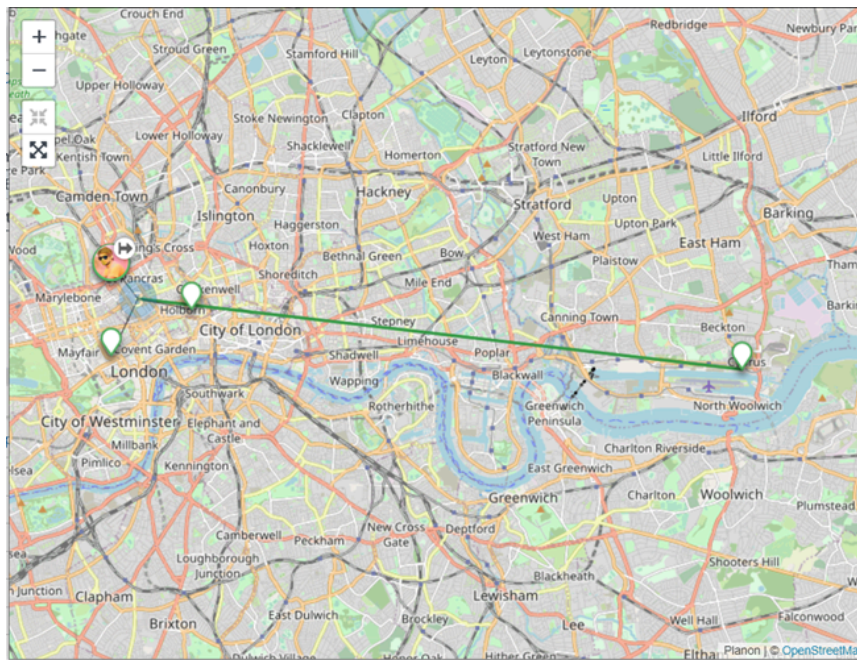
10. To show the full planning of a resource in either map view, select this person in the list and click the Show full planning symbol next to the name:

> ℹ️ A full planning only displays work assignments with the following statuses: Planned, Accepted, Assigned, Travel, Paused and Wait.

11. Use the actions provided on the map views to *zoom in* or *zoom out*, *center* of *fit all*, to get information to adjust your planning.

The map information will support you to make your planning more efficient and feasible for the respective engineers.

Adjusting the Unplanned panel

The view of the **Unplanned** panel is determined by its configuration. However, you can adjust this view further, if you want to apply temporary simplification or filtering. You can, for example, change the sorting order of columns or show / hide columns. You can also apply a (customized) filter to the Unplanned orders panel.

> **i** If planned work is moved from the graphical planner back to the **Unplanned** panel, these records are inserted at the top of the list. Sorting will take place after refreshing the list.

Filtering the Unplanned panel

There are many ways to apply filtering to the **Unplanned** panel in Resource Planner. These are explained below:

Procedure

1. To apply a quick and simple filter to the Unplanned panel, enter a specific search criterion in the Planon *quick filter* on the left, for example Property or Requestor.

This type of filter cannot be stored.

2. Secondly, in the filter section on the right, you can apply *TSI user filters*. These are predefined filters created by your application manager. The behavior of this filter is identical to filtering the elements list.

This type of filter can only be added, edited or removed by application managers.

> **i** See *Resource Planner Configurations* for information on defining a TSI user filter for the **Unplanned** panel.

3. Thirdly, in the same filter section on the right, you can define, edit and store your own *personal filters*. The behavior of this filter is identical to filtering the elements list.

Personal filters are in the same drop-down as TSI user filters. The difference is that you can create, edit and delete personal filters, while TSI user filters are fixed. See the image for the location of the various filter types.

> **i** See *Fundamentals* for information on using and creating filters.

4. Finally, to apply filtering to the content of columns, click the drop-down icon of a relevant column header, for example the Description column.

5. Select Filters.

6. Enter (part of) the search term on which you want to filter the column.

    The column is filtered accordingly.

7. Clear the Filters check box to remove the column filter.

Sorting and grouping columns in the Unplanned panel

P r o c e d u r e

1. To apply sorting to the columns of the Unplanned panel, click the drop-down icon on a relevant column header, for example the Description column.

2. Select one of the following options:

    ◦ Sort ascending

    ◦ Sort descending

    The column is sorted accordingly, either alphabetically, numerically or by date.

ℹ Sorting settings are stored per user and per selected **Resource planner configuration**. They are retained when you log out and log back in again.

3. To group the Unplanned panel by one of the columns, right-click in the relevant column header and select Group ascending or Group descending.

4. You can cancel the grouping by selecting Stop grouping.

Temporarily showing or hiding columns in the Unplanned panel

Which columns are shown by default in the **Unplanned** panel of **Resource Planner**, is determined in **Resource Planner Configurations**. However, it is also possible to *temporarily* show / hide columns that are not relevant to your planning.

Procedure

1. To temporarily show / hide columns from the Unplanned panel, click the drop-down icon on a relevant column header, for example the Description column.

2. Select Columns.

3. Select the check boxes to temporarily show the listed columns.

4. Clear the check boxes to temporarily hide them from the panel.

Moving work to a resource's time line

Prerequisites:

Resources (teams and team members) and a workload (*work assignments*, based on work orders, move orders and planned maintenance orders) have been created in the relevant TSIs.

ℹ️ For more information on creating work assignments and their functionality, see the *Work Assignments* documentation.

1. In Resource Planner, select the required Resource Planner configuration.
2. If required, adjust the calendar view of the planboard and / or apply filtering to the list of resources.

> ℹ️ Activate the map view if you want geographical information to support your planning. See Displaying a map view on the planboard.

3. On the Unplanned panel below the planboard, select the work you want to move to the time line of a resource.
4. Drag and drop the selected work assignment on the grid, onto the time line of the resource (team member) who must pick up this task.

The time line shows the working hours outside the company calendar in light gray. Any individual, incidental unavailability of a resource is indicated with a dark gray bar.

While dragging the work assignment, a tool tip dynamically displays start date-time information and whether it is valid to move it to that particular place on the time line of the resource. An 'inhibit' icon indicates that the allocation of the work is invalid (for example outside working hours), a 'check mark' icon indicates that it is valid:
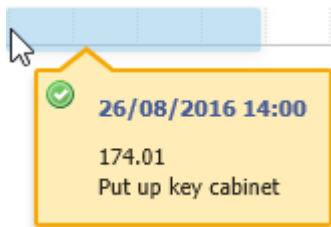
The work is now moved to the resource's time line. If required, you can:

- view / edit the related order details by double clicking an order and changing data.
- mark the work assignment as an **Appointment booking** via the context menu.
- adjust the work assignment's duration by resizing it on the planboard.

See Editing order data and Adjusting the start / end date time of the work on the planboard for the procedures.

5. Once you are satisfied with the data, you can *plan* and *assign* work assignments by changing their statuses to Planned or Assigned.

See Planning multiple work assignments on the planboard and Assigning multiple work assignments on the planboard for the procedures.

Searching for Planned or Assigned work on the planboard

In Resource Planner, changes to the planning may be required on a regular basis. If you need to quickly find a work assignment that already has the **Planned** or **Assigned** status, you can use the **Search bar** to quickly find the relevant work assignment. The search is based on either **Order number** or **Order description**. All planned or assigned work assignments related to the searched orders will be detected.

Procedure

1. In **Resource planner**, open the relevant resource planner configuration.
2. In the **Search bar**, start typing search criteria that refer to the work assignment that you are looking for.
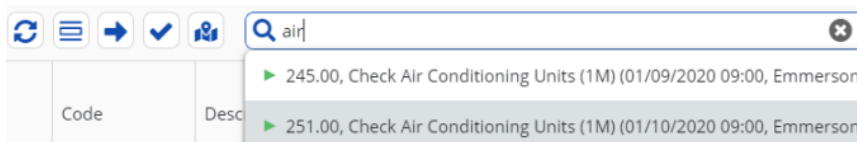
The entered search terms should include (part of) the related **Order number** or the **Order description**. After 3 or more matching characters, search results will be displayed, with a maximum of 20 displayed results. If the actual number of results is more than 20, this is indicated by the option **Show more results** at the bottom of the list. Clicking this option will open a **Work assignments** pop-up with all search results. For each work assignment you can view any relevant order information and, if applicable, references to resource allocations. You can use the search and filter options to quickly find the right work assignment.

3. Select the relevant work assignment from the search results.

   The planboard will now navigate to the selected work assignment and focus on it. All other work assignments on the planboard will be blurred, and will remain so as long as the search filter is active.

> ℹ️ Good to know: If you have previously hidden any resources (tradespeople) with the **Hide resource** button, this will not affect your search. Work assignments planned for / assigned to hidden resources *are* found and displayed, as long as the search filter is active. The same principle applies to completed work assignments (status **Done**). These are also found and displayed as long as the search filter is active.

4. Remove the work assignment from the planboard.
5. Move it from the **Unplanned** panel to a new slot on the time line of the relevant resource.

> ℹ️ In case of a *replanning scenario*, the search bar can also be used to navigate to the relevant work assignment on the planboard. See Replanning work on the graphical planner for more information.

Adjusting the start / end date time of the work on the planboard

The work assignment whose (date-)time you want to adjust is plotted on the time line of a resource (team member) on the planboard.

1. Go to the time line of the resource for whom you want to adjust a start / end date-time.

2. Hover the cursor over the bar representing the work assignment.

3. Drag the resizing handles on either end of the bar to adjust the duration. Tool tips give additional planning information.
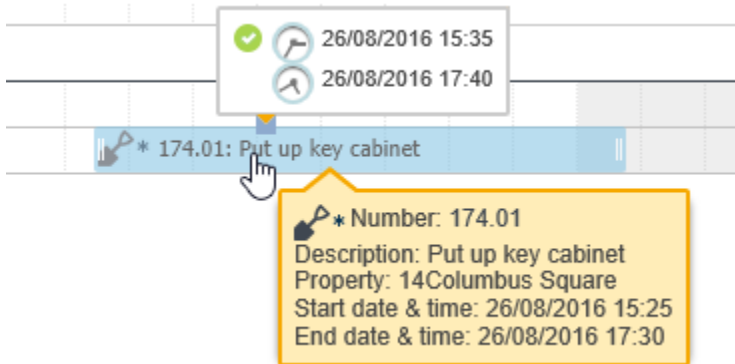
4. Release the mouse button to update the date-time details of the work assignment.

ℹ️ Your settings may allow plotting work outside the company calendar's business hours. A warning message will appear, which you can choose to ignore. The work assignment's borders are colored red if you move it entirely or partially outside working hours.
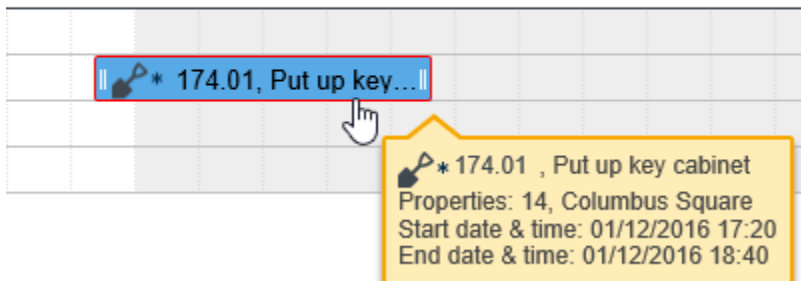
Replanning work on the graphical planner

It is possible to replan work on the graphical planner *after* it has been assigned to and accepted by the internal tradesperson / field engineer.

Prerequisites: if you use a Planon ProCenter version prior release L97, the feature switch for **Work assignments** must be

enabled. For more information on *improved feature* and *feature switches, see* *System settings* documentation.

> ⚠️ If the feature switch for Work assignments is disabled, moving a work assignment to a different time slot (with the same resource) in the Resource Planner does not count as a 'replanning' scenario.

Procedure

1. Select the work assignment you want to replan.

> ℹ️ Use the **Search bar** to find the relevant planned or assigned order. See Searching for Planned or Assigned work on the planboard for more information.

2. Drag it to the correct time slot and resource.

   the work assignment is 'cloned'. The status of the original work assignment changes to Stopped. If the original work assignment was an appointment booking, make sure that the customer is consulted about the replanning.

3. Edit any other data of the new work assignment, as required.

4. Change the status to Assigned.

> ℹ️ If you <u>do not</u> work with multiple work assignments (the corresponding **Orders** BO setting in Field Definer is disabled), and you replan a work assignment that is 'on hold' (status **Stopped**), only the newly created work assignment is displayed. The one that was stopped will be hidden, to avoid confusion.

Performing actions on orders via the context menu

Precondition: Relevant status transitions are configured for the order types you are working with on the planboard.

You can perform several actions on a work assignment on the planboard, via a context menu.
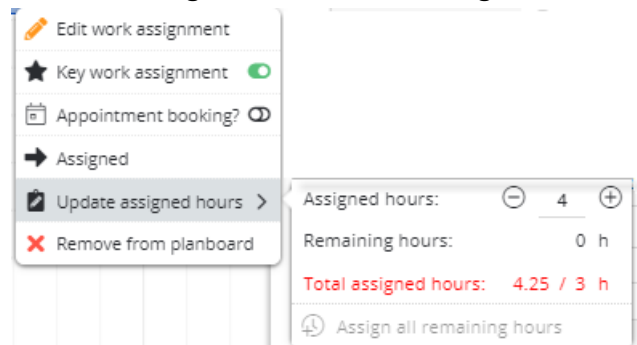
Procedure

1. On the planboard, right-click the work assignment for which you want to perform the action.

2. From the context menu, select a relevant action:

   ◦ **Edit work assignment** - select this option to edit one or more work assignment details in a dialog.

   ◦ **Key work assignment** - use the switch to mark a work assignment as 'key', or to undo this.

   ◦ **Appointment booking?** - use the switch to mark a work assignment as appointment booking, or to undo this.

   ◦ **Assigned** - select this option to move the status of a **Planned** work assignment to **Assigned**.

- ◦ **Update assigned hours** - this option allows you to quickly edit the number of assigned hours using the plus or minus buttons. Each click updates the hours by **+** or **-** 0.5 hours. Note: the option is only available if the setting **Activate 'Multiple work assignments'?** on the **Orders** business object is set to **Yes** in Field definer .

    If the value is not a whole or half number, using the **-** or **+** button will first round to the next whole or half number. The next reduction or increase will take place in steps of 0.5 hours. *Example*: the **Assigned hours** is initially 6.2. Selecting **-** will first result in 6. Clicking **-** again will result in 5.5. Similarly, selecting **+** will first result in 6.5. Clicking **+** again will result in 7.
    Select the **Assign all remaining hours** option to assign all budgeted hours to this work assignment in one go. Both update options will immediately update the **Remaining hours** and **Total assigned hours**.

- ◦ **Remove from planboard** - select this option to move the work assignment back to the **Unplanned** panel.

Editing order data

You can edit order data that is related to a work assignment, both on the planboard and on the **Unplanned** panel.

Procedure

1. On the planboard or on the Unplanned panel, double-click the order whose data you want to edit.

   The Order window is displayed, where you can edit order data and perform various actions, such as status transitions or reporting.

> ℹ See the *Work Orders* part of the user documentation for more details on working with orders.

> ℹ If you select an order status that is defined as **On hold** or **Temporary fix** in Field Definer > Business object settings, the order will be marked yellow on the planboard. These orders are also shown on the **Unplanned** panel, since they require rescheduling.

2. Make the required changes and click Save, followed by Close.

   The order data is now edited.

Viewing order details on slide-out panel

With the correct license and configuration it is possible to view order details on a separate slide-out panel within Resource Planner. This saves you the trouble of going to the **Work Orders** TSI to view this data.

You can view the details about the planned or unplanned work in Resource Planner, for example order lines and communication logs. You bring out this data by clicking an item on the **planboard** or the **Unplanned panel**.

Precondition: your Planon administrator must first add the relevant **Resource planner details** steps to the **Resource Planner** layout in **ProCenter modules** > **TSIs** . These steps will be shown as 'tabs' on the slide-out panel.

Procedure

1. In Resource planner, select an item on the planboard or the Unplanned panel.

   The Details slide-out panel is displayed.

2. Depending on whether you selected an *unplanned order* or a *planned work assignment* (on the planboard), the vertical bar on the left of the slide-out panel includes different 'tabs' for different categories of order details:

   ◦ **Work assignment details**: if you select a planned work assignment on the planboard, this 'tab' shows the work assignment's details.

   ◦ **Order details**: general info on the order, distributed over several horizontal tabs, similar to the **Orders** TSI.

   ◦ **Work assignment context**: clicking this tab displays information about any other work assignments related to the order. You can also add new work assignments here.

   ◦ **Order lines**

   ◦ **Labor hours**

   ◦ **Communication logs**

   ◦ **Maintenance activities**

   ◦ *For Service Providers solution mode*:

      ▪ **Subcontractor lines**

48.00, Boiler check (M)

General   Duration / Costs   Internal notes

Communication logs   Audit info

General

* Number	48.00		
Standard order	PM003, Standard PPM order rep		
Description	Boiler check (M)		
* Order group	01.01, Mechanical		
Asset ID	000250, Storage boiler electrical		
Priority	FM-W1, Within 1 week		
Requested com...	4/8/2020 09:00		
* Sign-off required	Yes	No	
* Sign-off by engi...	Yes	No	
* EHS required	Yes	No	
* Appointment bo...	Yes	No	
* High priority?	Yes	No	
Impact			

Location

* Property	14, Columbus Square
Space	0.46, Technical room

3. Click the relevant controls, records and tabs to view the order details you are interested in.

4. If you want to add order details, work assignments, labor hours or communication logs, use the Add button that is available on the various layouts.

5. To hide the details panel, click the '>' control at the panel's top left. The panel will remain hidden until you manually unhide it. To unhide the details panel, click the '<' at the top right of the planboard (beside the period view options).

For more information on the period view, see Resource Planner - overview.

Viewing a resource's details on slide-out panel

With an appropriate license and configuration it is possible to view a resource's details on a separate slide-out panel within Resource Planner.

You can view the details of a *resource* (tradesperson / engineer / team member) in the list of resources, by clicking on the name.

Precondition: the personnel fields that may be of interest, such as **Skill details**, **Certificate details** and so on, must be configured on the relevant **Personnel** layout.

Procedure

1. In Resource planner, select a resource from the Resources panel.

   The Details slide-out panel is displayed, showing information on the selected resource that is available in the Personnel TSI.

2. Click the relevant tabs to view the relevant details, for example the person's availability, skills or certificates.

Planning multiple work assignments on the planboard

Prerequisites: The **Planned** status is available and used in your configuration. You have finished allocating (moving) work to resources on the planboard. Now, you want to finalize your planning for a specific period and a specific group of team members, by changing the work assignments' statuses to **Planned**.

A status transition to **Planned** signifies that the work assignment's planning is finalized.

P r o c e d u r e

1. To set the status to Planned for multiple work assignments, go the planboard toolbar and click the Plan work assignments within a period action button.

2. In the From date-time field, select the start date of the period.

3. In the Until date-time field, select the end date of the period.

   The work in the selected period is now in the Planned status. You will be notified about any work assignments whose status could not be updated.

4. Click OK.

   The next step will be Assigning work to the resources, in a similar way. See Assigning multiple work assignments on the planboard for more information.

Assigning multiple work assignments on the planboard

Prerequisite: The **Assigned** status is available and used in your configuration. You have allocated or planned work on the planboard and want to assign multiple work assignments within a specific period to a specific group of team members.

A transition to the **Assigned** status sends the work to the team member who will carry out the work. If this person works with Planon AppSuite > My jobs or with Planon Mobile Field Services, the assigned work is sent to the mobile device.

Procedure

1. To set the status to Assigned for multiple work assignments, go the planboard toolbar and click Assign work assignments within a period.
2. In the From date-time field, select the start date of the period.
3. In the Until date-time field, select the end date of the period.
4. Click OK.

   The selected work is sent to the mobile devices of the respective field engineers.

Working with Resource allocations

Basically, there are two approaches when working with **Resource allocations** in Resource Planner:

- plan *all work at once*, by creating resource allocations, scheduling allocation periods for the relevant resources and by 'dragging & dropping' the work onto the resource allocations;

- plan work *in stages*, by initially creating resource allocations and scheduling resource allocation periods, but only 'drag & drop' the work whenever it is needed per specific period.

The process of preparing, planning and assigning is as follows:
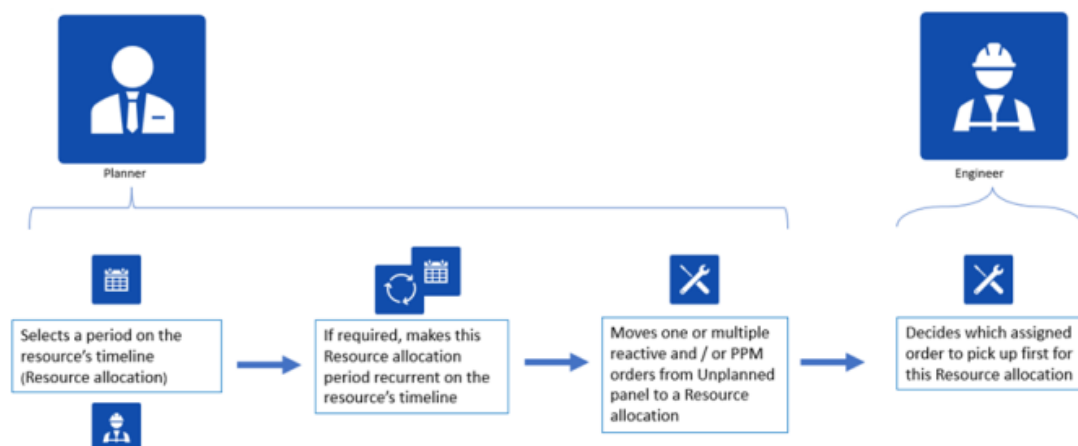
The following topics will explain the various planboard features available for **Resource allocations**.

Adding resource allocations and resource allocation periods

Resource allocations can be created directly for a resource via the planboard. They can also be added in the **Resource allocations** TSI.

Procedure

1. On the planboard, click on the time line of the resource for whom you want to add a resource allocation and resource allocation period(s).

2. Drag a bar on the time line representing the resource.

> If you intend to plan a resource allocation for a team, drag a bar on the team's time line. See Creating teams and roles for information on how to configure 'team orders' for

maintenance teams. See Adding Resource allocations to Teams for more information on adding resource allocations for teams.

3. Select Add resource allocation period > Add Resource allocation from the context menu.
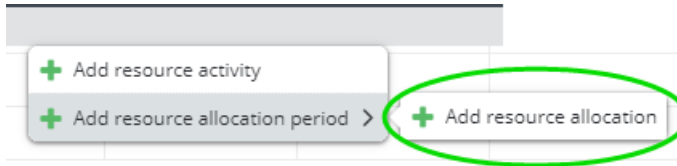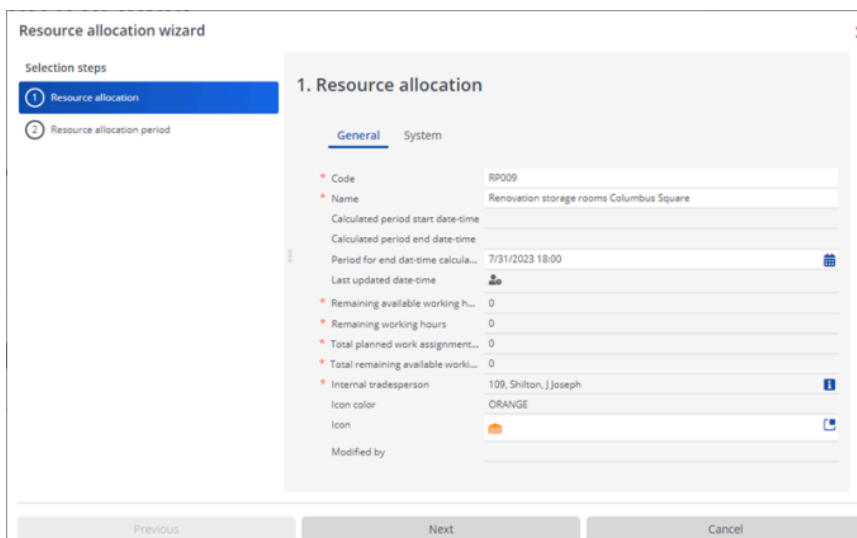

The **Resource allocation wizard opens. For the field descriptions, see Resource allocation wizard - fields**.

4. At step 1, **Resource allocation**, enter the required data, such as a **Code** and **Name** for the resource allocation.

   Notice that the **Internal tradesperson field is filled with the name of the selected tradesperson / team.**

5. Optionally, select an **Icon**.

6. In the **Setting for end date-time calculations** field fill in the date-time that should be used in the (re)calculations of remaining hours for this resource allocation. *This field is not mandatory*.

> ℹ️ If you fill in a value, you can either enter a fixed date-time or a date-time macro in this field. A date-time macro provides more realistic insight over longer planning periods, as it will only calculate the remaining available hours up to a certain point (defined by the macro), as opposed to a fixed end date-time, which calculates the total remaining hours for the entire resource allocation (past, present and future).

7. Click **Next**.

8. At step 2, **Resource allocation period**, you will see that the start and end date-time of the resource allocation period are pre-populated, but these fields can be edited. The maximum duration of a period is 7 days.

9. Click either **Complete** to save this single resource allocation and resource allocation period, or **Complete and make recurrent** to create recurrences of the resource allocation periods within this resource allocation.

10. If you select **Complete**, you can still create additional resource allocation periods for this resource allocation, by dragging a new bar on the same time line and selecting the existing resource allocation.
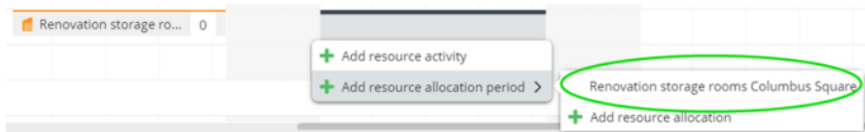
Use this option if you do not want to apply recurring patterns for the resource allocation periods, but periods with individual schedules.

11. If you select **Complete and make recurrent**, create a relevant schedule for the recurrence in the **Schedule** dialog.

This scheduling action makes repetitive copies of the initial resource allocation period on a daily, weekly or monthly basis.

12. Click **OK**.

The (recurring) resource allocation periods have been added to the planboard according to the selected schedule. You can now start dragging and dropping unplanned orders onto the resource allocations. When moved to the resource allocation, work assignments are created for this order. You can edit a resource allocation period by right-clicking and selecting Edit resource allocation period from the menu.

> ℹ️ To obtain clearer overview of working hours on the planboard, navigate to the top of the screen and select **Options**. Enable the **Compress non-working hours** function to display non-working hours in a more concise format.

Resource allocation wizard - fields

The following table includes the fields from the **Resource allocation wizard**. These fields are also displayed on the layouts of **Resource allocations** and **Resource allocation periods** in the **Resource allocations** TSI.

Field	Description

Resource allocation

Field	Description
Code	Enter a code for the resource allocation.
Name	Enter a name for the resource allocation.
Calculated period start date-time	This read-only field shows the start date-time for the resource allocation period for which the calculations are displayed. This start date-time can be one of two values; if the calculation is triggered *before* the start of the first **Resource allocation period**, then the first resource allocation period's start date-time is shown. If the calculation is triggered *after* the start, then that current date-time is used.
Calculated period end date-time	This read-only field shows the end date-time of the period for which the calculated field values are displayed. This date-time is updated every time the calculation is triggered, either manually or automatically. The calculation method depends on the value in the **Setting for end date-time calculations** field.
Icon	Select an icon to mark the resource allocation on the planboard.
Icon color	Select an icon color to mark the resource allocation on the planboard.
Internal tradesperson	Reference to the resource (internal tradesperson) on whose time line the resource allocation was created.
Setting for end date-time calculations	In this field, you can define the period of time *until which* you want end time calculations to be triggered. There are 3 options: • Leave the field empty. In that case the end date-time used for the calculations is the end date-time of the last resource allocation period on the time line. • Enter a fixed end date-time for the calculations, using the date picker. • Enter a macro to create *dynamic* end date-times for the calculations. Example: *&Endofday &FirstOfMonth &M1 &D-1* to display calculations until the end of the current month. see also: Adding resource allocations and resource allocation periods.

Field	Description
Last updated date-time	This field shows the last date-time the calculations were updated (either manually or automatically).
Remaining working hours	This field shows the sum of all remaining working hours from the resource allocation period(s) that fall within the calculated period (between **Start date-time** and **End date-time**).
Remaining available working hours	This field shows the sum of all working hours still *available* in the resource allocation periods that fall within the calculated period.
Total planned work assignment hours	This field shows the total number of working hours from the work assignments that have been planned within the resource allocation period(s). If you use 1:1 work assignment planning, the **Effort** field on the work assignment is used for the calculation. If you have the **Activate 'Multiple-work assignments'?** setting activated (1:n planning), the **Assigned hours** field on the work assignment is used for the calculation. See **Work assignments**>1:n planning, for more information on planning work assignments.
Total remaining available working hours	This field shows the number of hours that remain after the planned hours have been subtracted from the available working hours. This can also be a negative number, indicating that the resource is 'overbooked'. The number of total remaining available working hours is also shown on the resource allocation on the planboard. Negative hours are marked red.

Resource allocation periods

Start date-time	Shows the start date-time of the resource allocation period, as drawn on the planboard. If you change this date-time the period calculations are updated accordingly.
End date-time	Shows the end date-time of the resource allocation period, as drawn on the planboard. If you change this date-time the period calculations are updated accordingly.
Period for working hours	Shows the difference between start- and end date-time, based on the resource's *calendar*.

> ℹ It is possible to 'plan' hours in the non-working hour periods, but those hours are excluded from the (re)calculations.

Field	Description
Period for available hours	Shows the number of hours that are still available in this resource allocation period. This means: the working hours minus coinciding items on the resources time line, such as additional **work assignments** and **resource activities** (leave / vacations).
Recalculation required?	This field is populated by the system. The field is set to **Yes** if personal work assignments / resource allocations are planned or updated for individual team members in the same period. As a result, the available hours must be recalculated. On the planboard, a team's resource allocation periods that require a manual recalculation action are marked by a '?'.
Calculation method	This field is populated by the system. The value in the **Calculation method** field always matches the selected resource: if the resource is an individual team member, the **Person-based calculation method** is filled in. If the resource is a team, the **Team-based calculation method** is filled in.
Resource allocation	This field shows the linked resource allocation.
Recurring group	If you create **Resource allocation periods** via the **Make recurrent** action, these periods will all be linked together via the **Recurring group** field. All recurrences in the group have the same group number. A **Resource allocation period** can only be linked to one recurring group.

Adding work to resource allocations

Once you have created resource allocations for a resource, you can start adding actual work to these allocations.

Procedure

1. On the planboard - on the time line of the relevant resource - select the **resource allocation** to which you want to add work (reactive orders or PPM orders).

When there is no work added yet, the Unplanned panel is selected at the bottom half of your screen.

2. On the **Unplanned** panel, select the orders you want to add to the resource allocation. Use multi-select to add multiple orders.

3. Drag and drop the relevant order(s) onto the resource allocation.

One or more work assignments are created and planned. A tooltip provides planning information about the resource allocation. This example shows that the number of available hours (derived from the Effort field of the order's the associated work assignments) is exceeded by half an hour:
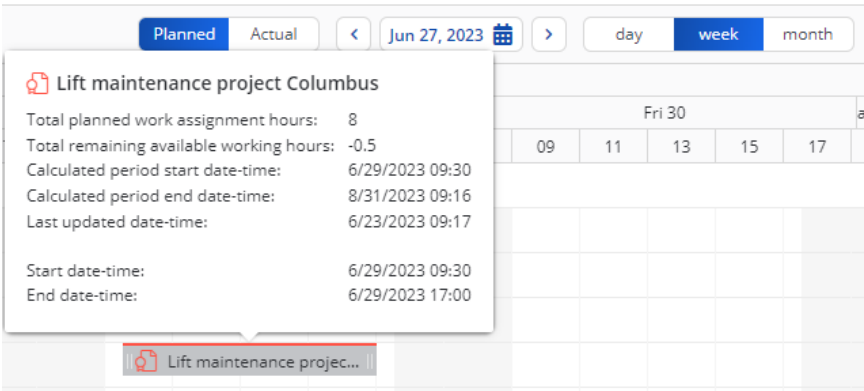
4. Make the necessary adjustments to the resource allocation, to match the working hours.

> ℹ️ If absence from work / an additional order is added to the resource's time line which is unrelated to the resource allocation, but which coincides with it, these hours are automatically subtracted from the remaining available hours of the resource allocation.
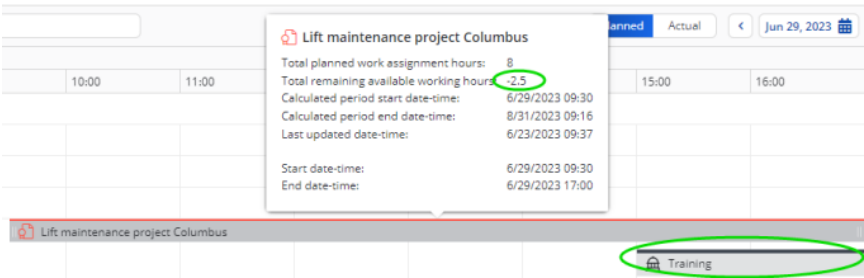
5. Click the resource allocation on the time line.

   The Allocated panel is now selected, displaying the work assignments that were created and planned for this resource allocation.

> ℹ️ • Starting from the **Unplanned** panel, if there is no relevant resource allocation on the planboard yet, you can nonetheless drag multiple orders to an empty space on a relevant time line. At that point, you are offered the option to add a new resource allocation (via the wizard). When this new resource allocation is created, it automatically includes the newly planned work assignments.
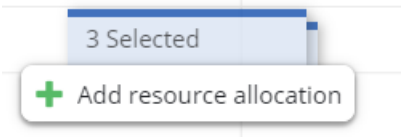
- Starting from the **Allocated** panel, you can also drag work assignments to an empty space on the planboard. It is also possible to drag one or more planned work assignments from one resource allocation to another, even to a different time line.

6. To assign the work to the selected resource (tradesperson / field engineer), right-click on a relevant work assignment in the list and select **Assign**. See also: Assigning / removing multiple planned work assignments.

   The work is now assigned and, if applicable, becomes available on the field engineer's mobile device. For each assigned work assignment within the resource allocation, the engineer can decide what the convenient time is to start the work.

Assigning / removing multiple planned work assignments

On the **Allocated** panel, you can perform several operations for single or multiple selected items, such as assigning or removing planned work assignments from a resource allocation.

Procedure

1. On the planboard, select the resource allocation from which you want to remove or for which you want to assign one or more planned work assignments.

   The Allocated panel is now active at the bottom of your screen.

2. On the **Allocated** panel, (multi-)select the work assignment(s) you want to remove / assign.

You can use SHIFT + left click or CTRL + left click to multi-select.

3. Now, if you want to *remove* one or more planned work assignments: right-click to open the context menu and select **Remove from allocation**.

   The selected planned work assignments are removed from the planboard and deleted.

4. Or, if you want to *assign* one or more planned work assignments: right-click to open the context menu and select **Assigned**.

   The selected planned work assignments are assigned to the internal tradesperson filled in on the work assignment.

Adding Resource allocations to Teams

In Resource Planner it is possible to assign work to teams. This is also true for work that is planned via **Resource allocations**.

In **Resource Planner**, you can add resource allocations to a team's time line.

A big difference with a resource allocation for an individual team member is the way the team's capacity is calculated. When a resource allocation is added to a team's time line, the related period calculations will take the availability of all individual team members into account. The procedure for adding a resource allocation to a team's time line is the same as for an individual resource. See Adding resource allocations and resource allocation periods.

Another difference with personal resource allocations is the reference to the **Internal tradesperson**; if a resource allocation is planned on a team's time line, this field refers to the 'person' representing the team (a record in the **Personnel** TSI), for example a person called *Maintenance team A*. See Creating teams and roles for more information about maintenance team configuration.

Calculations for 'Team' Resource allocation periods:

If changes are made to any of the resource allocations / work assignments / resource activities on the ***team's*** time line, the team's capacity (available hours) is automatically recalculated. The remaining available hours are also displayed on the planboard.
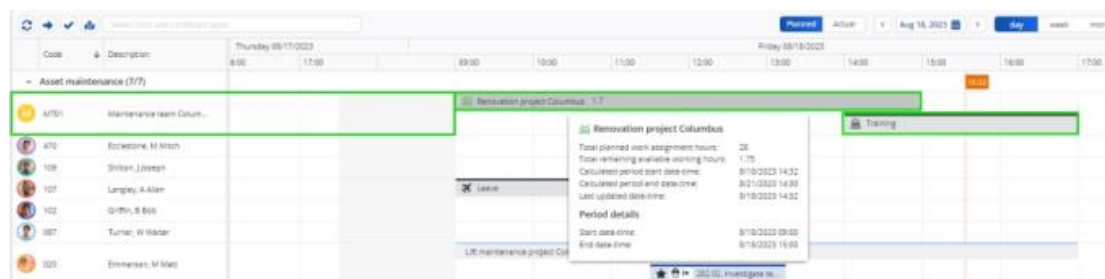
However, if changes are made to any coinciding ***personal*** resource allocations / work assignments / resource activities of individual team members, these changes will automatically update someone's personal available hours, *but not those of the team's coinciding resource allocation*, because it is not always clear how and when these changes will affect the team's capacity. In that case, you must trigger the recalculation yourself. On the planboard, a question mark on the bar of the team's resource allocation indicates that recalculation is required.
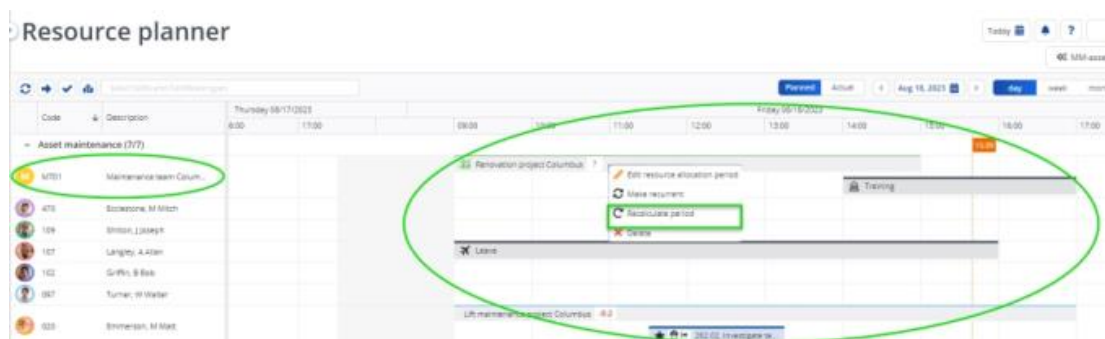
To recalculate, select the corresponding **Recalculate period** action from the context menu on the planboard. After the recalculation, the planboard and pop-ups will reflect the

updated available hours. All linked future periods (after the selected period) are updated accordingly.

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