



Supporting Data

Planon Software Suite
Version: L105

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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 Supporting data

The main purpose of the Supporting data navigation group in Planon ProCenter is the registration and maintenance of various types of basic data that can be made available *to support other features* in the application. Examples of this type of data include:

- Financial years
- Priorities
- Trades
- Item groups
- Tariff groups for reservation units
- Standard orders
- Desk configurations for reservation units
- Facilities for reservation units
- Arrangements for reservation units
- VAT tariffs / Tax rates

Authorized users can register and maintain these sets of supporting data by selecting the relevant launch item and subsequently adding, copying, modifying or deleting elements, such as reservation tariff groups, standard orders, desk configurations, item groups, cost centers, and so on.



For the basic principles of working with Planon ProCenter , see [Fundamentals](#). For information on adding Services and SLAs, see [Service level agreements](#).

Action and reason configuration (MM and PMFS)

MM & PMFS configuration (in Accelerator: Business processes > PMFS action configuration) is a TSI that is used to configure *actions* and *reasons* that can be displayed on the layout of any relevant communication log. In addition, you can link specific *PMFS actions* to reasons which can subsequently be displayed in the communication logs of work orders and PPM orders and displayed on the PMFS app. Finally, your action and reason configuration can support the SLAs used by the back-office and enforce feedback from engineers on maintenance checklist items. The following selection steps are available for this purpose on the **Actions** selection level:

- **Actions:** enables the creation of configurable actions. These actions can be displayed in any type of communication log in Planon.
- **PMFS actions:** displays pre-configured, read-only actions, only to be used in *Planon Mobile Field Services* (AppSuite and Planon Live app). Some pre-configured PMFS actions can be linked to reasons, which are also configurable. The following table includes the available PMFS actions:

Code	Description	Additional info
1	EHS accepted	
2	EHS declined	
3	Start work	
4	End work	
5	Start travel	
6	End travel	
7	Wait	
8	Discontinue	
9	Pause	
10	Resume work	
11	Bar code scan	
12	Temporary fix	

Code	Description	Additional info
13	Team order decline	
14	Asset updated	
15	Refuse	
16	Reassign	
17	Unknown asset	
18	Debug snapshot	Planon AppSuite only
19	Time registration	Planon AppSuite only
20	Accept	PMFS Live app only
21	Apply temporary fix and continue	PMFS Live app only
22	Sign off	PMFS Live app only
23	Engineer's sign -off	PMFS Live app only
24	Tradesperson's comment	PMFS Live app only
25	Confirm asset	PMFS Live app only

PMFS actions and any linked reasons are displayed on PMFS mobile devices, where they can be selected by engineers. Back-office personnel will see the PMFS actions and reasons reflected in the *communication logs* ensuing from PMFS orders.



For information on PMFS system settings, see *AppSuite - Configuration Guide > Non-property set dependent PMFS order settings*.

See the following examples, to get an idea of the type of information that is conveyed to the back-office:

The following communication logs are created on the order for the PMFS actions:

- **EHS declined** - created if the field engineer declines the EHS check. The communication log includes: the name of the PMFS action, the engineer's name, the start date-time entered by the engineer, the reason for declining the EHS check, the engineer's comment.
- **Start travel** - created if the field engineer selects the **Start travel** screen. The communication log includes: the name and code of the PMFS action, the engineer's name, the start date-time entered by the engineer.
- **Bar code scan** - created when the field engineer scans an asset bar code. This communication log includes: the date-time the

engineer scanned the bar code, the name of the PMFS action and the engineer's name. The **Comment** field includes the scanned asset code.

- **Refuse** - create if the **Refuse** button is tapped by a signatory on the app. In order to meet any SLAs, the order is still moved to **Technically completed**, even though the customer is not (entirely) satisfied.

Optional: if your back-office requires a status transition to reflect this **Refuse** action, you must first create and configure a corresponding 'Refuse' status in Field definer. The status transition must first go from **Technically completed** to [Refused]. Next, you can also link a **Refuse** 'action-reason' pair to this status transition.

Adding actions

The **Action - reason configuration** TSI is the place to define and maintain actions that can be displayed on the layouts of communication logs.

Procedure

1. Go to the Action - reason configuration TSI.
2. Select Actions > Actions.
3. On the action panel, click Add.
4. Enter a code, name and label for the action in the data section.
5. Click Save.

The action is added and can be displayed on the layout of a communication log.

Adding reasons

The **Action - reason configuration** TSI is the place to add and maintain reasons that can be displayed in communication logs and on a PMFS mobile device.

Procedure

1. Go to the Action - reason configuration TSI.
2. Go to Actions > Reasons selection step.
3. Click Add on the action panel.
4. Enter a code and name for the reason in the data section.
5. Click Save.


A reason is added. The reason can be linked to one or more PMFS actions and displayed on the *Work orders communication logs* layout and on the PMFS mobile device. For more information, see [Linking PMFS actions to reasons](#).

Linking PMFS actions to reasons


The **Action-reason configuration** TSI is the place to link PMFS actions to reasons in order to display them on communication logs and on the PMFS mobile device.

Procedure

1. Go to Action-reason configuration > Reasons > Action configuration.
2. Click Add on the action panel.
3. Select an action in the Action field.

 Only the PMFS actions **EHS declined**, **Discontinue**, **Pause**, **Reassign**, **Temporary fix**, **Sign-off refused** and **Wait** can be selected.

4. Select a reason in the Reason field.

 If you are configuring an action-reason pair for the **Pause** action, you can select a value in the **Finalize time registration** field. This field is read-only on all the other actions. See [Configuring labor hour registration](#) for more information.

5. Click Save.

The PMFS action is now linked to a reason.

Linking PMFS actions and reasons to statuses

The action-reason configuration plays a major role in supporting order flows between the back-office and PMFS app users and / or in facilitating SLA management work flows.

In the **Action-reason configuration** TSI you can link combinations between PMFS actions (on the app) and reasons to relevant **Work order** or **PPM order** statuses. Refer to the procedure below for the actual configuration.

General use cases

- For *work orders* and *PPM orders*, an action-reason combination can move an order to a specific status, for example if the reason relates to an engineer requesting materials or assistance on the app. The status change enables the back-office to act on this request.
- In SLA management, a configured action-reason can move a *work order* to the **On hold** status to 'stop the clock' (labor-hour registration). For more specific SLA-related examples see the examples below.

 Precondition: bidirectional status transitions must be configured for the relevant user-defined order types in **Business object settings** in **Field definer**. Also, PMFS actions must be enabled for these statuses through the **PMFS settings**.

SLA examples

1. An engineer working on an order via the app selects one of these actions **Wait**, **Pause**, **Discontinue** or **Decline the EHS check** and specifies a preconfigured reason for this action. This triggers an automatic status transition in the back-office that will 'stop the clock'. This means that the wait time is not included in the job completion time, to remain compliant with the SLA.
2. An engineer working on an order via the app selects the **Temporary fix** action. This temporary fix could be 'boarding up a broken window' while waiting for a new pane to be ordered and delivered. The engineer selects a configured reason corresponding with this action. This triggers an automatic status transition in the back-office that is configured for temporary fixes.
3. An engineer working on an order via the app selects one of the PMFS actions mentioned above. However, none of the configured reasons apply, except **Other**. The engineer selects **Other** and enters the real reason in the **Comment** field on the app.
4. A customer is not (entirely) satisfied with the work delivered and refuses to sign off. For the sake of continuity in the SLA flow, the order is still moved to the **Technically completed** status after tapping the **Refuse** button. The job information is sent to the back-office as a communication log, after which appropriate action can be taken.



- For more information on SLA Management in Field Services see [SLA Management](#).
- For information on status settings and mobile action settings in Planon AppSuite see [Planon AppSuite Configuration - Field Services](#).
- For more information on the PMFS Live app and actions and reasons, see [Configuring 'Edit forms' for status transitions](#).

Procedure

1. Go to Action-reason configuration.
2. On the Reasons > Action configuration selection step, select the action - reason combination to which you want to link a status.
3. On the action panel, click Link order statuses.
4. Under Available, select the relevant order status(es) and move them to In use.
5. Click OK.

The PMFS action - reason combination is now linked to the selected status(es).

Linking reasons to checklist results

With planned maintenance activities, there might be (mandatory) checklist items. Field engineers must record a result for checklist items on the app, in order to complete their activity. Checklist results can be linked to reasons, as follows:

Procedure

1. Go to Action-reason configuration.
2. Go to Actions > Reasons, selection step and select a reason that must be linked to a result.
3. On the action panel, click Link checklist result.
4. In the Link checklist result dialog box, select the result(s) you want to link to this reason.

The results include:

- **Not assessed** - this is the default value for each checklist result.
 - **Assessed with observation** - if this result is selected for a mandatory checklist item, entering a reason is also mandatory. This implies that at least one reason must be configured and linked to the result.
 - **Unable to assess** - this result (and linked reason) is only supported by the PMFS Live app.
 - **Done** - the checklist result is assessed.
5. Click OK.

The reason is now linked to the selected checklist result(s) and displayed on the app.



For more information on the fields of checklist items, see [Checklist item fields](#).

Additional facility categories

The **Additional facilities categories** TSI allows you to configure categories of asset units that can be displayed on web forms such as the Self-Service **Reservation wizard**. Additional facility categories include bookable assets that you want to offer in addition to the assets that are booked along with the room. If you link asset units to these categories in the **Reservations** TSI, these asset units can be reserved during the time of the (main) reservation.

Adding additional facilities categories

Using this feature, you can create as many additional facilities categories as required for reservations.

Procedure

1. Go to Additional facilities categories TSI.
2. On the action panel, click Add.
3. Enter a Code and Name.
4. Click Save.

An additional facilities category is created.

5. On the action panel, click **Link reservations units** to quickly link this facility category to one or more reservation units.



You can also go to Reservations > Reservation units and link a reservation unit to one or more facility categories.


Approved messages

When performing an action in the application, various warning or confirmation messages might appear.

For example, when the number of persons on a reservation is changed, a confirmation message appears asking if the number should be copied to all the underlying orders.

The **Approved Messages** TSI allows you to control the processing of these messages by configuring default answers such as **Yes** or **No**.

For example, you can provide a fixed answer (default value) as **Yes** to a confirmation message, so that this message will be skipped and the subsequent action will be performed.


-  Approved messages functionality is also available in various [Self-Service modules \(Messages tab\)](#).
- If you are looking for information about changing/customizing a message description, see [Customizing a language \(label\) > Language](#) file.

Configuring approved messages

Procedure

- Go to Approved Messages.
- Click Add on the action panel.
- Fill the data section fields.

See the descriptions of these fields in the following table.

Field	Description
Message code	Enter the message code (PN number) of a confirmation/warning. For example, 'PN_A01496'.
	 To get the message code, on the confirmation/warning message window, click the Copy to Clipboard button. Paste the message code to Notepad. Then copy, paste this code number in the Message code field.
Message type	Select a message type from the list. You can select either Confirmation or Warning , depending on the message type to which you want to assign the default value.
Message option	Select Yes or No . The confirmation message type has only Yes available, whereas the warning has both options.

Field	Description
Message description	If you select Yes , the original/system message is skipped as the default answer will now be set as Yes . When you select No , the relevant workflow for the No action will follow.

4. Click Save.

You have now created a default value for the selected confirmation/warning message.

5. Click In use on the action panel to activate the message.

Area measurement standards

In Planon ProCenter, Area measurement standards such as the Dutch NEN 2580 are used to determine the net or gross area of a space if the enclosed holes or constructional elements are present. If the area of the enclosed hole/constructional elements is below the given threshold, their area is not subtracted from the surrounding space. Though it is not possible to maintain an entire standard in space norms, you can specify the thresholds for enclosed hole and constructional elements. On importing the AutoCAD drawings these thresholds are used to calculate the space area and in converting the drawing into a CAD Integrator .orj file.

Adding area measurement standards

Procedure

1. Go to Area measurement standards.
2. Click Add on the action menu.
3. Fill the data section fields.

See the descriptions of these fields in the following table:

Field	Description
Code	Enter a code for the area measurement standards.
Description	Enter a description for the area measurement standards.
Threshold for enclosed construction polyline area	<p>Specify a value to maintain a standard while calculating the enclosed construction polyline area of a drawing. For example: 0.5. The impact on the surrounding area of a space is as follows:</p> <p>If Enclosed construction polyline > area \geq Threshold value: The surrounding net and/or gross space polylines are subtracted from the area of the polyline. The enclosed polyline is converted into the FM CAD Integrator drawing.</p> <p>Enclosed construction polyline > area < Threshold value: The surrounding net and/or gross space polylines are not subtracted from the area of the polyline. The space area is calculated including the construction polyline area. The enclosed polyline is converted into the Constructional CAD Integrator drawing.</p> <p>If this field is empty, no standard is applied. The polyline is not subtracted from the space. The enclosed polyline is converted into the Constructional CAD Integrator drawing.</p> <p>When using a '0' (zero) as threshold value, all surrounding net and/or gross space polylines are subtracted from the area of the</p>

Field	Description
Threshold for enclosed hole polyline area	<p data-bbox="586 247 1308 310">polyline. The enclosed polyline is converted into the FM CAD Integrator drawing.</p> <p data-bbox="586 344 1341 436">Specify a value to maintain a standard while calculating the enclosed whole polyline area of a drawing. For example: 4. The impact on the surrounding area of a space is as follows:</p> <p data-bbox="586 457 1351 579">If Enclosed hole polyline area \geq Threshold value: The surrounding net and/or gross space polylines are subtracted from the area of the hole. The enclosed polyline is converted into the FM CAD Integrator drawing.</p> <p data-bbox="586 600 1341 758">If Enclosed hole polyline $>$ area $<$ Threshold value: The surrounding net and/or gross space polylines are not subtracted from the area of the hole. The space area is calculated including the hole area. The enclosed polyline is converted into the Constructional CAD Integrator drawing.</p> <p data-bbox="586 779 1325 900">When using a '0' (zero) as threshold value, all surrounding net and/or gross space polylines are subtracted from the area of the hole. The enclosed polyline is converted into the FM CAD Integrator drawing.</p> <p data-bbox="586 921 1325 1010">If this field is empty, no standard is applied. The polyline is not subtracted from the space. The drawing can be converted as a Constructional drawing.</p>

Asset classifications

Asset classifications in Supporting data is used to classify corporate assets that require planned preventative maintenance for building elements and equipments.

Example

The Dutch NL-SfB system and the British CL-SfB system are two examples of quite similar, widely-used asset classification methods. Each asset classification is assigned its own code in NL-SfB 23 stands for Floors, 27 for Roofs, 57 for Air treatment and so on.

Since various classification methods are used in different counties and different lines of business, Planon ProCenter offers the opportunity to add several different classification methods in Supporting data , which can subsequently be applied in **Maintenance Planner**.

Adding an asset classification

Procedure

1. Go to Asset Classification.
2. On action panel, click Add
3. Fill the data section fields.

See the descriptions of these fields in the following table.

Field	Description
Code	Enter the code of the asset classification. For example 27.
Code group	Automatically displays the code of the main asset classification and all subordinate codes. Codes of different levels are separated by a dot. For example; the group Ceilings (code 45) contains the sub-classification Ceilings; suspended (code 1). The value 45.1 is displayed in the field of Ceilings: suspended.
Parent level	If a sub-classification is added to a main asset classification, this field automatically shows the name of the main asset classification.
Description	Select one of the options (Yes or No), to specify if vehicles using liquefied petroleum gas are permitted to use the car park.


4. If relevant, enter sub-classifications.

In total, an asset classification can have 15 levels.


5. Each time after you have finished entering the data for a classification or sub-classification, click Save.

These asset classifications can subsequently be used in Maintenance Planner.

Background actions

 If you do not use a Planon Accelerator environment, the **Background actions** TSI must be added to the navigation panel. For example, you can add it to **Supporting data** or **System Settings**.


Background actions are actions that take longer than 30 minutes to run on the Web Client. The maximum session time on the Web Client is 30 minutes. Consequently, if you are running actions that take longer than 30 minutes, there may be session timeout errors.

 To reduce storing data in the PLN_SESSIONDATA table and improve performance, (stateless) in-memory session IDs are used for background actions

Examples of time-consuming actions:

- Deep copying
- Generating clustered orders
- Compiling property-based maintenance plans
- Compiling contract-based maintenance plans
- Replenishing stock, by creating automatic replenishment suggestions
- Running a Talk/SDI definition
- Running a configuration transfer
- Processing Planon AppSuite data synchronization (also see the Planon AppSuite - Configuration Guide)

These actions are run in the background on the application server while you and your colleagues continue working.

- 
- For a background action like generating clustered maintenance orders, the clustering takes place in batches, according to the clustering criteria that apply. This reduces the number of session time out errors and makes it easier to verify in the logging which actions were successful.
 - In order to prevent the 'history' from piling up, you can delete the older background actions. The **Delete** action is disabled if the selected background action is running.


Logging

A log is created for every background action running on the server, to keep track of its progress. The log can be seen in the TSI per background action and it allows you to view what a particular background action has done.

Background action statuses

Background actions can have the following statuses -

Not started, Queued, In progress, Completed and **Completed with errors**. There can be 5 simultaneous background actions (jobs) in progress. Planon comes with predefined defaults (which are applicable for most common use cases) for the number of background actions that are run simultaneously.

 The priority of the background actions is **first in first out**. Actions with the oldest insert date-time will be picked up with the highest priority.

Background action progress

The **Background action progress** bar displays the progress of a background action currently running in the background. The progress is shown in percentage from **0** to **100%** and is set to **Done** when it is completed.

For a description of the fields, see the following table:

Field	Description
Property set	Displays the active property set for this background action.
Status	Indicates the background action's status, which is either: <ul style="list-style-type: none">• 0, Queued• 1, In progress• 2, Completed• 3, Completed with errors
Start date-time	Displays the date and time the background action was started.
Completion date-time	Displays the date and time the background action was completed.
Duration	Displays the duration of the scheduled task in milliseconds.
Has errors	Indicates whether errors were encountered. If the status is 3, Completed with errors , this field will be set to Yes .

Planon AppSuite synchronization via Background actions

In Planon AppSuite, all essential order-related data is sent from the app to the back-office through an outbox-inbox mechanism. Whether field engineers are working online or offline, all relevant app actions are collected in an outbox on the app.

- If they are working online, the outbox will immediately send the data to the back-office.
- If they are working offline, the data remains stored in the outbox until they are online again.

All outbox data is sent from the outbox to the **AppSuite inbox** in System info > Background actions. Here, a back-office employee can monitor and assess the background actions. Those actions that *completed with errors* must be queued for a retry.

Working with the AppSuite inbox in Background actions

The **AppSuite inbox** in **Background actions** is an overview of all app actions sent from the mobile devices of field engineers to the back-office. In the **AppSuite inbox**, the various background actions can be monitored and assessed.

Background actions in the AppSuite inbox that go from **In progress** to **Completed** need no further attention.

Background actions with the **Completed with error status** must be investigated and possibly acted upon. They can be submitted to an application manager / Planon Support staff to be amended and queued for a retry. The following procedure is intended for them.

Procedure

1. Go to System info > Background actions.
2. Select the AppSuite inbox step.
3. Create filters on the background actions to find the ones you want to investigate.
 - To find background actions with errors, create a filter on **Status** and the **Has errors** field with value **Yes**.
 - To find background actions coming from a specific engineer (internal tradesperson) create a filter on the **Modified by** and **Inserted by** fields.
4. Assess the background actions with errors by reading the information in the Log field.
 - See [PMFS error overview](#), for a list of known errors and their meaning.
 - If required, you can copy the info from the **Log field** and **Action parameters** field into your communications with Planon.
 - Application managers or Planon Support staff can resolve some errors by adjusting the order data or the order workflow in ProCenter and queueing the background action for a retry.
 - Planon Support staff can resolve error messages by using the **Modify action parameters** action to modify the data received from the device.

- If the problem is expected to be solved with the above methods, set the Queued status to trigger a retry.


The queued background action will be duly processed.

PMFS error overview

Code / system name / message	Context
<p>NOFS_0001</p> <p>rPss.NovaPMFS.error.ecCouldNotUploadPhoto</p> <p>Could not upload photo.</p>	<p>This error occurs if there is a network connection problem during the upload of the photo to the file location configured in System settings.</p>
<p>NOFS_0004</p> <p>rPss.NovaPMFS.error.ecPMFSSettingsCouldNotBeRetrieved</p> <p>PMFS settings could not be retrieved.</p>	<p>This error occurs if the Self-Service site does not contain the PMFS App settings web definition.</p>
<p>NOFS_0005</p> <p>rPss.NovaPMFS.error.ecCouldNotFindObjectithId</p> <p>Could not find {0: bo type name} with {1: bo primary key field name} {2:object id}</p>	<p>This error occurs if an attempt is made to read the system code of a business object that does not exist.</p>
<p>NOFS_0006</p> <p>rPss.NovaPMFS.error.ecCouldNotSaveQuestionnaireAnswers</p> <p>Could not save questionnaire answers.</p>	<p>This error occurs if a question is answered on the device, while the question has been removed in the back-office.</p>
<p>NOFS_0007</p> <p>rPss.NovaPMFS.error.ecNoPersonLinkedoAccount</p> <p>No person is linked to account {0:account name}</p>	<p>This error occurs if a user account is not linked to a <i>person</i>. Example: the Job list is retrieved via the person linked to the account. If the field engineer is not linked to a person, it is unclear which jobs are relevant.</p>
<p>NOFS_0008</p> <p>rPss.NovaPMFS.error.ecCouldNotAddCommlog</p> <p>Could not add a commlog</p>	<p>This error occurs if an action on the device does not have a matching PMFS action in the back-office (version mismatch).</p>
<p>NOFS_0010</p> <p>rPss.NovaPMFS.error.ecNoValidStandardrderFound</p>	<p>This error occurs if a service request or suborder is added on the device based on a standard order, while that</p>

Code / system name / message	Context
No valid standard order found	standard order has been removed in the back-office.
<p>NOFS_0011</p> <p>rPss.NovaPMFS.error.ecNoValidParentOrder found</p> <p>No valid parent order found</p>	This error occurs if a suborder is added on the device, while the main order is deleted in the back-office.
<p>NOFS_0012</p> <p>rPss.NovaPMFS.error.ecNoValidFileLocation</p> <p>File location is not configured. File location is required for storing photos and sign-off</p>	This error occurs if there is no file location configured in System settings and a field engineer adds a photo on the device or tries to add a signature.
<p>NOFS_0015 / PMFS_0015</p> <p>The data cannot be synchronized. The 'Save' action is not available on the order.</p>	<p>This error may occur in the following circumstances:</p> <ul style="list-style-type: none"> • the user is not authorized to save orders • the order is archived • the order has been canceled
<p>PMFS_0040</p> <p>PMFSOrder.ecStateTransitionNotAvailable</p> <p>Unable to update Order number {0:orderNumber} as state transition from {1:fromState} to {2:toState} is not available.</p>	This error occurs if you configured a specific status while there is no status transition from the current order status to this configured status.
<p>PMFS_0041</p> <p>PMFSOrder.ecStateTransitionNotAvailableFor actionReasonConfig</p> <p>Unable to update the state for Order number {0:orderNumber} as state transition is not available from ({1:fromState}) to any of the states configured for action : {2:actionName} - {3:reasonName}.</p>	This error occurs if you configure a specific status for action+reason while there is no status transition from the current order status to this configured status.
<p>PMFS_0042</p> <p>PMFSOrder.ecStateTransitionNotAvailableFor resumeWork</p>	This error occurs if you resume work for an order in the SLA Wait status and the status transition is not available for the action. The order will

Code / system name / message	Context
Unable to resume the order {0:orderNumber} from current status {1:currentState}.	remain in the SLA Wait status (SLA stop the clock).

 Errors starting with **PN_U** are user extension errors. In that case, you may want to check your TMS and contact your TMS consultant.

CAD Integrator hatch patterns & colors

The **CAD Integrator hatch patterns** TSI provides a predefined list of hatch patterns that you can apply to CAD Integrator space mapping in your drawings. You can apply hatch patterns for space mapping on the following elements:


- Departments
- Cost centers
- Space types
- Space categories
- Tariff groups
- Space standards
- Free space attributes

You can add more hatch patterns to the list by using the **Add** action. For information on the data fields of CAD Integrator hatch patterns, see the following table:

Field	Description
Code	Enter a unique code for the hatch pattern.
Hatch angle	Enter an angle for the hatch pattern (numeric only). For example: 0, 45, 90.
Hatch pattern	Enter the hatch pattern definition (coordinates) in this field.
Hatch scale	Enter a value greater than or less than 1 to increase or decrease the scale of the pattern.
System code	Displays a unique system code for the hatch pattern.
Preview	Displays a preview of the defined hatch pattern.

The **CAD Integrator colors** TSI provides a predefined list of colors. These colors can be modified, prioritized and applied in combination with hatch patterns to the elements listed above. The colors are used in TSIs where CAD Integrator is available, for example, in the Space Management TSI.

You can add more colors to the list by using the **Add** action. For information on the data fields of CAD Integrator colors, see the following table:

Field	Description
System ID	Enter a unique code for the color. It can be the same as the color number, as is the case in the default color set.
Color number	Enter a unique number for the color. If no color priorities are specified, this number also determines the color's priority in situations where CAD Integrator coloring is done automatically.
Color priority	Enter the priority the color must take over other colors when coloring takes place automatically and dynamically. Color number 1 will be used first, color number 2 second, and so on.
<div style="border: 1px solid black; padding: 5px;">  Set the CAD Integrator setting Automatic coloring to Yes, to make this feature work. </div>	
<p>Example: Dynamic CAD coloring is applied in user-defined space mapping. When drilling down the various selection levels before you apply user-defined space mapping in Space Management, the color priorities are retained for the duration of your user session. Every time you drill down from different floors, the same colors are used for the same elements in the drawing.</p>	
Color scheme	To select a color from a color scheme, click the look-up icon in this field and select a specific color from an HSV or an RGB scheme.
Description	Enter a description for the color.

BIM models

For viewing BIM models in the BIM viewer (Assets or Spaces & Workspaces), these models need to be made available to the Planon application.

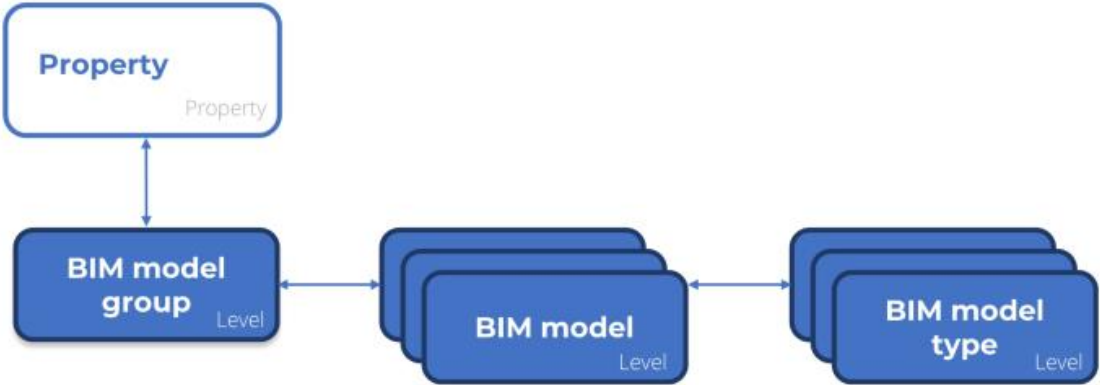
This requires setting up a BIM model structure containing three levels:

- 1. [BIM model groups](#)
- 2. [BIM models](#)
- 3. [BIM model types](#)

You can set up this structure in [Supporting data](#).

BIM model groups

A BIM model group is basically a *container* that allows you to link multiple BIM models to a property.



Linking multiple BIM models to a property enables you to display multiple BIM models in BIM viewer simultaneously (Assets , Spaces & Workspaces).

Field	Description
Code	Enter a code for your BIM model group.
Name	Enter a name for your BIM model group. The name is used to identify and select the BIM model group when linking it to a BIM model.
Property	Select the property for your current BIM model group. The BIM model group - property link must be unique.

BIM models

For viewing BIM models in the BIM viewer (Assets or Spaces & Workspaces), these models need to be made available to the Planon application.

Conversion

BIM viewer can display models that have an *svf* extension, to which, typically, BIM models need to be converted.

Conversion options

You can do one of the following:

- Link your model in the Autodesk Cloud (automatic conversion).
- Create/update your BIM models in a WebDAV folder and publish your model to the Autodesk cloud.




For publishing your model to Autodesk cloud, you need a Platform app, which you can download from the [Planon Marketplace](#). The **Planon Connect for Forge** app (Connect4Forge) publishes your model to Autodesk cloud when the model in your WebDAV location is changed (saved). The model is subsequently converted by Autodesk cloud and will result in a new **Conversion result**.

BIM models

The following table shows the fields and the descriptions that are available on the **BIM models** step.

Field	Description
Code	Enter a unique code.
Name	Enter a name to identify the model.
BIM system	Select the BIM system for which you are defining a BIM model.
Source model	This field holds a link to the Revit-based model, which is the source for the models to be displayed using BIM viewer. By default, this field accepts files with extension <i>.rvt</i> . If you want to upload a model with a different extension,

Field	Description
Conversion result	<p>you must enter this extension in the BIM source model - allowed file types field (System Settings > File locations)</p> <p>This field will contain a link to a file with the extension <i>json</i>, which is stored in the same folder as the Source model.</p> <p>Conversion result will hold the result of the conversion process when it is done. In order to trigger the conversion, you need to install the Planon Connect for Forge app (Connect4Forge).</p> <p>The Conversion result body contains a <i>connection string</i> with information about the region, file format (SVF or SVF2) and a URL per converted file. You must copy this string and paste it in the Autodesk cloud reference path.</p>
BIM region	<div data-bbox="527 716 1313 900" style="border: 1px solid #0070C0; padding: 5px; margin-bottom: 10px;"> <p> When sharing URLs via mail or chat or any other means of communication, invisible characters (zero-width space) may be added that invalidate the URL. When receiving a URL in such a way, pasting it in a text editor will remove these invisible characters.</p> </div> <p>Select the region for storing your BIM model. Typically, select the region that is closest to you.</p> <p>Region & GDPR Compliance</p> <p>The General Data Protection Regulation (GDPR) is a set of rules that protect the digital privacy of the citizens of the European Union (EU). Businesses and organizations who serve users in Europe are legally required to comply with GDPR.</p> <p>Accordingly, Forge serves users in Europe, Middle East, and Africa (EMEA) from a dedicated data center, in compliance with GDPR regulations. The EMEA data center is physically separated from the US data center.</p> <p>For more information, see the Autodesk website.</p>
Conversion update	Displays the status of the conversion of the model by Autodesk.

BIM model type categories

On this step, you can specify the various categories that you want to work with for distinguishing or labeling your BIM models.



Anything is possible, here are some examples of categories; *Electrical*, *Mechanical*, *Architectural*, and so on.

Field	Description
Code	Specify a code for your BIM model type category. The code is used to identify and select a category for a BIM model type.
Name	Specify a name for your BIM model type category.

BIM model types

By subdividing a BIM model into various BIM model types you can distinguish between classifications, such as Mechanical, Electrical and so on.

For more information about the required data, see the following table:

Field	Description
Code	Enter a unique code.
Name	Enter a name to identify the model.
BIM model	Displays the BIM model for which you are creating a new type.
BIM model type category	Select the BIM model type category (electrical, mechanical, ...) for the selected BIM model. You can specify a BIM model type category on BIM models > BIM model type categories step.
Path reference BIM model	Specify the WebDAV file reference to the BIM model (in <i>svf</i> format).
Autodesk cloud reference	Enter the Autodesk cloud file reference from the Conversion result .
	<div style="border: 1px solid #0070C0; padding: 5px;"> <p> If both the BIM model reference and the Autodesk cloud reference contain a value, the latter takes precedence.</p> <p> When sharing URLs via mail or chat or any other means of communication, invisible characters (zero-width space) may be added that invalidate the URL. When receiving a URL in such a way, pasting it in a text editor will remove these invisible characters.</p> <ul style="list-style-type: none"> • Please ensure that the .json file type is specified in the Document file types field (System settings > File locations). If this is not the case, the json file cannot be downloaded from the Autodesk server. </div>
Start date	Enter or select a start date for the BIM model type.

Field	Description
End date	Enter or select an end date for the BIM model type.
Offset	<p>Specify the BIM model's coordinates if you want to display multiple BIM models in BIM viewer.</p> <p>The coordinates specify the distance from the origin along the x, y, and z-axes, respectively.</p> <p>The coordinates should be specified in JSON format:</p> <pre>{x: 100, y: 200, z: 0}</pre>

Countries & Cities


End users can use the **Countries** and **Cities** pick list, for example, to specify the country / city where a property is located, or to specify the country / city for an address.

The **Countries** pick list can be maintained in Supporting data > Countries.

Enter the **Code** and **Name** of the country in the relevant fields.

The **Cities** pick list can be maintained in Supporting data > Cities.

For the available fields, see the following table:

Field	Description
Country	Select a country from the list.
City	Enter the name of the city.
District	Enter a district.
ZIP code / Postal code	Enter the default zip code/postal code of the city. When end users specify a city in Planon, for example for an Address or a Property , the zip code is automatically populated with the value defined in the ZIP code / Postal code field in Supporting data > Cities . End users can always manually change this code.
<div style="border: 1px solid #00a0e3; padding: 5px;"> If the field Postal code / ZIP code of an Address or Property already has a value, this value will not be overwritten with the value from Supporting data > Cities.</div>	
Municipality	Enter the municipality to which the city belongs. When end users specify a city for an Address or a Property in Planon, the municipality is automatically populated with the value defined in the Municipality field in Supporting data > Cities . End users can always manually change the municipality.
Region/ County	Enter the region or county to which the city belongs. When end users specify a city for an Address or a Property in Planon, the region or county is automatically populated with the value defined in the Region/County field in Supporting data > Cities . End users can always manually change the region or county.



The **Cities** pick list is not translatable; because of internationalization requirements, a new **City** field has been introduced (CityReference). By using this field, names of cities are now translatable. For more information, see [Making Cities translatable](#).

Car parks

In **Car parks**, you can add and maintain detailed information on parking areas for properties. This includes a car park's opening hours, height restriction, LPG vehicle approval and capacities over time. You can also specify an alternative property that contains a car park which can be used if the main car park is full. In the case of an alternative car park, you can also specify its distance to the main property and the amount of time required for visitors to travel to the designated meeting site.

Once a car park is added, parking spaces within it can be assigned to visitors in the Personnel TSI from the **Visitors** selection level.

Adding a car park

The procedure to add a car park is as follows:

Procedure

1. Go to Car parks.
2. Click Properties and select the property to which you want to add a car park.
3. Click Car parks.
4. On action panel, click Add.
5. Fill the data section fields.

See the descriptions of these fields in the following table.

Field	Description
Property	Select a property other than what is already selected on the Properties selection level.
LPG permitted	Select one of the options (Yes or No), to specify if vehicles using liquefied petroleum gas are permitted to use the car park.
Height	Enter the car park's vehicle height restriction. This will be in the unit of length used by your organization
Opening time	Enter the car park's opening time.
Closing time	Enter the car park's closing time.

6. Click Save.

Adding car park capacity

Once you have added a car park, you can then specify its capacity over given periods of time. The procedure to do this is as follows:

Procedure

1. Go to Supporting data > Car parks.
2. Go to the Car parks selection level and select the car park to which you want add car park capacity.
3. Go to Details > Capacity.
4. In action panel, click Add.
5. Fill the data section fields.

See the table for descriptions of these fields.

Field	Description
Start date	Enter the date from which the number of parking spaces you are about to enter will be available from.
End date	<p>This read-only field automatically displays the date on which the number of spaces available changes. For example, if you first enter a car park capacity of 40 spaces with a start date of 01.01.2009, this field will remain unspecified.</p> <p>If you then enter a car park capacity of 20 spaces with a start date of 01.02.2009, the end date of the initial capacity you entered will automatically be specified as 31.01.2009.</p>
Parking spaces	Enter the number of parking spaces available from the given start date.

6. Click Save.

Adding an alternative car park

Once you have added a car park, you then have the option of specifying an alternative car park that belongs to another property. Furthermore, regarding meetings, you can also specify the amount of time required for visitors to walk from the alternative car park to the property associated with the original car park you entered. The procedure to add an alternative car park is as follows:

Procedure

1. Go to Supporting data > Car Parks.

2. Go to the Car parks selection level and select the car park to which you want to add an alternative car park.
3. Go to Details > Linked car parks .
4. On the action panel, click Add
5. Fill the data section fields.

See the descriptions of these fields in the following table.

Field	Description
Car park	This field displays the currently selected car park to which you are adding the alternative car park.
Property	Select the alternative car park by entering the property to which the alternative car park belongs.
Priority	Enter a number representing the priority this car park is to be given regarding other alternative car parks already added or to be added.
Distance to property	Enter the distance to the property of the currently selected car park (that is; the main car park property in which the meeting will take place). The unit used will be the unit of length used by your organization.
Margin start time (minutes)	Enter the extra time required in minutes for a visitor to reach the meeting location as a result of parking in the alternative lot.
Margin end time (minutes)	Enter the extra amount of time in minutes required for a visitor to reach the alternative car park from the meeting location.

6. Click Save.

Certificate types

A certificate is an additional qualification that you have acquired to show that you have specific skill or knowledge. The certificates are usually related to an occupation, technology, or industry.

Adding a certificate type

You can define certificate types and link them to a person to enable filtering personnel data for a particular qualification that is required for a job.

Procedure

1. Go to Certificate types.
2. On the action panel, click Add.
3. In the data section, enter a Code and Name for the certificate type.
4. Click Save.

A new certificate type is created.

Contract line groups and group combinations

In Supporting data > **Contract line groups**, you can add and maintain contract line groups and group combinations.

A contract line group allows you to group contract lines into categories such as service costs, rent costs, and so on. Whenever you add a contract line to a contract, you can specify which contract group the contract line belongs to.

A group combination is an element to which individual contract line groups can be linked for reporting purposes. When creating a price announcement letter, if you do not want to report on price changes of individual contract lines but on contract line groups or combinations of contract line groups (example; service costs and other costs together), you can instead link the contract lines groups you want to report on to a group combination and then create a price announcement letter for the combination.

Adding a contract line group

Procedure

1. Go to Contract line groups > Contract line groups.
2. On the action panel, click Add.
3. Enter a Code and a Description for the contract line.
4. Click Save.

Adding a group combination

Procedure

1. Go to Contract line groups Group combinations.
2. On the action panel, click Add.
3. Enter a Code and Description for the group combination and click Save.

Linking contract line groups to a group combination

Once you have added contract line groups and one or more group combinations, for reporting purposes, you can then link contract line groups to a group combination. This would allow you to create a price announcement letter for the combination group. The procedure to link contract line groups to a group combination is as follows:

Procedure

1. Go to Contract line groups.
2. Click Group combinations and select the group combination you want to link to contract line groups.
3. On the action panel, click Link Contract line groups.
 - Alternatively, if you are at the **Contract line groups** selection level, select the contract line group you want to link to group combinations.
4. On the action panel, click Link Group Combinations.
5. In the Link Group Combinations dialog box, select the required records and move them to In use section.

In both cases, a dialog box appears in which you can select the elements you want to link and move to **In use**.

In Contracts , you can now create a price announcement letter to report price changes for the group combination to which you have just linked contract line groups.



For more information, see [Reporting price changes via a price announcement letter](#)

Cost centers

In Supporting data > **Cost centers**, you can add and maintain cost centers.

'Cost center' is an element in Planon ProCenter that denotes that part of an organization that contributes to the costs of an organization, but only indirectly contributes to its profit.

CSS definitions

For some components in Planon ProCenter , such as the Workflow Manager, predefined CSS style sheets are used. If required, you can use Supporting data > **CSS Definitions** to add your own user-defined CSS definitions to the system-defined CSS.



For more information on CSS definitions refer to [Appendix - CSS styling properties - Reservations Planboard](#) and [Appendix - CSS styling properties - Work order planboard](#).

Adding BaseOrderCSS

The BaseOrderCSS allows you to define colors for the various user-defined statuses of reservations.

Adding a CSS definition

Procedure

1. Go to **CSS definitions**.
2. Select **BaseOrderCSS** in the CSS definitions list.
3. On the action panel, click **Add**.
4. Fill the data section fields.

See the descriptions of these fields in the following table.

Field	Description
System name	Specify a name to the definition.
CSS	Enter a CSS definition. By entering a user defined CSS color code here, you can assign a unique color to the selected reservation status. See Examples in this section for customizing CSS definitions.
Parent level	Select the parent level of the CSS definition.

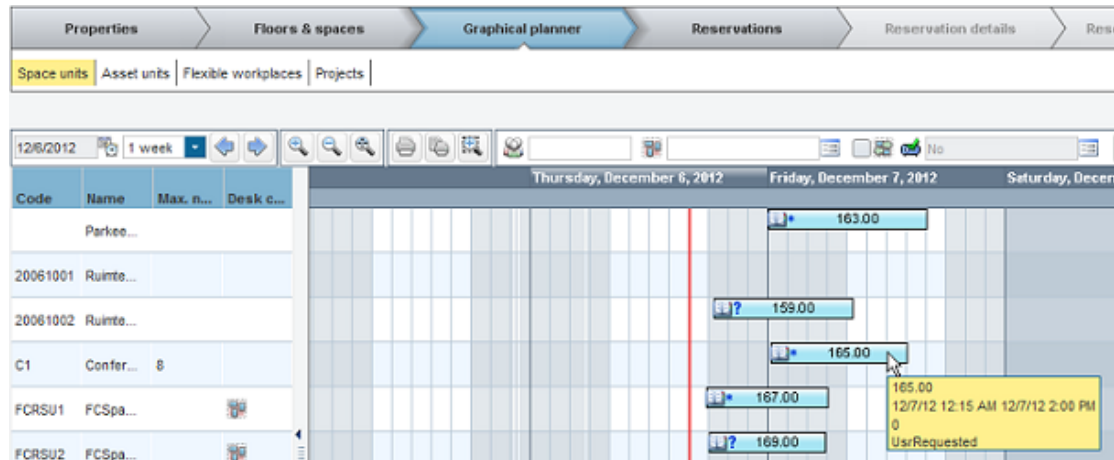
5. Click **Save**.
6. Do **Refresh all**.
You have now added a definition.



For more information on reservations, see [Reservations](#).

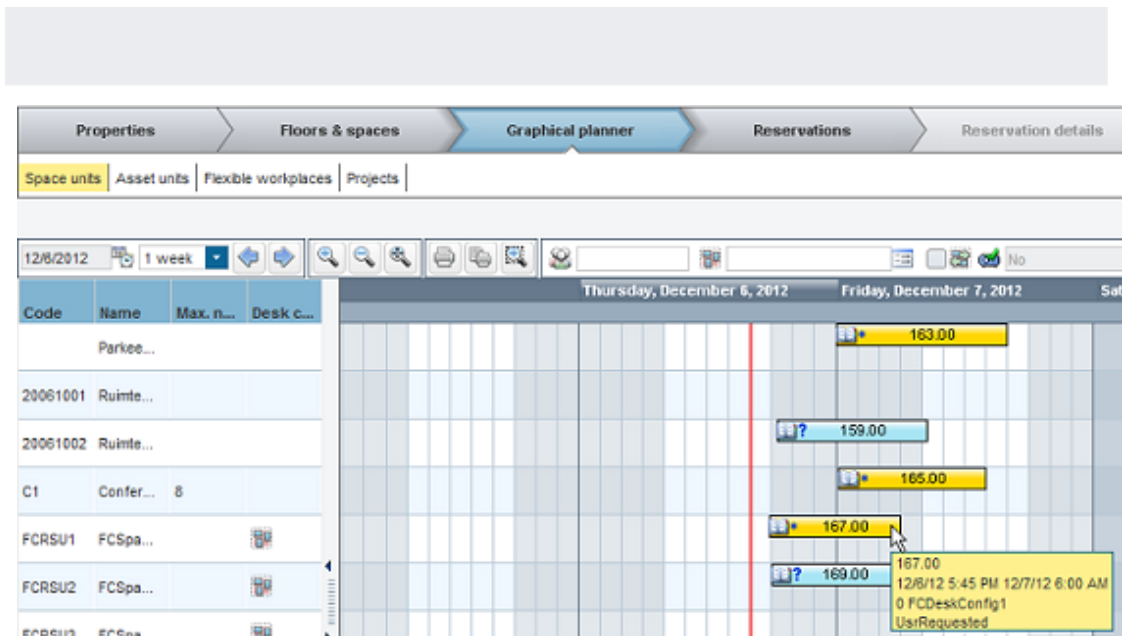
Examples:

Example I: If no CSS styling is applied, the reservations under the status **UsrRequested** are displayed as follows:



Example II: If you want to color the status **UsrRequested**, the following CSS definition should be added in the BaseOrderCSS.

```
#fillPaintActivity[userStatePnName="UsrRequested"]  
  
{ class : "ilog.views.java2d.IlvLinearGradientPaint(start,end,  
    stops,colors,adapting)" ;  
  
    start : "0.0,0.0" ;  
  
    end : "0.0,1.0" ;  
  
    stops[0] : "0.0" ;  
  
    stops[1] : "0.5" ;  
  
    stops[2] : "1.0" ;  
  
    colors[0] : "255,255,255" ;  
  
    colors[1] : "255,230,0" ;  
  
    colors[2] : "255,200,0" ;  
  
    adapting : "true" ;  
  
}
```



Example III: If you have two user-defined business objects, you can color the statuses as follows:

```
#fillPaintActivity[userStatePnName="UsrRequested"]
{
  class : "ilog.views.java2d.IlvLinearGradientPaint(start,end,
    stops,colors,adapting)" ;
  start : "0.0,0.0" ;
  end : "0.0,1.0" ;
  stops[0] : "0.0" ;
  stops[1] : "0.5" ;
  stops[2] : "1.0" ;
  colors[0] : "255,255,255" ;
  colors[1] : "255,215,0" ;
  colors[2] : "255,215,0" ;
  adapting : "true" ;
}
```

```
#fillPaintActivity[userStatePnName="UsrOption"]
{
  class : "ilog.views.java2d.IlvLinearGradientPaint(start,end,
```



```

stops,colors,adapting)" ;

start : "0.0,0.0" ;

end : "0.0,1.0" ;

stops[0] : "0.0" ;

stops[1] : "0.5" ;

stops[2] : "1.0" ;

colors[0] : "255,255,255" ;

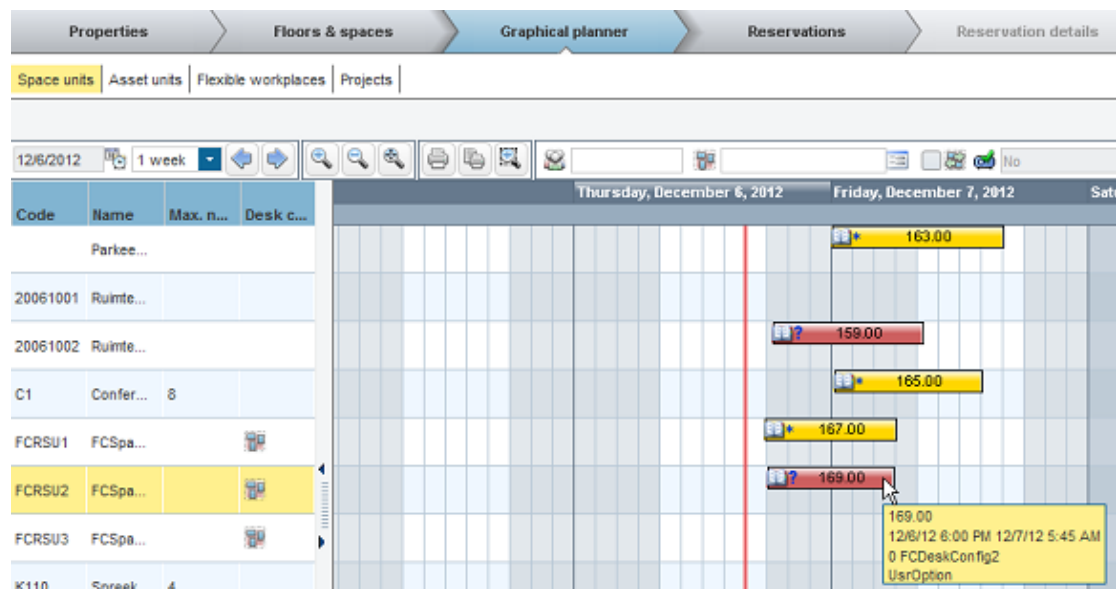
colors[1] : "205,95,95" ;

colors[2] : "205,95,95" ;

adapting : "true" ;

}

```



Example IV: If you want to display a customized tool tip, the attributes can be added or removed from the **activity** element in the CSS definition of **BaseOrderCSS** as follows:

```

activity {

    class : "ilog.views.gantt.graphic.renderer.composite.

        IlvActivityCompositeGraphicRenderer" ;

    graphic : "@+compositeActivity" ;

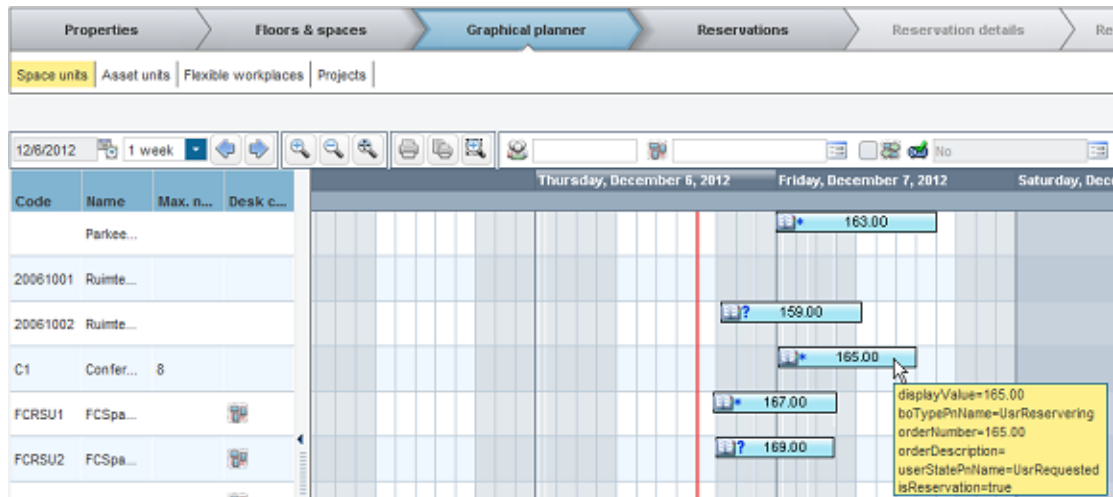
    tooltipText : "@|"<html>"+ "displayValue=" + @displayValue + "<br>"
}

```

```

+ "boTypePnName=" + @boTypePnName + "<br>" + "orderNumber="
+ @orderNumber + "<br>" + "orderDescription=" + @orderDescription
+ "<br>" + "userStatePnName=" + @userStatePnName +
"<br>" + "isReservation=" + @isReservation + "</html>";
}

```



Example V: If you do not want to display an icon for the reservations, the **Subobject#compositeActivity** element in the CSS definition of **BaseOrderCSS** should be updated as follows:

```

Subobject#compositeActivity {
    _EDITABLE : "true" ;

    class : "ilog.views.graphic.composite.IlvCompositeGraphic" ;

    children[0] : "@+activityRectangle" ;

    children[1] : "" ;

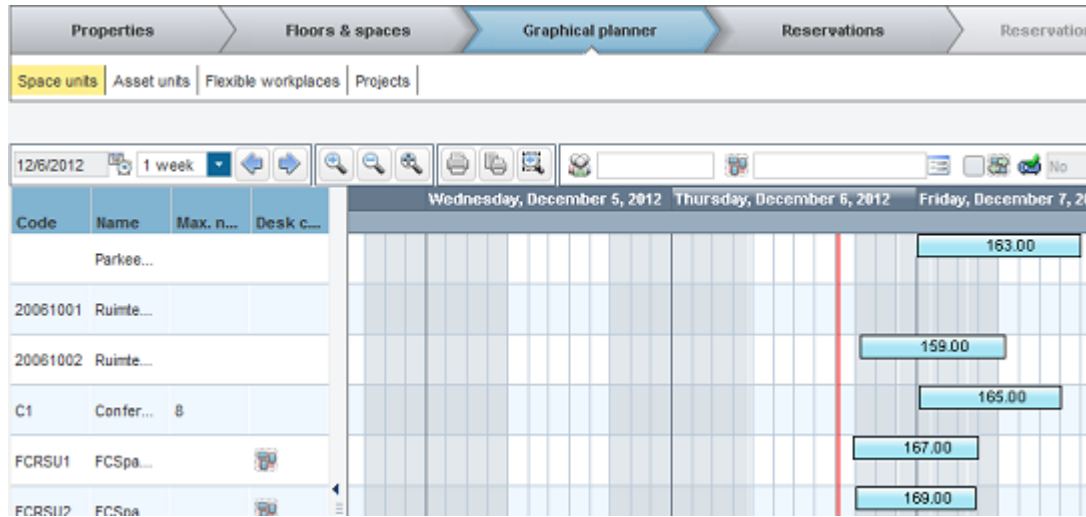
    children[2] : "@+Text" ;

    constraints[2] : "@+AttachmentText" ;

    children[3] : "" ;

    resizingPolicy : "ResizingBase";
}

```



You can also hide the icon for a particular business object. To achieve this, you must include the appropriate attributes with the element.

For example, `Subobject#compositeActivity[userStatePnName="UsrReservationMeetingRoomConfirmed"]`
`[boTypePnName="UsrReservationMeetingRoom"]`

Default email addresses

In the *System info > Email TSI*, you can add and maintain a list of email addresses, which can subsequently be set elsewhere as the default reply, sender and BCC email addresses. You can set these as default email addresses for the entire application, individual property sets, or individual users

You can make these settings in the following locations:

- To set default reply, sender and Bcc email addresses for Planon ProCenter :
 - Go to *System settings > SMTP - system settings* (in Planon Accelerator **Outgoing email TSI**) and enter the default email addresses in the **Reply email address**, **Sender's email address** and **Bcc email address** fields.
- To link default reply, sender and Bcc email addresses to a property set:
 - Go to the **Property sets TSI** (either under Supporting data or System settings on your navigation panel).
 - Select a property set and select default email addresses from the dialog boxes in the **Reply email address**, **Sender's email address** and **Bcc email address** fields respectively.
- To link default reply, sender and Bcc email addresses to a user:
 - Go to the **User groups TSI** (either under Authorization or Accounts on your navigation panel).
 - Select a user at the *Users > Settings* selection level and select default email addresses from the dialog boxes in the **Reply email address**, **Sender's email address** and **Bcc email address** fields respectively.



Reply email address and **Bcc email address** fields can store several default email addresses, which should be separated by commas.

After making these settings, the reply, sender and Bcc email address fields throughout Planon ProCenter are automatically populated with these default values. End users can overwrite default email addresses as required.

Planon ProCenter *prioritizes* as follows when automatically populating email address fields with default values:

- If default email addresses are specified for the currently logged-on user, email address fields are automatically populated by the default email addresses for the user.
- If default email addresses are not specified for the currently logged-on user, the default email addresses of the current property set are used.

- If default email addresses are not specified for the current property set, the default email addresses from **System settings** are used.



For more information on making default email address settings in **System settings** and **Authorization**, see [System settings](#) and [Authorization](#) respectively.

Defaults and preferences

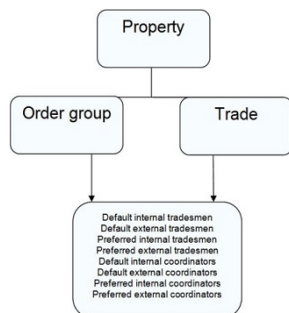
In Planon ProCenter , the functional application manager or someone with similar authorizations can specify which tradespeople or coordinators, either internal or external, are presented to end users in dialog boxes or as default values when creating orders. This will considerably simplify making selections for end users.

Basically, a distinction is made between preferred or default tradespeople and coordinators per property, trade and order group.

Preferences are used to create pre-filtered lists of tradespeople and coordinators in dialog boxes that can be opened from within fields, such as the **External tradesperson** field.

Defaults are values that will be specified automatically on the data tabs of the order as soon as a specific property and order group or trade - for which these defaults have been registered - is specified for the order.

Preferred or default tradespeople and coordinators are linked to either a trade or order group. Additionally, combinations of preferences or defaults may also be linked to a specific property. The possible relations between the various elements are shown in this image.



For more information on working with defaults and preferences, see [Work Orders](#) .

Copying defaults and preferences between properties

If you have assigned defaults and preferences to a property, you can also assign the same defaults and preferences to other properties, for example, the same city or locality.

To copy defaults and preferences between properties

Procedure

1. On the Properties selection level of any TSI, select the property to which you want to copy defaults and preferences.
2. On the action menu, click Copy defaults and preferences.
3. In the Enter values dialog box, using the Yes or No buttons, select if you want to replace existing defaults and preferences that are already assigned to the property you are copying to.
4. Select the property you want to copy from and the individual defaults and preferences you want to copy.
5. Click OK to complete the action.

The selected defaults and preferences are now copied to the property you selected on the **Properties** selection level.

Defects catalogs

Defects catalogs are added and maintained in **Defects catalogs** and can subsequently be used in Assets and Surveys to schedule condition-based maintenance.



For more information on (standard) assets and building elements, see [Assets](#).

A defects catalog is the result of a thematic categorization of defects in or on assets and building elements. For example, you can group defects according to country, site or repair method.

Adding a defects catalog

Defects catalogs are added and maintained in the **Defects catalogs** TSI.

Procedure

1. Go to Defects catalogs.
2. on the action menu, click Add.
3. Enter a code and a description for the defects catalog.
4. Click Save.

A Defects catalog is added. You can, now, add a defects classification to the defects catalog.

Defect classifications

A defects classification is a filter that you can apply to a defects catalog to filter out relevant defects lists and defects.

Adding a defects classification

Defects classifications are added and maintained in the **Defects catalogs** TSI.

Procedure

1. Go to **Defects classification**.
2. Click **Add** on the action menu.
3. Enter a code and a description for the defects classification.
4. Click **Save**.

You can now proceed to add a defects list to the defects catalog at **Defects > Defect lists**.

Defects lists

A defects list contains links to all conceivable defects that can occur in or on a specific asset or building element.

Adding a defects list

Defects lists are added and maintained in **Defects catalogs**, at **Defects > Defect lists**.

Procedure

1. At **Defects lists**, on the action menu, click **Add**.
2. Complete the fields in the data section.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the defects list.
Description	Enter a description for the defects list.
Asset classification	Select a relevant asset classification from the dialog box that is available in this field. An asset classification is a functional and hierarchical grouping of assets that require planned preventative maintenance.
Defects catalog	Select a relevant defects catalog from the dialog box that is available in this field.
Item group	Select a relevant item group from the dialog box that is available in this field. Item groups are used to classify assets into relevant groups that can be used to purchase or order assets.
Responsible person	From the dialog box that is available in this field, select the person who is responsible for maintaining the defects list in Supporting data .

3. Click **Save**.

You can now proceed to link defects, standard activity definitions or (standard) assets or building elements to the defects list at **Defects > Defects**.

Linking defects to a defects list

Procedure

1. At **Defects > Defects lists**, select the defects list to which you want to link defects.
2. On the action menu, click **Link defects**.
The **Link defects** dialog box appears.
3. Move the defects that you want to link to the selected defects list to **In use**.
4. Click **OK**.
The defects are now linked to the defects list.

Linking assets/building elements/standard activity definitions to a defects list

Procedure

1. Go to **Defects > Defects lists** and select the defects list to which you want to link standard activity definitions, (standard) assets or (standard) building elements.
2. On the action menu, click a relevant **Link [...]** option, for example **Link standard activity definitions**.
The **Link defects** dialog box appears.
3. Select the standard activity definitions you want to link to the selected defects list and move to **In use**.
4. Click **OK**.
The standard activity definitions are now linked to the defects list.

Defects

A defect is a fault, shortcoming or disrepair of an asset or building element.

Adding a defect

Defects are added and maintained in the **Defects catalogs** TSI, **Defects > Defects**.

Procedure

1. Go to **Defects** and on the action menu, click **Add**.
2. Complete the fields in the data section.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the defect.
Is extent fixed	Select Yes to make the extent field as read-only or select No to allow changes in the extent field when a defect is added as an observed defect.
Is intensity fixed	Select Yes to make the intensity field as read-only or select No to allow changes in the intensity field when a defect is added as an observed defect.
Is severity fixed	Select a relevant defects catalog from the dialog box that is available in this field.
Description	Enter a description for the defect.
Defects classification	Select a relevant defects classification from the dialog box that is available in this field.
Extent	Click on the reference icon and select a relevant value from the list.
Intensity	Click on the reference icon and select a relevant value from the list.
Severity	Click on the reference icon and select a relevant value from the list.

3. Click **Save**.

Now you have successfully added a defect.



To know more about extent, severity and intensity values of a defect, see [Survey standards](#).

Linking defects lists to defects

Procedure

1. Go to **Defects > Defects**, select the defect to which you want to link defects lists.
2. On the action menu, click **Link defects lists**.
The **Link defects lists** dialog box appears.

3. Select the defects list(s) you want to link to the selected defect and move to **In use**.
4. Click **OK**.
The defects list(s) are now linked to the defect.

Archiving/Dearchiving a defect

In Planon ProCenter , you can archive defects that are no longer in use or retrieve defects from the archive. To archive/dearchive defects, you need to add two actions to the layout: **Transfer to archive** and **Retrieve from archive** under the actions of layout panel.

 For adding actions to the Defects layout, see [Layouts](#)

Procedure

1. Go to Defects selection level.
2. Select the defect that you want to archive/dearchive.
3. On the action menu, click Transfer to archive/ Retrieve from archive.

To archive multiple defects at once, use Action on selection.

4. You have now archived/dearchived a defect.

Archived defects can be viewed by clicking on the **Show archived items** button. The data can only be viewed, it cannot be modified. If you want to modify the data of an archived property, you have to retrieve the property from the archive.

 When archiving a defect, the related defect details are also archived.

Delivery address

In this TSI, you can define a delivery address for properties so that the purchased products can be delivered at the correct location. A delivery address is the address where you want the supplier to deliver the ordered products. The delivery address is important and must be specified for every purchase order.

When you create a purchase order for a non-stock item, the default delivery address is always linked to the warehouse.

You can link multiple properties to a delivery address and define the default delivery address. Only one default delivery address per property is allowed.

When you define a delivery address as default and another default delivery address is already present for that property, then the previous default indication is removed from that delivery address.



A delivery address can be the default delivery address for multiple properties.

Linking properties to a delivery address

To link properties to a delivery address.

Procedure

1. Go to Delivery addresses.
2. Select a delivery address to which you want to add properties.
3. Click Link properties on the action menu.
4. Select the properties you want to link to the delivery address and move them to the In use list. You can select one or more properties from the list.
5. Click OK.
6. The selected properties are displayed in the Linked properties list. Select the Is default? check box, if you want to make the current delivery address as the default for the property.

Desk configurations

Desk configurations are used in **Reservations**, and are created and maintained in Supporting data . To each space unit you can link the possible desk configurations. In **Reservations** one of these desk configurations can be set as the standard desk configuration for a specific space unit.



For more information on using desk configurations and on setting a standard desk configuration in **Reservations**, see [Specifying a standard desk configuration](#).

Defining desk configuration types

You can specify different types of desk configurations.

Procedure

1. Go to Pick lists.
2. Select OPSTYPE.
3. Go to the Picklist items selection level.
4. On the action panel, click Add.
5. Enter a description and click Save.

A new desk configuration type is created.

Adding desk configurations to a space unit

One or more desk configurations can be added to space units, for example circle, rows or square.

Procedure

1. Go to Desk configurations.
2. On the action panel, click Add.
3. Complete the fields in the data panel.

For a description of these fields, see the following table:

Field	Description
Type	Select the type of desk configuration. Based on this desk configuration, you can select the space units in the Graphical planner. The various types of desk configuration can be defined by your organization.


Field	Description
Code	Enter a unique code for the desk configuration.
Description	Enter a description for the configuration.
Reservation unit	Here you can select the reservation unit (space unit) to which the desk configuration should be linked.
Photo / Scheme	A linked file that has not been created in Planon ProCenter , for example a document containing a photograph of the desk configuration.
Reconstruction time	The average time needed to build the required desk configuration.
Reconstruction costs	An indication of the costs involved with modifying the configuration.
Standard order	Select a standard order that will create sub-order(s) to enable personnel to change the default desk configuration to an alternative desk configuration (and change it back to the default again).

 For more information, see [Defining desk configuration types](#).

Deterioration profiles

In Supporting data > **Deterioration Profiles**, you can add and maintain deterioration curves and deterioration coordinates that are subsequently used in Planned Maintenance to estimate when the condition-based maintenance activity is to be performed on an asset or building element.

Linking a deterioration curve to an asset or building element is done in Assets . Deterioration curves are used in Planned Maintenance to calculate the projected deterioration of assets or building elements and timely schedule maintenance activities.

 For more information about condition-based maintenance and scheduling maintenance activities, see [Condition-based maintenance](#).


Adding a deterioration curve

To add a deterioration curve.

Procedure

1. Go to Deterioration Profiles.
2. On the action menu, click Add.
3. In the data section, enter a code and description.
4. Click Save.

A deterioration curve is added.

 At **Deterioration coordinates**, you can add coordinates to the deterioration curve.

Deterioration coordinates

Deterioration coordinates are used to represent a relationship between the condition scores of an asset over a period of time. Together, several pairs of coordinates (X, Y) form a deterioration curve:

The X-axis coordinates represent the factor by which the deterioration period must be multiplied.

The Y-axis coordinates represent the condition scores (for example 1... 6) of the asset or building element.

After assets or building elements in a property are surveyed, their observed condition is entered either in **Survey Management** or directly in **Asset Management**. This depends on your configuration of Planon ProCenter. Condition scores are subsequently calculated

based on these observed conditions. Calculated condition scores can be used to predict the deterioration period of an asset or building element. If a maintenance activity is subsequently carried out on the asset or building element, the condition score is updated due to the resulting improved condition.



The factor and condition score methodology is generally derived from the deterioration curves described in a national or international standard.

Adding deterioration coordinates to assets

To add pairs of deterioration coordinates that together form the deterioration curve.

Procedure

1. Go to Deterioration Profiles.
2. On the action menu, click Add.

In the data section, complete the relevant fields. For a description of these fields, see the following table:

Field	Description
Deterioration curve	From the dialog box available in this field, select the deterioration curve to which you want to add deterioration coordinates of assets.
Factor for deterioration period	Enter the factor by which the deterioration period of the asset or building element must be multiplied.
Condition score	Enter the condition score of the asset or building element.

3. Click Save.

After adding one pair of coordinates, continue to add the other pairs of coordinates until you have defined a complete deterioration curve.

Energy labels

An energy label is an element (business object) to which you can assign an image of a real energy label that is typically provided by the asset's manufacturer. The manufacturer's energy label of an appliance is usually designed to indicate its energy efficiency. Hence, by using this functionality, your organization will easily be able to view the energy efficiency of some of its assets.

You can add, delete, modify and copy energy labels in Supporting data > Energy labels. Once you have added an energy label, users can assign it to assets, rentable units or property details.

Adding an energy label

Procedure

1. Go to Energy Labels.
2. On the action panel, click Add.
3. Complete the fields on the data panel.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the energy label.
Description	Enter a description for the energy label.
Image	Select an image for the energy label. Click the Upload button to select the image from its existing location to your default image directory. To open the image and display it, click the Select a file button.

4. Click Save.

External visitors

In **External visitors**, you can add and maintain a list of external visitors, which can subsequently be used in the external visitors' list in Personnel .



For more information, see [Adding visitors](#).

Adding external visitors

Procedure

1. Go to Supporting data > External visitors.
2. On the action menu, click Add.
3. In the data panel, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Address	Select the address of an external visitor. <div data-bbox="592 1113 1318 1291"><p> The addresses are created in Contact Management.</p><p> For more information on how to add addresses, see Contact Management.</p></div>
Email	Enter the email address of the external visitor.
Comment	Enter a comment about the visitor, if necessary.
First name	Enter the first name of the visitor.
Gender	Specify the gender of the external visitor.
Initials	Enter the initials of the external visitor.
Last name	Enter the last name of the external visitor.
License plate number	Enter the license plate number of the external visitor's vehicle.
Mobile phone number	Enter the mobile phone number of the external visitor.
Phone number	Enter any other phone number of the external visitor.

Field	Description
Prefix	Enter the prefix in the external visitor's last name.

4. Click Save.

Financial years


Financial years can be added, maintained and closed in Supporting data > Financial years.

Adding a financial year

Procedure

1. Go to Supporting data > Financial years.
2. On the action panel, click Add.
3. In the data panel, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Year	Enter a year that represents the new financial year.
Description	Enter a description for the financial year.
Start date	The start date is automatically populated by adding one day to the end date of the previous financial year.
End date	Select an end date for the financial year.
	<div data-bbox="602 1262 1317 1451"> If the setting Year end date set by Planon is set to Yes in FieldDefiner > Financial years > Business object settings, the end date is automatically populated and Planon will define the financial year as an exact year with a fixed start date.</div>
Costs excl. VAT	When creating a financial year, typically, the default setting is taken from System Settings . Here you can overrule this setting for a selected financial year, if required. Click No , if you want to calculate costs including VAT or click Yes if you want to calculate costs excluding VAT.
Status	The status of the financial year is displayed: Open or Closed .

Field	Description
Journal entries generated for contract lines	If you applied the Generate journal entries for contracts action, this field will be automatically set to Yes . Journal entries are created for those contracts which belong to the selected financial year and are linked to a budget definition. For more information on the Generate journal entries for contracts action, see Adding a financial year .

4. Click Save.

Available actions for financial years

The following actions are available for a financial year:

- **Generate journal entries for contracts** – This action is run as a background action (see [Background actions](#)) and generates - per contract line - all required journal entries and corresponding postings for the selected financial year. If there is too much data to process in one run for a specific financial year, you must repeat the **Generate journal entries for contracts** action until all journal entries are generated. Once all contracts have been processed, Planon automatically switches the setting **Journal entries generated for contract lines** to **Yes** and the **Generate journal entries for contracts** action is no longer available.



The setting **Update budgets on basis of budget definition** in Field definer > Contracts > Business object settings should be set to **Yes**.

- **Adopt recurring budgets** - Selecting this action will enable you to adopt the budgets of a particular financial year.
- **Close all budgets of financial year** - Selecting this action will close all the budgets related to the selected financial year.



For more information, see [Budgets](#).

- **Closed status transition** - Enables you to close the selected financial year. A financial year can only be closed if all budgets linked to it have been closed too. If you want to close the budgets linked to a particular financial year in one go, you can select **Close all budgets of financial year**.
- **Show open contracts** - Use this action to get an overview of all contracts that are still open. When closing a period in a financial year, Planon checks if all contracts have been closed up to the corresponding closure date. A period can only be closed if all contracts have been closed. It is not always clear which specific contracts have not yet been closed, sometimes contracts are not

visible because filters are applied. This action helps you to search for all open contracts.



You can also use the action at any other time, not just at the closure of a financial period. If required, you can export the overview of open contracts to Excel.

Indexation methods

In Contracts , contract prices can be adjusted based on an indexation method. Indexation methods can be defined in Supporting data > Indexation methods.

When end users want to index contract prices in Contracts , they can select an indexation method from the pick list containing all the indexation methods which have been defined in Supporting data > Indexation methods.



For more information on using indexation methods to adjust contract prices, see [Adjusting contract prices using indexation](#).

Adding an indexation method

Prerequisites

To add indexation methods based on index groups, you must first define the required index group(s) and the corresponding index numbers in **Index groups** launch item. For more information, refer to [Defining index groups and index numbers](#).

Procedure

1. Go to Supporting data > Indexation methods.
2. From the action menu, select one of the following options:
 - **Add percentage method** - to add an indexation method based on a percentage.
 - **Add index group method** - to add an indexation method based on an index group.
 - **Add base amount indexation** - to add an indexation method based on an index group and a base amount.
3. Complete the fields in the data section.


For a description of these fields, see the following tables:

Percentage method fields

Field	Description
Percentage	Use this field to specify the percentage of the indexation method.
Period	Use this field to specify how often you wish to index, for example yearly or quarterly.

Index group method fields

Field	Description
Index group	Use this field to specify the index group the index method belongs to. You can select the relevant index group from a pick list. This pick list contains the index groups defined in Supporting data > Index groups .
Period	Use this field to specify how often you wish to index, for example yearly or quarterly.
Fixed month for numerator/denominator	<p>When you index contract prices according to an indexation method based on index groups, the new price will be calculated as follows:</p> $\frac{\text{Index number numerator}}{\text{Index number denominator}} * \text{Fixed price} = \text{New price}$ <p>If you want to use the index number of a fixed month as a numerator/denominator, you can use the Fixed month for numerator/denominator fields to specify a fixed month. The index number of this month will then be used as numerator/denominator.</p>
Relative month for numerator/denominator	<p>Use this field if you want to use the index number of a relative month as a numerator/denominator. The relative month number indicates the number of months that has to be added to the actual month in the indexation process. You can also use this field in combination with the Relative year for numerator/denominator field.</p> <p>Example: if the indexation date is 1/1/2007 and the value specified in this field is 1, the index number of February will be used as numerator/denominator.</p>
Relative year for numerator/denominator	<p>Use this field if you want to use the index number of a relative year as a numerator/denominator. The relative year number indicates the number of years that has to be added to the actual year in the indexation process. You can also use this field in combination with the Relative month for numerator/denominator field.</p> <p>Example:</p> <p>Indexation date is 1/1/2007 of a yearly indexation.</p> <ul style="list-style-type: none"> Relative month used for this index: 4 months in the past. <p>Value in this field for the</p>

 If you omit to complete this field, the month of the indexation date will be used as numerator/denominator.

Field	Description
	<p>numerator: -4. The index number of September 2006 will be used.</p> <ul style="list-style-type: none"> Value for the denominator: -16 (or relative year -1 + relative month -4). The index number of September 2005 will be used.
Is based on year index	Use this field to specify whether you want to use the year index number as a numerator/denominator.

Base amount indexation fields

Field	Description
Index group	Use this field to specify the index group the index method belongs to. You can select the relevant index group from a pick list. This pick list contains the index groups defined in Supporting data > Index groups .
Period	Use this field to specify how often you wish to index, for example yearly or quarterly.
Is based on year index	Use this field to specify whether you want to use the year index number as a numerator.
Relative year for numerator	Use this field if you want to use the index number of a relative year as a numerator. The relative year number indicates the number of years that has to be subtracted from the actual year in the indexation process. Example: if the indexation date is 1/1/2007 and the value specified in this field is -2, the index number of January 2005 will be used as numerator.
Relative month for numerator	Use this field if you want to use the index number of a relative month as a numerator. The relative month number indicates the number of months that has to be subtracted from the actual month in the indexation process.
Fixed month for numerator	<p>When you index contract prices according to an indexation method based on both an index group and a base amount, the new price will be calculated as follows:</p> $\frac{\text{Index number numerator}}{\text{Index number denominator}} * \text{Base amount} = \text{New price}$ <p>If you want to use the index number of a fixed month as a numerator, you can use the Fixed month for numerator</p>

Field	Description
	field to specify a fixed month. The index number of this month will then be used as numerator.

4. Click **Save**.

Defining index groups and index numbers

Prerequisite

If you want to use indexation methods based on index groups, you have to define the required index group(s) and corresponding index numbers. In Supporting data > **Indexation groups** you can add index groups and their corresponding index numbers. After index numbers have been linked to an index group, indexing calculations can be made.

Adding an index group

To add an index group

Procedure

1. Go to **Index groups**.
2. From the action menu, select **Add**.
3. Complete the fields in the data section.
4. Click **Save**.



Later, you can add index numbers to the index group. For more information, see [Adding index numbers](#).

Adding index numbers

To add index numbers

Procedure

1. Go to **Index groups > Index numbers**.
2. On the action menu, select **Add**.
3. Complete the fields in the data section.

For a description of these fields, see the following table:

Field	Description
Index group	In this field, you can select the relevant index group from a pick list. This pick list contains the index groups defined at the Index groups selection level.
Year	Use this field to specify the year to which the index numbers apply.
Year index number	Use this field to specify the year index number for the relevant year.
Index number — month (1-12)	Use this field to specify the index number for the relevant month.

4. Click **Save**.



Repeat the above procedures for each year that you want to define index numbers.

Indicators and assessment values

You can define a list of [indicators](#) to track the progress of a project on various aspects such as budget, planning or quality. An [assessment value](#) is associated with a color scheme to indicate the progress or status of various aspects of your project. You can define assessment values such as red for 'risk', green for 'good' and amber for 'needs attention'.

Example:

Let's assume you want to track the progress of your project based on three aspects: budget, planning and quality. For this, you create three indicators **Budget**, **Planning**, and **Quality**. You also create three assessment values: red for 'risk', green for 'good' and amber for 'needs attention'. You can now add the indicators to the project and assign assessment values to them.



For more information, see [Adding project assessments](#).

Indicators

The **Indicators** TSI allows you to add and maintain a list of indicators used to track the progress of a project in various aspects using [assessment values](#).

Adding an indicator

Procedure

1. Go to **Indicators**.
2. On the action panel, click **Add**.
3. In the data panel, enter a code and description.
4. Click **Save**.

You have added an indicator.

Assessment values

The **Assessment Values** TSI allows you to add and maintain a list of assessment values to track the progress of an [indicator](#) in a project.

An assessment value is associated with a color scheme to indicate the progress or status of various aspects of your project. You can define assessment values such as red for 'risk', green for 'good' and amber for 'needs attention'.

Adding an assessment value

Procedure

1. Go to the **Assessment values** TSI.
2. On the action panel, click **Add**.
3. In the data panel, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the assessment value.
Color	Select a color for the assessment value. For example, red.
Name	Enter a name for the assessment value. For example, risk.

4. Click **Save**.

Item groups

Item groups in Supporting data is used to classify items and supplies into relevant groups. It is intended for all items/assets that can be ordered or used by FM customers. In Planon ProCenter, three main item groups can be distinguished:

- Asset groups
- Purchase groups
- Product groups

There may be great overlaps between items that have been registered as purchase items, product items and/or assets, since items which have started out as purchase items may continue their career as product items and/or assets.

Asset groups are used to classify assets used in your company. They may include furniture, office equipment or means of transport. It is for your organization to decide which items classify as assets. Assets may have started out as purchase items and/or catalog items before they were put into use.

Supporting data is only intended to group the assets. In Assets , you can actually register assets and assign them to specific locations and people.



For more information on this subject, refer to *Assets* .

Purchase groups are used to classify items which should be purchased from external suppliers before they can be ordered by FM customers. It is for your organization to decide which types of items classify as purchase items. The purchase items themselves are maintained in Supporting data > **Item groups**.

Product groups are used to register items which can be requested directly (from stock) by FM customers. Requested products need to be purchased before they can be issued. An item is referred to as a purchase item when it is purchased and as a product when it is requested by an FM customer. Usually, only the description and the tariff charged are different. It is for your organization to decide which types of items classify as purchase items and products.

Adding item groups

You can add an item group and sub item groups, using the following procedure:

Procedure

1. Go to Item groups.
2. On the action panel, click Add to add a new purchase item.

In the data section, complete the relevant fields. For a description of these fields, see the following table:

Field	Description
Classification code	Enter a classification code for the item group.
Name	Enter a name for the item group
Display type	Select a display type from the list.
Product group	Select Yes/No . If you select Yes , the products under this group will be available in the products list in the Products Catalog.
Purchase group	Select Yes/No . If you select Yes , the products under this group will be available in the purchase items list in the Products Catalog.
Asset group	Select Yes/No . If you select Yes , the products under this group will be assets.

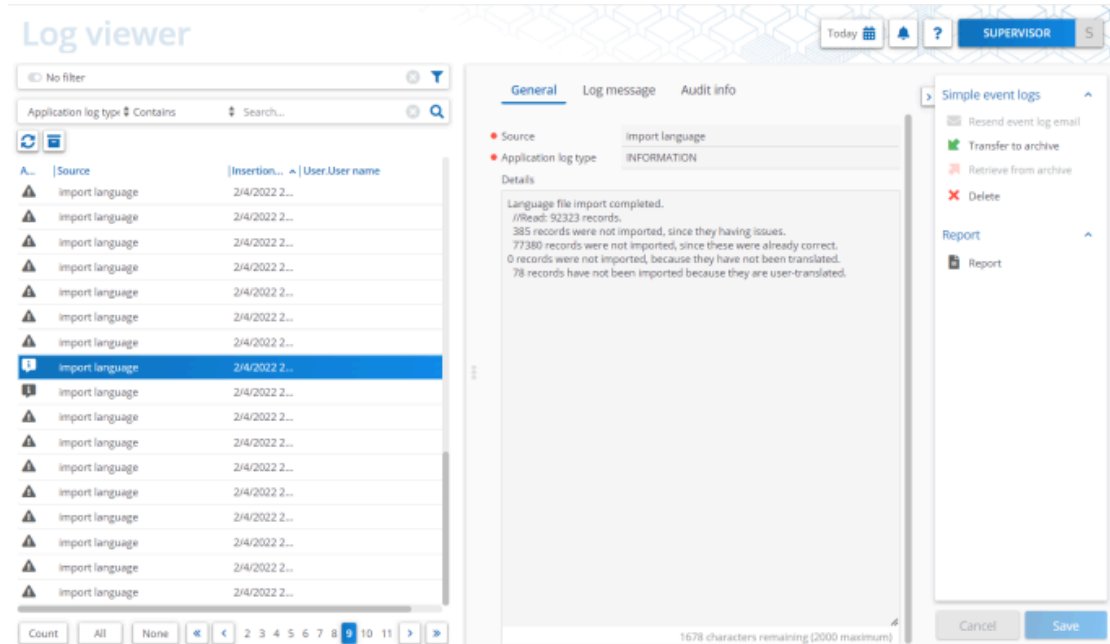
3. Click Save.



If you want to add a sub item group, select the main item group (level 1) and select **Add sub** from the action panel. The procedure for entering and saving data is identical to adding a main item group. Item groups can have three sublevels.

Log viewer

Log Viewer enables you to view information, warnings or errors regarding events (system feedback that may occur, for example, when importing a language file. This data is particularly useful to the Planon Administrator, who can then use **Log Viewer** to trace system activities and diagnose any problems that occurred.



The screenshot displays the Log Viewer interface. On the left, a table lists log entries with columns for Source, Insertion time, and User name. The selected entry is 'import language' at '2/4/2022 2...'. The main panel shows the details for this entry, including the source 'import language' and application log type 'INFORMATION'. The details text reads: 'Language file import completed. //Read: 92323 records. 385 records were not imported, since they having issues. 77380 records were not imported, since these were already correct. 0 records were not imported, because they have not been translated. 78 records have not been imported because they are user-translated.' On the right, a 'Simple event logs' panel offers actions: 'Resend event log email', 'Transfer to archive', 'Retrieve from archive', and 'Delete'. A 'Report' section is also visible with a 'Report' button. At the bottom right, 'Cancel' and 'Save' buttons are present.

Actions in Log viewer

The following actions are available in Log Viewer.

- Delete
- Transfer to archive
- Retrieve from archive
- Resend event log email



When using Planon in another mode than **Production**, mails that are automatically sent in this other mode will be suppressed. To be able to test the functionality of sending emails, you can click **Resend event log email** in order to route them to Log Viewer (instead of to the recipients). For more information, see *Administrator's Guide > Routing mails to Log viewer*.

Routing mails to Log viewer

In Production mode, (notification) mails are sent to the intended recipients. When moving an environment to another mode, and DTAP is configured as described here, mails will be routed to the **Log viewer**. For more information, see [Log viewer](#).

Process

1. If DTAP is configured as described in [DTAP environment](#), then this is visually displayed in the user interface by the **Email catcher on?** radio button in *System Settings > Email settings*. If this read-only field is set to **No**, this implies that the mode is Production.
2. If the Planon environment is moved from Production mode to another DTAP mode, this change is detected and the **Email catcher on?** setting is changed to **Yes**.
3. Emails that are typically sent to a recipient, will not be sent but will be routed to the **Log viewer**.
4. You can test the email mechanism from the **Log viewer** by selecting a mail log entry and clicking **Resend event log email** (BomResendEventLogEmail). The CC and BCC recipients will be cleared on sending the email. The BOM is only enabled when selecting a mail log entry.
5. After moving the environment back to Production, the **Email catcher on?** will be set to **No** and the mail exchange will be continued.



For Cloud environments this behavior is default. For on-premise installations, this will need to be configured.

Non-bookable period for reservation units

A non-bookable period is the time during which reservations cannot be created. You can block a reservation unit

- for a certain length of time. For example, during maintenance work.
- for repetitive periods. For example, always during lunch time.

Non-bookable periods can be defined in Supporting data > **Non-bookable periods** TSI and linked to a reservation unit. For more information on reservations, see [Reservations](#).

Adding a non-bookable period


You can make a reservation unit unavailable for the end users for a fixed period of time to limit the usage of the selected reservation unit.

Procedure

1. Go to Supporting data > Non-bookable period.
2. Click Add on the action panel.
3. Complete the fields in the data section.

For a description of these fields, see the following table:


Field	Description
Code	Enter a code for the Non-bookable period .
Description	Enter a name for the Non-bookable period .
Start date	Select the date from which the non-bookable period should start.
Start time	Select the time from which the non-bookable period is active.
End date	Select the date on which the non-bookable period ends.
End time	Select the time until which the non-bookable period is active.
Schedule	In case the non-bookable period is repetitive, select the desired frequency. You can choose from Daily ,

Field	Description
	Weekly, Monthly, Calendar and also enter Number of occurrences .
	<div style="border: 1px solid #0070C0; padding: 5px;"> <p> If no schedule is selected, the selected Start date, End date, Start time and End time will be the start and end date-time of the non-booking period. If a Schedule is filled in, the start and end dates indicate the overall period and start and end time indicate the repetitive period.</p> </div>
Reservation unit details	The reservation units linked to this period are displayed here.

4. Click Save.

You have now added a non-bookable period.

Now, you can link the non-bookable period to a reservation unit using the **Link reservation unit** option on the action panel. The non-bookable period is then shown when creating reservations on the Graphical planner, Kiosk and Room booking panel.

 If there are reservations already created for this period, you have to move/remove these reservations *manually*.

Objective classifications

Objective classifications can be used to add and maintain objective classifications. By setting up a classification structure you can classify and group objectives that are related to the same topic, such as energy or water. Classifications can be linked to an objective definition in the Objectives TSI.

For more information on working with Objectives , see [Objectives](#).

Adding objective classifications

Procedure

1. Go to the Objective classifications TSI.
2. On the action panel, click Add.
3. Enter a Code and Name.
4. Click Save.
5. If relevant, enter subclassifications. In total, an objective classification can have 4 levels.

You can now proceed to link these classifications to objective definitions via the **Objective classification** field in the Objectives TSI .

Objective's origins

Objective's origins are used in the Objectives TSI to specify the reason why an objective was defined, for example a governmental reason, a local reason, a company reason. By using objective's origins, you can organize and group objectives with the same origin. Objective's origins can be linked to an objective definition in the Objectives TSI. Objective's origins can be added and maintained in Supporting data .

For more information on working with Objectives , see [Objectives](#).

Adding objective's origins

Procedure

1. Go to the Objective's origins TSI.
2. On the action panel, click Add.
3. Enter a Code and Name.
4. Click Save.

You can now proceed to link an origin to an objective definition via the **Objective's origin** field in the Objectives TSI .

Pick lists

In *Planon ProCenter*, there are two types of pick lists:

- **Pick list code descriptive:** For each choice in the pick list a description and a code are available. End users can either select an option from the pick list or type the corresponding code in the field.
- **Pick list descriptive:** For each choice in the pick list a description is available.

For the available pick lists provided by Planon, refer to [Appendix Maintainable pick lists](#).

Configuring pick lists

You can configure these pick lists in the following way:

Procedure

1. Go to Pick lists.

Here, you can modify existing pick lists (descriptive or code descriptive) or create a new one by using the relevant Add option from the action menu.

2. Go to the Pick lists items level.

Here, you can add new items to the pick list.

After completing the new pick list, you can link it to a free field.



For more information see [Linking pick lists to free fields](#), (Field definer).

Archiving pick list items

Pick list items (descriptive or code/descriptive) that are obsolete can be transferred to the digital archive in Planon ProCenter. You can also de-archive the items.

You can archive user pick list items and system pick list items.

To archive multiple pick list items in one go, you can use **Action on selection**.



For more information see [Action on selection](#) (Fundamentals).

Project classifications

Project classifications is a TSI that is used to add and maintain project classifications. By setting up a classification structure you can classify and group your projects. Classifications can be linked to a project in the Projects TSI.

Adding project classifications

Procedure

1. Go to the Project classifications TSI.
2. On the action panel, click Add.
3. Enter a Code and Name.
4. Click Save.
5. If relevant, enter subclassifications. In total, a project classification can have 4 levels.


You can now proceed to [link](#) these classifications to projects via the **Project classification** field in the Projects TSI .


Property sets

A property set is a data set comprising multiple properties (buildings and building complexes). The demo version of Planon ProCenter has a property set that includes various properties and corresponding data for demonstration purposes.

The functional application manager can maintain property sets in Supporting data > Property sets.

Accelerator customers can maintain property sets in System settings > Property sets.

 Deleting a property set, including its many properties and linked data, may take a long time!

 For information on granting user groups authorization to a specific property set, refer to *Authorization*.

Adding a property set

Procedure

1. Go to Property sets.
2. On the action panel, select Add.
3. On the data panel, enter a unique code and a description.


Note: the code cannot start with a blank space.

4. If relevant, enter a default email address for this property set in the Sender's email address field and one or multiple default email addresses in the Reply email address field.

Email address fields in Planon ProCenter for which no specific user defaults have been set will be automatically populated with the values you enter here.

5. Click Save.

A new property set is added.

 If you add a new property set, the following components are automatically created for the newly created property set:

- Site
- Web client
- Homepage

Adding a new property set in the Planon Cloud

The Planon Cloud supports using multiple property sets.

 Using multiple property sets in the Planon Cloud is subject to *licensing*. For more information, check your Planon consultant.

Procedure

1. Go to Property sets and add a new property set.
2. Fill out the Code and Description.


 The **Code** field only accepts the following characters 0-9, Aa-Zz (no spaces).

3. If relevant, enter a default email address for this property set in the Sender's email address field and one or multiple default email addresses in the Reply email address field.

Email address fields in Planon ProCenter for which no specific user defaults have been set will be automatically populated with the values you enter here.

4. Select a value in the Separate WebDAV location for Cloud field.

This field only works for Cloud environments. Yes means that the new property set will get its own unique WebDAV location. If you select No, the default /webdav/ location will be used.

 Planon recommends setting this field to **Yes**. If you change this setting to **No** after creating the property set, the file location falls back to /webdav/ but the file structure that was created will actually remain to exist (until the corresponding property set is removed).

5. Click Save.

A warning message appears informing you that creating a new property set can take a while and that you can view progress in the Log viewer.

6. Click Proceed.

Another message may be shown, informing you that one or more business objects are being configured. Click OK and refresh your list.

The newly created property set will appear in the elements panel. However, if the creation fails, it will be removed from the elements list without further notification, nor will you be prompted when creating the property set is completed. Go to the Log viewer to find out what the property set status is.

Log viewer entries show the following stages of the property set's creation:

- Creation of the property set is *triggered* (by the user account)
- Configuration is *started* (by CLOUDADMIN)
- Creation is *completed* (by CLOUDADMIN)

Any errors and warnings are also logged here.

7. When the property set is created, obtain the WebDAV details of your new property set in your Environment Management gadget.

The property set is reflected in the Help > About menu.

8. If you want to access the WebDAV location via FTP, make sure to fill the correct environment credentials. The default directory is: `.../webdav`.
 - A new WebDAV account and URL will be created for each property set
 - The new WebDAV location will be: `.../webdav-<propertysetcode>/`

If you want to access another WebDAV location, please change directory by using the correct credentials.



To delete a property set, you must first delete the (web configuration) sites linked to your property set

Priorities

In **Priorities**, the functional application manager or someone with similar rights can maintain a list of priorities for *orders*. See [Adding a priority](#).

In Planon, this configured list can be used in various ways:

- In **Work orders**, when creating an order, back-office users can select a priority from a pick list to specify the period within which this order must be executed.
- If you work with **SLA services**, the priorities are used to determine which KPIs apply to ensuing orders. See [KPI](#) for more information.
- In **Assessments and Observations**, priorities on observations play a role in determining the execution period of orders that result from follow-up actions. See [Observation priorities](#) for more information on observation priorities.
- In **Assets**, you can select a priority on an asset, to determine the execution period of (maintenance) orders. This is especially convenient if you do not use SLAs or a [priority matrix](#).

Adding a priority

Proceed as follows to add a [priority](#).

Procedure

1. Go to Priorities.
2. On the action panel, click Add.
3. Complete the fields on the data panel.
4. For a description of these fields, see the following table:

Field	Description
Priority code	Enter a code for the priority.
Description	Enter a description for the priority.
Period	Select a duration: Minute , Hour , Day , Week , Month or Year . In the Quantity field, enter the appropriate number of instances for the selected time unit. You can also select Unspecified , if no period applies. The Period field also plays a part in ranking an observation priority. See Observation priorities for more information on observation priorities.

Field	Description
Observation sequence	This field is only relevant if you use the <i>observation priorities</i> feature. The number you enter here is partly decisive for ranking the observation priority. In general, the lower the value you enter, the more urgent the priority. See Observation priorities for more information on observation priorities.

5. In the Period field, .
The Period dialog opens.
6. Select a duration for the priority: Minute, Hour, Day, Week, Month or Year. In the Quantity field, enter the appropriate number of instances for the selected time unit. You can also select Unspecified, if no period is selected.
7. Click Save.

You have added a new priority. The priority will be displayed in the elements list.

Priority matrices

When adding an order of any type in, for instance, **Service Manager**, **Service Desk** or **Reservations** TSIs, end users can enter the severity and an impact of the incident associated with the order.

The severity of an incident is a numeric value that typically indicates how serious the incident is. For example, on a scale of 1 to 10, 10 could be used to describe a life-threatening situation such as a power outage occurring in a medical facility.

The impact of an incident is a numeric value that typically indicates the number of people affected by the incident. For example, on a scale of 1 to 10, 10 could be used to describe the failure of a major server that jeopardizes the entire IT network within an organization, thus affecting nearly everyone in the organization.




The severity and impact scales used are purely arbitrary can be in either ascending or descending order, however this order should be the same for both quantities. These parameters are set up by the Planon Administrator in Supporting data > **Priority Matrix**.

A priority matrix multiplies the impact and severity of an order and then matches this number to its correct priority range. Since each priority range has a defined priority associated with it, orders with a specified impact and severity are automatically assigned a priority for their completion.

When adding a priority matrix in **Priority Matrix**, the Planon Administrator defines all of the possible impacts and severities that are available to be assigned to orders as well as priority ranges. When adding a priority range, the Planon Administrator specifies a minimum and maximum value for the product of impact and severity, thus defining a numeric range. The administrator then specifies a priority (time to be completed in) for that priority range.

If a priority matrix is added and is then assigned to an order type in, for instance, **Service Manager, Service Desk** or **Reservations**, Planon ProCenter will automatically specify a priority for a new order of that type based on the **Severity** and **Impact** values entered.

 You can also assign a priority matrix to a standard order. Whenever an order is generated that is based on this standard order, the specified priority matrix is applied. For details on standard orders, see [Maintaining standard orders](#).

Example of planning and adding a priority matrix

Let's assume that we want to add a priority matrix to Planon ProCenter and then assign this matrix to all orders of type **Request**.

We will use severity and impact scales of 1 to 6, whereby, the least severity and impact will be of value 1, and the greatest severity and impact will be 6.

Our impact x severity product will therefore range from 1 to 36.

When we add our new priority matrix in **Priority Matrix**, we would then add six impacts and six severities.

Impact/ Severity	1	2	3	4	5	6
1	1	2	3	4	5	6
2	2	4	6	8	10	12
3	3	6	9	12	15	18
4	4	8	12	16	20	24
5	5	10	15	20	25	30
6	6	12	18	24	30	36

We could also add six priority ranges for the products of these impacts and assign priorities (completion times) as follows:

Impact x Severity	Priority (completion time)
1 to 6	Whenever possible
7 to 12	Within 1 month
13 to 18	Within 1 week
19 to 24	Within 2 days
25 to 30	Within 4 hrs
31 to 36	Immediate

Once the priority matrix is complete, we can then specify it as the default priority matrix for the relevant order type (in this case, **Requests**) in **Field Definer**.



For information on the scenarios explaining how a company calendar is applied depending on the interval for the priority, refer to *Service Manager > Calculating the Requested completion date*.

Adding a priority matrix

Procedure

1. Go to Priority Matrix.
2. On the action menu, click Add.
3. In the data section, complete the relevant fields.
4. Enter a code and description for the new priority matrix.
5. Click Save.

The priority matrix you added appears in the elements list. You can now descend to the **Priority matrix details** selection level to add impacts, severity and priority ranges to the new priority matrix.

Adding an impact

Procedure

1. Go to Priority matrix.
2. In the elements list, select a priority matrix to which you want to add an impact.
3. Descend to Priority matrix details > Impact.
4. On the action menu, click Add.
5. In the data section, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the new impact. This field is mandatory.
Description	Enter a description for the new impact.
Impact value	Enter a number to represent the magnitude of the impact on your organization's own predefined scale.

6. Click Save.

The impact you added now appears in the elements list. Repeat the procedure from step 4 onwards to add all of the impacts to be made available to end users for the selected priority matrix.

Adding a severity

Procedure

1. Go to Priority matrix.
2. Select the priority matrix to which you want to add a severity.
3. Descend to Priority matrix details > Severity.
4. On the action menu, click Add.
5. In the data section, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the new severity. This field is mandatory.
Description	Enter a description for the new severity.
Severity value	Enter a number to represent the magnitude of the severity on your organization's own predefined scale.

6. Click Save.

The severity you added now appears in the elements list. Repeat the procedure from step 4 onwards to add all of the severities to be made available to end users in the selected priority matrix.

Adding a priority range

Procedure

1. Go to Priority matrix.
2. Select the priority matrix to which you want to add a priority range.
3. Descend to Priority matrix details > Priority range.
4. On the action menu, click Add.

5. In the data section, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Code	Enter a code for the new priority range. This field is mandatory.
Description	Enter a description for the new priority range.
Minimum value	Enter the minimum value of the impact x severity product to be included in the priority range.
Maximum value	Enter the maximum value of the impact x severity product to be included in the priority range.
Priority	Click the pick list button in this field to open the Priority dialog box in which you can specify a time in which orders belonging to the selected priority range are to be completed by.

6. Click Save.

The priority range you added now appears in the elements list. Repeat the procedure from step 4 onwards to add all of the priority ranges to be made available to end users via the selected priority matrix.



When adding a priority range, the range of values defined by the minimum and maximum values must be unique for that particular priority matrix. For example, if a priority range of 1 to 10 has already been added and you attempt to add a new priority range for the values 10 to 20, a message will appear stating that the range you are attempting to add overlaps an existing one.

Assigning a default priority matrix to an order type

Procedure

1. In the Launch Center, click FieldDefiner.
2. On the Business Objects selection level, select the main business object Orders and set its status to Under construction.
3. Expand Orders and select the relevant order type (for example, Reservations > User Reservations).
4. Descend to Details > Fields.

5. In the elements list, select the Priority matrix field and in the data section, click the pick list button in the Default value field to specify a default priority matrix.
6. Click Save.
7. Return to the Business objects selection level and set the status of the Orders business object back to Completed.

The default priority matrix you specified will now be automatically specified for all new orders of that particular type.

Priority coloring

The **Priority coloring** TSI allows you to color the descriptions of different order types and contract types in the elements list in order to create a priority list based on a time interval and the assigned color. This feature can be used in all TSIs where orders and contracts can be created.

This TSI is included in **Supporting data** , but it can also be set up independently.

Priority coloring can be applied to the *user-defined types* of the following order types and contract types:

- Contract orders
- Work orders
- Purchase orders
- Reservations
- Requests
- Requisitions
- Move orders
- Move requests
- Maintenance orders
- Maintenance plan group orders
- Service contracts
- Lease contracts

With **Priority coloring**, you can define a color scheme to display orders and contracts based on their **Date-time coloring**.

For example, you can assign a specific color to the description of orders (in the elements list) to indicate the priority of their completion. Another example of applying priority coloring is to assign a specific color to orders whose completion is more than an hour overdue.

The display of orders in different colors supports users in recognizing and completing the most important work first, especially when dealing with SLAs.

Coloring orders and contracts based on priority

It is possible to apply colors to the display of orders and contracts, to indicate their priority. Priority order coloring is especially useful if you are working with Service Level Agreements (including KPIs, such as time to react (TTR) and time to complete (TTC)).

In the **Work Orders** and **Contracts** TSIs you can activate the coloring feature on the elements list using the **Show color based priority** toggle button. The **Date-time coloring**

field on the order and the contract can be used to display a reference to the coloring scheme.



For more information on the toggle button and the **Date-time coloring** field on orders and contracts, refer to the Work Orders and Contracts documentation.

Procedure

1. In Priority coloring, click Business object definition.
2. Select a user-defined contract type or order type from the list, for example Move order.

Coloring can only be defined on user-defined business objects.

3. Go to Priority order coloring for orders.
4. Click Add on the action panel.

Complete the fields in the data section. For a description of these fields, see the following table:

Field	Description
Business object definition	Select a business object definition from the list.
Priority	<p>The priority has a prefilled value, but you can modify it. You can create a maximum of 10 priorities per user-defined type.</p> <p>It is recommended to limit the number of priority coloring settings, as performance in the Work Orders TSI may be affected by large numbers of coloring settings.</p>
Description	Enter a description for the color priority setting.
Lower range value in working minutes	<p>Enter a lower range value in minutes.</p> <p>Use negative values for orders / contracts that need to be colored in the past.</p> <p>A time range is unique. You cannot create another range with the identical values.</p> <p>It is also possible to set non-continuous ranges.</p>
Upper range value in working minutes	Enter an upper range value in minutes.
Color	Select a color from the palette. Orders: The orders that have to be picked up / completed etc. within the specified range are colored with the selected color. Contracts: The contracts whose next notice date

Field	Description
	falls within the specified range are colored with the selected color.

5. Click Save.

A new Priority coloring range is created. With these Priority coloring settings, the orders' descriptions are displayed in different colors in the Work Orders TSI after clicking the Show color based priority toggle button.



You can also copy a priority coloring setting from one user-defined business object to another, using the **Copy to** action, provided that this user-defined business object belongs to a different *system type*.

Recurrence periods

Orders, such as reservations, can be repeated within a pre-defined period. For example you can plan your weekly meetings per three-monthly periods, creating a pre-defined period for each quarter. You can define and maintain recurrence periods in **Recurrence periods**.

To add a recurrence period:

Procedure

1. Go to Recurrence periods.
2. Click Add in the action menu.
3. In the data section, complete the relevant fields.

For a description of these fields, see the following table:

Field	Description
Description	Enter a description for the recurrence period.
Start date	The date after which the first order should to be generated. This date does not necessarily have to be the start date of the first generated order.
End date	The date after which no orders should be generated anymore. This date does not necessarily have to be the start date of the last generated order.

4. Click Save.



For details on how to make an order recur, see [Making an order recurrent](#) and [Making a reservation recurrent](#).

Regulations

Regulations frequently serve as the starting point for maintenance work or other essential activities. The regulations themselves may arise from the legislative requirements or industry standards that your organization seeks to comply with.

If regulations apply to any of your (maintenance) activities, you can add these in Planon ProCenter in the Regulations TSI and subsequently link them to the appropriate (standard) assets or (standard) activity definitions.

Adding regulations

Procedure

1. Go to the Regulations TSI > Regulations selection level.
2. On the action panel, click Add.
3. Enter the required information on the data panel.

For information on the field descriptions, see [Regulation fields](#)

4. Click Save.

Base assets (assets / building elements), Standard assets and Standard activity definitions can be linked to one or more applicable regulations. Vice versa, you can also link regulations to assets from within the Assets TSI or to standard assets from within the Asset library TSI.



When you deep copy an asset, any linked regulations are also copied. If a regulation is linked to a standard asset and you create a asset based on that standard asset, the linked regulation(s) is / are also copied.


Regulation fields

Field	Description
Code	Enter a code for the regulation.
Name	Enter the name of the regulation.
Valid from	Select a date from which the regulation is valid.

Field	Description
Valid till	Select the date until which the regulation is valid.
Comment	If relevant, enter comments to the regulation.
Linked activity definitions	Displays the details of any linked activity definitions, such as location information.
Linked assets	Displays the details of any linked assets.
Linked standard activity definitions	Displays the details of any linked standard activity definitions, such as service plan information.
Linked standard assets	Displays the details of any linked standard assets.

Reservation arrangements

Reservation arrangements are used in **Reservations** as a charge back method for reservation costs. In an arrangement, a fixed price per person is arranged, for instance for a morning meeting including lunch. Provided that you have the appropriate authorization, you can add and maintain arrangements in the Supporting data .

 For more information on using arrangements and specifying reservation costs, refer to *Reservations*.
For more information on authorization, refer to *Authorization*.

Adding a reservation arrangement

Proceed as follows to add an arrangement.

Procedure

1. Go to Reservation arrangements.


The elements section displays the existing arrangements.

2. From the Arrangements action menu, select Add.

Complete the fields in the data section. For a description of the arrangement data registration, see the following table:

Field	Description
Code	The code of the arrangement. The arrangement's code should be unique.
Name	A description of the arrangement. The arrangement's name should be unique.
Minimum number of people	In this field you can specify the minimum number of people that will participate in the arrangement.
Price of arrangement	The arrangement price per person.

3. Save your arrangement data.

 If you delete an arrangement that is linked to a reservation, the arrangement remains linked to that reservation even after it has been deleted and consequently the costs also remain. However, the arrangement concerned can no longer be linked to new reservations.

Reservation unit facilities

A list of facilities, which can be booked along with a space unit, can be maintained in Supporting data > **Facilities (reservation units)**. Facilities may be fixed or portable, for example: video projectors that are fixed to the ceiling of particular space units, or portable projectors, which can be used in all space units. Portable facilities can be registered as asset units in **Reservations**.

Facilities are used in **Reservations** and they should be registered in Supporting data .

When booking a space unit, end users can select any required facilities, such as a projection screen, a video projector or sound equipment. Using the graphical grid in **Reservations** , they can find a space unit on the basis of specific facilities available.



For more information on using facilities in **Reservations**, refer to *Reservations*.

Maintaining facilities

You can define a list of up to 50 different facilities for reservation units. For example: phones, video projectors, audio equipment etc.



It is possible to edit the pre defined list of 50 facilities, to tune it to your organizations requirements. However, it is not possible to add or delete any facilities.

Defining reservation facilities

Proceed as follows to define new facilities.

Procedure

1. Go to Facilities (reservation units).

The elements section displays all existing facilities.

2. Click the facility whose data you want to edit in the elements section.
3. Complete the fields in the data section.

For more information on the available fields, see the following table:

Field	Description
Name	Enter a description of the selected facility. The facility's name will be displayed in the

Field	Description
Visible	element section and in the dialog boxes in the Reservations TSI. A Yes/No field to specify whether a facility is to be displayed in the relevant dialog boxes and filters.

4. Click Save.

Roles

Both Transactions and Projects include the use of teams. Team members that are added to these teams have a role to fulfill in their teams. Examples of roles are: project manager, architect, site agent, supervisor etc. The various roles that team members can fulfill must be added and maintained in Supporting data > **Roles**.



For the basic principles of adding, deleting, copying and archiving elements in Planon ProCenter, refer to *Fundamentals*.

Adding a role

Proceed as follows to add a role.

Procedure

1. Go to Roles.
2. On the action menu, select Add.
3. Complete the fields in the data section. Enter a code and description.
4. Click Save.

A new role is added.

Survey standards

In Supporting data > **Survey Standards** you can view and maintain survey standards that can be subsequently used in Surveys, Planned Maintenance , and Defects Catalog.

A survey standard, based on the NEN 2767 method, comprises a set of values at various levels for **Extent** (1 to 5), **Intensity** (1 to 3) and **Severity** (1 to 3), to calculate the **Condition Score** of an asset. For a description of the survey standard NEN 2767 method, see the following table:

NEN 2767 method	Description
Extent	The net amount in which a defect is present in relation to the total surveyed net amount of a construction or an installation. The extent can be expressed as an area, a piece, unit of length or a number.
Severity	The degree of influence that a defect has on the operability of a construction or an installation.
Intensity	An indicator to mark the phase in which the defect occurs. Condition surveys discerns three categories: Intensity 1: Low (starting phase) – The defect is hardly noticeable. Intensity 2: Middle (advanced phase) – The defect is clearly noticeable. Intensity 3: High (end phase) – The defect is very apparent and can hardly/cannot increase.

In Planon ProCenter , you can only change the code and description of the various levels of extent, intensity, severity and condition score at Supporting data > **Survey Standards**.



For more information about surveys and survey elements, see [Surveys](#).
For more information about maintenance, see [Planned maintenance](#).

Standard orders

In Planon ProCenter, standard orders are a kind of 'template' orders, which end users can use to speed up the process of feeding new orders into the system. If an end user applies a standard order, much order data is automatically entered that he or she would otherwise have to enter manually.

End users will benefit from applying standard orders in TSIs such as Work Orders , **Service Desk**, **Knowledge Base** and **Reservations**. In addition, standards orders are used in TSIs that enable automatic order generation, such as the **Service scheduler**, **Maintenance planner** or **Web Configuration** TSIs.

Planon administrators can define (add, copy, delete, modify, archive) standard orders in Supporting data > Standard Orders. Standard orders that are obsolete can be deleted.

Standard orders can have standard suborders, keywords, questions, costs, estimates, purchase order lines, requisition lines and order lines. Moreover, standard orders should always be linked to a user-defined order. The linked user-defined order determines what type of order will ensue from the standard order when it is applied by the end user. The choice of user-defined orders depends on what user-order types are used in your organization. For example: complaints, breakdowns, catering orders, cleaning orders etc.



In contrast with regular orders, standard orders do not have status transitions of their own. However, an order that is based on a standard order will have the status transitions corresponding with the linked user-defined order. The *initial status* of an order based on a standard order is determined by the status that is selected in the **Status** field of the standard order.

Adding a standard order

Proceed as follows to add a standard order.

Procedure

1. Go to Standard orders.

The elements section displays the existing standard orders.

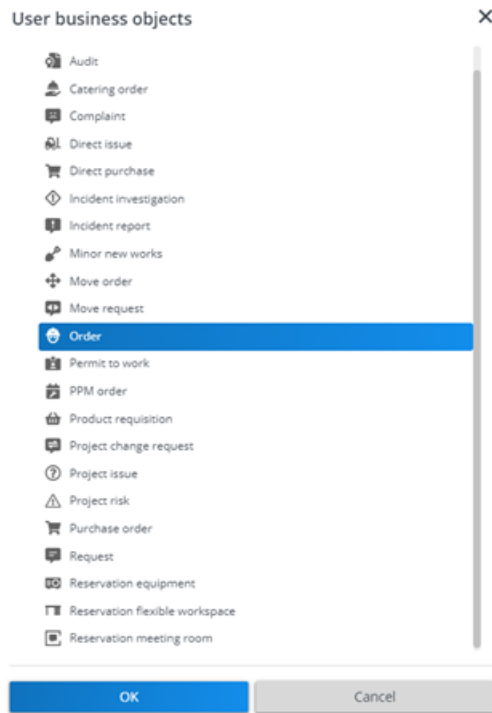
2. On the action panel, click Add.

The **User business objects** dialog box appears.

3. Select a relevant order type from the User business objects dialog box and click OK.

Based on the selected order type, a new standard order is created. This determines what order type the standard order will be, once it is applied: standard work order, standard

request, standard reservation, standard PPM order and so on.



i The order types you see in the list are configurable (user-defined). For more information, see [Settings for the standard order business object](#).

4. Select an initial status for the standard order in the User-defined status field.
5. Complete the other relevant fields in the data section.

For more information on the available fields, see the following table:

Field	Description
General	
Code	In this field, enter a relevant code for the new standard order.
Order group	In this mandatory field, select the order group to which the standard order should be linked. This can be chosen from a pick list.
User-defined type	This field specifies the standard order's initial user-defined order type.

Field	Description
Status	In this mandatory field you must enter the standard order's <i>initial</i> status. When end users apply the standard order / request this status will be the initial status of the new order / request.
Property	In this mandatory field, select a property from the pick list to link the standard order to a property.
Reservation unit	In this field, you can select a reservation unit from the pick list to link the standard order to a department.
Asset	In this field, you can select an asset from the pick list to link the standard order to an asset.
Description	Enter a fitting description that is to be displayed on the new order / request when the standard order is applied. End users can modify this description as required.
Priority	You can select a priority from a pick list to specify the term within which the standard order must be carried out.
Department	In this field, you can select a department from the pick list to link the standard order to a department.
Budget	In this field, select the budget to which the order costs should be booked.
Assigned by	In this field, select the person for whom an order is completed (and who is charged for it). An option can be chosen from a pick list including all addresses of this type in the Contracts TSI.
Trade	In this field, you can link the standard order to a specific trade, which can be selected from a pick list.
Cost category	In this field, you can select a cost category from a pick list.
Project	In this field you can select one of the available projects from a pick list.
To be approved by	The person who must authorize the order. For this field a pick list is available, containing people from the Personnel TSI.
SLA service	Use this field to link an SLA service to a standard request or a standard order. This is very useful because when creating a request or order, the


Field	Description
	correct SLA service is always completed based on a standard.
SLA priority	Specify a number to search for an SLA. By specifying an SLA priority for the order, a specific SLA can be found via the SLA scope.
Weighting	Specify a number to indicate the importance of the order. Based on the weighting, the completion time score and response time score are calculated.
Display type	<p>A display type is a specific set of data that the Planon administrator can choose to make visible for Planon ProCenter elements such as Orders, Properties, People, Contracts, Item groups and Assets. Click the button within this field to open the Display type pick list from which you can specify a display type for the selected user-defined business object.</p> <p>If the name of a user-defined business object is not displayed correctly in the Display type pick list, change the translation of the user-defined business object in Field Definer.</p>

Standard order links

Applicability user groups	Specify to which user groups the standard order applies. The options are: All , None or Specific . If you select Specific , you have to make the actual link to the user groups via the action menu. In Service Desk, only standard orders that are linked to the user group of the entered Internal requestor will be displayed.
Applicability item groups	Specify to which item groups the standard order applies. The options are: All , None or Specific . If you select Specific , you have to make the actual link to the item groups via the action menu. In Service Desk, only standard orders that are linked to the item group of the entered Asset ID will be displayed.
Applicability properties	Specify to which properties the standard order applies. The options are: All , None or Specific . If you select Specific , you have to make the actual link to the properties via the action menu. In Service Desk, only standard orders that are linked to the entered Property will be displayed.
Applicability space categories	Specify to which space categories the standard order applies. The options are: All , None or Specific . If you select Specific , you have to make the actual link to the space categories via the action menu. In

Field	Description
	Service Desk, only standard orders that are linked to the space category of the entered Space will be displayed.
User group detail	Displays all linked user groups if the Specific option is selected in the Applicability user groups field. This field will be empty, if All is selected in the Applicability user groups field.
Asset group detail	Displays all linked asset groups if the Specific option is selected in the Applicability item groups field. This field will be empty, if All is selected in the Applicability item groups field.
Property detail	Displays all linked properties in case the Specific option is selected in the Applicability properties field. This field will be empty, if All is selected in the Applicability properties field.
Space category detail	Displays all linked space categories in case the Specific option is selected in the Applicability space categories field. This field will be empty, if All is selected in the Applicability space categories field.


6. Click Save to save your standard order data.

 Use the **Priority matrix** field, if you want to assign a priority matrix to a standard order. For details on this subject, see [Priority matrices](#).


Depending on your requirements, you might also want to add suborders to the new standard order (standard request, standard reservation, standard work order and so on). See [Adding standard suborders](#).

Adding standard suborders

Standard orders are hierarchical elements. This means you can add standard suborders to the main standard order. The below table lists which type of standard suborder can be added to which type of main standard order. Horizontally, the main standard orders are shown, vertically the standard suborders. As you can see, not all types of standard order can have suborders or can be added as a suborder to another standard order.

 This table only shows the standard system order types that are currently supported in Planon ProCenter.

Main Std. Order → Std. suborder ↓	Std. request	Std. work order	Std. reservation	Std. requisition	Std. purchase order	Std. move request	Std. move order	Std. planned maintenance order
Standard request	Yes	Yes	Yes	No	No	No	No	Yes
Standard work order	Yes	Yes	Yes	No	No	No	No	Yes
Standard reservation	No	No	Yes	No	No	No	No	No
Standard requisition	Yes	Yes	Yes	No	No	No	No	Yes
Standard purchase order	Yes	Yes	Yes	No	No	No	No	No
Standard move order	No	No	No	No	No	No	No	No
Standard planned maintenance order	No	No	No	No	No	No	No	No
Standard move request	No	No	No	No	No	No	No	No

 To add a sub to a standard order, use the relevant **Add sub** option from the action menu.

Calculating the start and end date-time of an order based on a standard order

When creating an order, for example a reservation, based on a standard order with subs that have a different start and end date/time, the value on the standard order template is not taken over in determining the start and end date-time of the suborders.

However, the values on the standard order are taken into account when adding the standard order to create a reservation, for example. That is, the start and end date-time of the sub reservations is calculated based upon the start and end date-time of the main reservation.

This means that when an order (reservation) is created (with subs), the delta of the start and end date-time of the main and sub orders as is defined on the standard order is carried through to all its subs.

For instance:

Standard Reservation

BeginDateTime 1.1.2013 9:00

EndDateTime 1.1.2013 17:00

Standard SubReservation

BeginDateTime 1.1.2013 8:30

EndDateTime 1.1.2013 17:30

Standard SubWorkorder

BeginDateTime 1.1.2013 10:00

EndDateTime 1.1.2013 10:15

When a reservation is made from 8:00 - 12:00 based upon the above standard reservation, the result will be:

Reservation

BeginDateTime 14.10.2013 8:00

EndDateTime 14.10.2013 12:00

Standard SubReservation

BeginDateTime 14.10.2013 7:30

EndDateTime 14.10.2013 12:30

Standard SubWorkorder

BeginDateTime 14.10.2013 9:00

EndDateTime 14.10.2013 9:15

Adding details to standard orders

You can add details to most standard orders, such as estimates, costs, keywords, questions, and order lines.



Standard planned maintenance orders cannot have details.



For more information on estimates, costs and order lines, see *Service Manager*.

Keywords and questions can be added to standard orders to help end users find a relevant standard order more quickly and easily. For a description of these fields, see the following table.

Keywords are used in **Standard order** dialog boxes in relevant TSIs.


Selection step	Description
Keywords	You can use the Standard orders details selection level > Keywords selection step to link keywords to a standard order, to make it easier for end users to find a standard order, even if you are not sure to which work order group or trade the request concerned belongs.
Questionnaire	Displays the questionnaires that are linked to the standard order. The sequence number determines the display order of the questionnaires in the linked standard order in the Service Manager TSI.


Linking questionnaires to standard orders

You can link questionnaires to standard orders. A single standard order can be linked to several questionnaires.

Procedure

1. Go to the Standard orders TSI.
2. Click the **Standard orders** level and select the standard order to which you want to link questionnaires.
3. On the action panel, click **Link questionnaires**. The **Link questionnaires** dialog box appears.
4. Select the questionnaires you want to link from the **Available** list and move them to **In use**.
5. Click **OK**. The questionnaires are linked to the selected standard order.
6. To unlink, select the questionnaires in the **In use** list and click the left arrow button. The questionnaires are moved back to the **Available** list.

 Linking a great number of questions to a standard order can have a negative impact on the performance. The impact will become evident when processing an order that is based on this standard order. The exact number of questions that will reduce the performance, as well as the impact on the performance depends on your local infrastructure. However, it is recommended to limit the number of linked questions to 25.

 If you work with Planon AppSuite, do not link an LMRA questionnaire to a standard order, because this would result in an undesired work flow. If the back-office creates an order based on this standard order with linked LMRA questionnaire, field engineers are unable to receive an uncompleted LMRA questionnaire in the EHS wizard. Instead, the back-

office staff would be required to answer the LMRA questionnaire, which is not intended for them.

Adding links to standard orders

Besides questionnaires, you can also link other specific items to standard orders, such as properties, space categories, asset groups and user groups.

As with questionnaires, you can link multiple items to a single standard order and vice versa (link multiple standard orders to a single item).

The links between standard orders and these items play an important part in **Service Desk**.

Examples:

The **Service Desk** module in the Planon ProCenter Web Client needs links between standard orders and properties, space categories, asset groups and user groups for its filtering (Service List functionality).

Planon's mobile applications also use these links for filtering purposes.

Procedure

1. Go the **Standard orders** TSI.
2. On the **Standard orders** level, select the standard order to which you want to link properties, asset groups, space categories or user groups.
3. Click **Link [...]** (**properties, asset groups, space categories** or **user groups**) on the action menu. The **Link [...]** dialog box appears.
4. Select the relevant items from the **Available** list and move them to the **In use** list.
5. Click **OK**. The selected items are now linked to the selected standard order.

Defining a standard order's applicability

To make sure that only relevant standard requests & standard orders are shown, for example in Planon Live apps (Planon Workplace app), in Planon application (Service Desk > Add panel) or in Planon Self-Service (Service List), you can specify to which properties, space categories, asset groups and user groups a standard order should apply.

Procedure

1. Go to the Standard orders TSI.

On the Standards orders layout, there are four applicability fields: Applicability user groups, Applicability asset groups, Applicability properties and Applicability space categories.

2. In each of the applicability fields, select the scope of applicability: All, None or Specific.

3. If you have selected **Specific** in any of the fields, go to **Links** on the action panel and click the relevant **Link ...** action, to link the required user groups / properties / space categories / item groups to the standard order. For more information on creating links, refer to **Adding links to standard orders**.

The linked standard orders are displayed in Service Desk, Self-Service or in the Planon Live app when entering a property, space, asset or person or when filtering on these elements.



If you change an option from **Specific** to either **All** or **None**, a warning is displayed on saving the standard order. If you continue, in spite of the warning, all links to properties, space categories, asset groups and user groups will be deleted.



If the **Link** action to standard orders is available on the relevant layout, it is also possible to link multiple standard orders to properties, space categories, item groups and user groups.

Order flow

Planon ProCenter enables you to define an order flow on the standard orders to enable the automatic processing of suborders in accordance with the defined process flow. The order flows must be first defined in **Supporting data > Standard Orders** so that they can be applied on the regular orders (by linking the standard order to them). Order flows are very useful in performing the repetitive mini-projects effectively.

Workflow object

A workflow object is that through which the process flow is carried out. You can define various workflow objects on a standard order. The following workflow objects are available:

- Tasks
- Events - Start and End
- Gateways - Parallel, Exclusive, Inclusive

Task

A **Task** is a unit of work, a job to be performed to complete an order. A task is one of the workflow objects and is associated with a suborder in an order flow.

Event

A start/end point of an order flow.

For every order flow, there is a single start event and one or more end events depending on the order flow.

Sequence flow

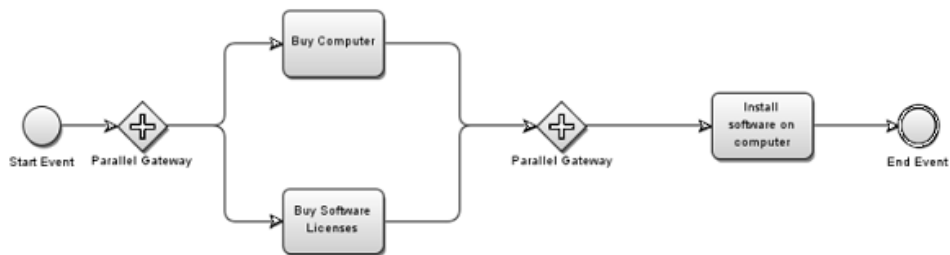
Connects the various flow objects of an order flow. It links two flow objects and can have an answer condition in case it connects an exclusive/inclusive gateway to a subsequent flow object.

A flow object can be a **predecessor** or a **successor** in a sequence flow. The predecessors and successors in an order flow can be a task, an event or a gateway.

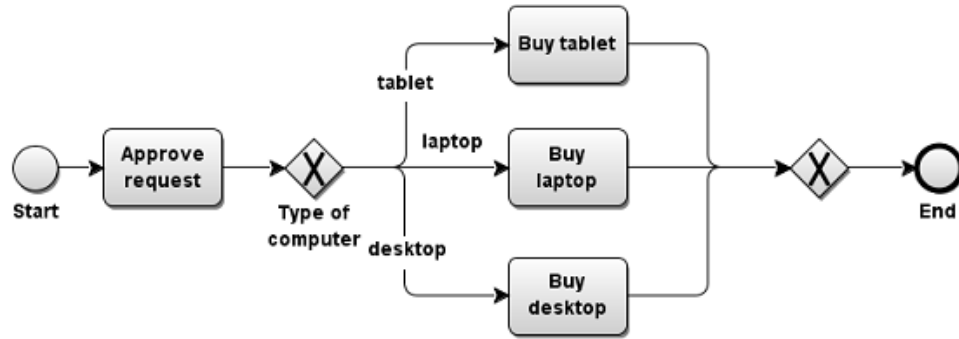
Gateway

Gateways control the process flows in an order flow. Planon ProCenter supports these gateways.

- **Parallel gateway:** Triggers parallel flows. When the process arrives at the parallel gateway node, the sequence flow splits into multiple branches for each parallel task. All the outgoing tasks will then merge again into a joining parallel gateway. Only when all the tasks are completed, this gateway will be completed which then triggers the next flow object(s).



- **Exclusive gateway:** Allows only one of the outgoing paths to be taken in the process flow. It has only a single flow that depends on the answer on the **Single select question** defined on the gateway. All other outgoing flows will be cancelled, as they are mutually exclusive. When merging, the gateway awaits for one incoming branch to complete before triggering the outgoing flow.



- **Inclusive gateway:** Inclusive gateway can trigger one or more outgoing paths. They could all be taken, or only one of them.
- Which outgoing flows are activated depends on the answer on the **Multi select question** defined on the gateway. All other outgoing flows will be canceled. For example, the software to be installed on a computer.



On the gateways, you can only link questionnaires having the **Is audit** field set to **No**.

Adding order flows

In order to apply order flows on regular orders, you must first define workflow objects and the sequence flows in the **Standard Order TSI**.

You can apply order flows on the user defined order types such as a Request, Work order or Move order by linking a standard order with an order flow.

Procedure

1. Go to the **Standard orders** selection level.
2. Select a standard order on which you want to define an order flow.
3. Create the standard suborders that are to be linked to the tasks in the order flow.
4. Create the questionnaires and questions that are to be linked to the exclusive/inclusive gateways in the order flow and subsequently link these questionnaires to the standard order or any of its suborders.




For more information on creating questionnaires and questions, see *Questionnaire Manager*.

5. On the **Standard order details** level, select **Workflow objects**. Here you define the order flow by adding the workflow objects.
6. On the action menu, select to add any of the following standard workflow objects: **Start event**, **Task**, **Exclusive gateway**, **Inclusive gateway**, **Parallel gateway** and **End event**.


7. Complete the fields in the data section. For a description of these fields, see the following table:

Field	Description
Code	Enter a code to identify the workflow object.
Name	Enter a description for the workflow object.
Standard order	Select a standard order on which you want to define the workflow. If you drill down by selecting a standard order, this field will be filled automatically.
Standard suborder	Select a standard suborder for the workflow. This field is only available for the Standard task .
Question	Select a question, depending on which the workflow will be executed.
Questionnaire	Select a questionnaire with the questions for the workflow to be executed.
Standard order with questionnaire	Select a standard order on which the questionnaire is defined. Since any suborder can have a questionnaire, it is important to specifically select the standard order on which the questionnaire is defined.

 The Question, Questionnaire and Standard order with questionnaire fields are only available for exclusive/inclusive gateways.

8. After creating the workflow objects, you must create the sequence flows to connect the various workflow objects of an order flow.

On the **Standard order sub details** level, add sequence flows such as **Predecessors** and **Successors**.

 The **Answer condition** field is available only when the predecessor is an exclusive/inclusive gateway on which a question has been defined. Only the answer options linked to the question that is defined on the (exclusive/inclusive) gateway are displayed.

9. Continue to create sequence flows until all the flow objects that you want in an order flow are covered.

Survey cluster profiles

In Supporting data > Survey Cluster Profiles you add and maintain the cluster profiles and cluster profile criteria that are subsequently used in **Surveys** to process survey data. The goal of clustering survey elements while processing survey data is to efficiently populate Assets with new assets and asset condition data.



For more information about surveys and survey elements, refer to *Surveys*. For more information about condition data, refer to *Assets*.

Cluster profile

Survey cluster profiles are used in **Survey Management** to apply default and additional cluster criteria to create new assets / building elements and asset conditions in **Asset Management** after processing survey data. A cluster profile intrinsically contains some default criteria that are applied when processing survey data.

The default clustering criteria for assets are:

- Property,
- Standard asset,
- Unit of measurement,
- Survey activity definitions,

The default clustering criteria for condition data are:

- Unit of measurement,
- Observed condition before maintenance.

Survey elements that have matching field values for the above mentioned criteria can be clustered into one asset. For survey activity definitions, all the field values should match except the field **Quantity**.

For examples, refer to [Examples of applying cluster criteria during the processing of survey data](#).



You must at least add one cluster profile to be able to process survey data in **Survey Management**.

At the **Cluster profile criteria** selection level, you can add some additional cluster criteria to a cluster profile.

Adding cluster profiles

Use the following procedure to add a cluster profile.

Procedure

1. Go to **Cluster Profiles**.
2. On the action menu, click **Add**.
3. In the data section, add a code and description.
4. **ClusterSurveyElements (Y/N)**: Specify if the clustering of survey elements is permitted or not. By default, the field is set to **Yes**.
5. Click **Save**. A cluster profile is created.

At **Cluster profile criteria**, you can add additional cluster profile criteria to the cluster profile.

Cluster profile criteria

The default and additional cluster profile criteria specify how survey elements from **Surveys** are to be clustered and how they populate Assets with new information, when processing survey data.

The cluster profile criteria added in Supporting data are an addition to the default cluster criteria that are applied when processing survey data in Surveys.

You can add additional cluster criteria for:

- **Assets**. The defined criteria are used to efficiently add new assets / building elements in Assets after processing survey data in Surveys;
- **Conditions**. The defined criteria are used to add new condition data and condition details in Assets after processing survey data in Surveys.

Adding additional cluster criteria for assets

Use the following procedure to add additional cluster criteria for adding new assets / building elements to **Asset Management**.



All survey elements in **Survey Management** that are based on a standard asset / standard building element are used to create new assets / building elements.

Procedure

1. At **Cluster profile criteria**, click **Add cluster criteria for assets** on the **Cluster profile criteria** action menu.

In the data section, complete the relevant fields. For a description of these fields, see the following table:

Field	Description
Cluster profile	From the dialog box available in this field, select the cluster profile to which you want to add cluster criteria for assets.
From survey element field	<p>From the dialog box available in this field, select the survey element field that must be used as an additional cluster criterion.</p> <p>For example, if you want to cluster survey elements by their alternative classification, select the Alternative classification field.</p> <p>The selected field must be put in In use in FieldDefiner.</p>
To asset/condition field	<p>From the dialog box available in this field, select an asset/building element field that must be populated.</p> <p>For the clustering to work, you must select a field of the same field type as in the From survey element field. Also, the selected field must be put in In use in FieldDefiner.</p>

2. Click **Save**.

For an example, see [Examples of applying cluster criteria during the processing of survey data](#).

Adding cluster criteria for conditions

Use the following procedure to add additional cluster criteria for adding / updating the asset condition details in **Asset Management**.

Procedure

1. Go to **Cluster profile criteria**.
2. On the action menu, click **Add Cluster criteria for conditions**.
3. In the data section, complete the relevant fields. For a description of these fields, see the following table:

Field	Description
Cluster profile	From the dialog box available in this field, select the cluster profile to which you want to add cluster criteria for conditions.
From survey element field	From the dialog box available in this field, select the survey element field that must be used as an additional cluster criterion.

Field	Description
	<p>For example, if you want to cluster survey elements by their survey site select the Survey site field.</p> <p>The selected field must be set in In use in FieldDefiner.</p>
To asset / condition field	<p>From the dialog box available in this field, select the asset / building element field that must be populated.</p> <p>For the clustering to work, you must select a field of the same field type as in the From survey element field. Also, the selected field must be In use in FieldDefiner.</p>

4. Click **Save**.

For an example, see [Examples of applying cluster criteria during the processing of survey data](#).

Examples of applying cluster criteria during the processing of survey data

Example 1 - Matching default criteria only:

Processed survey elements in Survey Management:	Clustering criteria (default)	Result in Asset Management:
Survey element 1	Property = P1 Standard asset = SA1 Unit = m2	New asset 1: Property = P1 Standard asset = SA1 Unit = m2
Survey element 2	Property = P1 Standard asset = SA1	

Processed survey elements in Survey Management:	Clustering criteria (default)	Result in Asset Management:
	Unit = m2	

Example 2 - Matching default & additional criteria:

Clustered / processed survey elements in Survey Management:	Criteria (default & additional)	Result in Asset Management:
Survey element 1	Property = P1 Standard asset = SA1 Unit = m2 Alternative classification = A	New asset 1: Property = P1 Standard asset = SA1 Unit = m2 Alternative classification = A
Survey element 2	Property = P1 Standard asset = SA1 Unit = m2 Alternative classification = A	

Example 3 - Non-matching default & additional criteria

Clustered / processed- survey elements in Survey Management:	Criteria (default & additional)	Result in Asset Management:
Survey element 1	Property = P1 Standard asset = SA1 Unit = m ² Alternative classification = East	New asset 1: Property = P1 Standard asset = SA1 Unit = m ² Alternative classification = East
Survey element 2	Property = P1 Standard asset = SA1 Unit = m ² Alternative classification = West	New asset 2: Property = P1 Standard asset = SA1 Unit = m ² Alternative classification = West

SX Configuration

Planon ProCenter licensees are able to add their own functionality and business rules to the Planon ProCenter system (customizations). If they want to embed additional business logic, they can create extensions (pieces of Java code) in their preferred Java development environment.



For more information on extending your Planon ProCenter API library with solution extensions, refer to *Solution Extensions* or your Planon consultant.

After having programmed extensions, they should be registered in Planon ProCenter, via **SX Configuration**.

Registering extensions

To register new extensions Planon administrators have to go through the following steps:



Procedure

1. Go to SX Configuration.
2. Click Extensions, if you need to register a solution extension. For registering a task user extension, select Task user extensions.
3. Click Reload on the action menu to load all the available extensions.
4. To add a single extension, click Add on the action menu.
5. Complete the relevant fields, in the data panel section. For a description of these fields, see the following table:

Field	Description
Class name	Enter the exact name of your extension, or select the class name of a solution extension (SX) from the pop-up. The pop-up displays all the unregistered SXs that are loaded via an OSGI bundle. You cannot select SXs that are registered via classpath; these have to be entered manually.
Is available	Indicates whether the SX is available.
System code	Displays a generated code to identify the SX.
Business object type	Displays the BO type for which the SX works.
Description	If a description of the extension has been defined in the programmed code, this field will automatically display it.

Field	Description
Update count	Displays an incremented value indicating the number of times this field has been updated.
Usages	Displays all the business objects where the extension is linked in FieldDefiner. It is available only in the Extensions step.

6. Click Save.

-  You must link the extension to a business object in **Field Definer** to execute it on an action of a specific business object. For task user extensions, you must add the user extension as a task user extension in the **Scheduled tasks** TSI.
-  For more information, see [Linking extensions to business objects](#) (Field Definer).

Tariff groups - reservation units

Tariff groups for reservation units are used in **Reservations**, as a charge back method for reservation costs. A tariff group is a detailed set of tariff amounts (per hour, morning, afternoon, night etc.) and cancellation fees for a specific type of reservation unit.

Provided that you have the appropriate authorization, you can add and maintain tariff groups for reservation units in Supporting data .

If you have the appropriate authorization, you can add, delete, copy, modify and archive tariff groups in **Tariff groups (reservation units)**.



For more information on using tariff groups and specifying reservation costs, refer to *Reservations*.

For more information on authorization, refer to *Authorization*.

Adding a tariff group for a reservation unit

Proceed as follows to add a tariff group for reservation units.

Procedure

1. Go to Tariff groups(reservation units).

The elements section displays the existing tariff groups.

2. On the action menu, click Add.
3. Complete the fields in the data section.

For description of these fields, see the following table:

Field	Description
Tariffs	
Tariff group code	Specify the tariff group code.
Description	Enter a description for the tariff group.
Start time day tariff	It is mandatory to specify a start time for the day tariff. Click the clock icon to open the Select a time dialog box.
Hourly rate	Specify the hourly rate that applies to the reservation unit to which the selected tariff group is linked. At least one tariff must be specified. This means that at least one of the fields Hourly rate , Morning tariff , Afternoon tariff , Day


Field	Description
	tariff, Weekly tariff, Monthly tariff or Annual tariff must be completed.
Day tariff	Enter the amount that should be paid if the reservation unit linked to the tariff group is booked for one day.
Morning tariff	Enter the amount that should be paid, if the reservation unit linked to the tariff group is booked for one morning.
Weekly tariff	Enter the amount that should be paid, if the reservation unit linked to the tariff group is booked for one week.
Start time afternoon tariff	Specify the start time of the afternoon tariff. Click the clock icon to open the Select a time dialog box.
Tariff per period	Specify the amount that should be paid, if the reservation unit to which the selected tariff group is linked is booked for a specific period. This field plays no part in the automatic generation of reservation costs.
Afternoon tariff	Enter the amount that should be paid, if the reservation unit linked to the tariff group is booked for one afternoon.
VAT tariff	From the pick list available in this field, select a relevant VAT tariff.
Start time night tariff	Specify the start time of the night tariff. You can click the clock icon to open the Select a time dialog box.
Night tariff	In this field, you can enter the amount that should be paid if the reservation unit linked to the tariff group is booked for one night.
Annual tariff	Enter the amount that should be paid, if the reservation unit linked to the tariff group is booked for one year.
End date day tariff	It is mandatory to specify an end time for the day tariff. You can click the clock icon to open the Select a time dialog box.
Monthly tariff	Enter the amount that should be paid, if the reservation unit linked to the tariff group is booked for one month.

Field	Description
Discounts	
Fixed discount	If you prefer to work with fixed discounts for the selected tariff group, you can specify the discount in this field.
Discount percentage	If you prefer to work with a fixed discount percentage for the selected tariff group, you can specify the percentage in this field.
Cancellation costs period [...]	
Description	Enter a description for the cancellation period that applies to the reservation. For example: Cancellation 1 week in advance, Cancellation 1 day in advance etc.
No. of days till reservation	Enter the number of calendar days (i.e. working days and non-working days) until the start time of the reservation to which this tariff group's cancellation costs apply. The values have to be specified in ascending order. This means that the value specified for Cancellation period 1 , has to be smaller than the value specified for Cancellation period 2 . Also, the various periods have to be contiguous. So, it is not allowed to only complete cancellation periods 1, 3 and 5, for example. However, it is not mandatory to complete all five periods. If a reservation gets the Canceled status and cancellation costs are charged as a result, the current date will be considered to be the cancellation date.
Percentage of sum total	Enter a percentage of the reservation costs, which should be charged as cancellation costs. The field can be completed individually, but it can also be combined with the Fixed amount field. If both fields are completed, the sum of the two amounts will constitute the total cancellation costs.
Fixed amount	Enter a fixed amount for cancellation costs. The field can be completed individually, but it can also be combined with the Percentage of sum total field. If both fields are completed, the sum of the two amounts will constitute the total cancellation costs.

Field	Description
Transferred to archive (Y/N)	If a tariff group is archived, <i>Planon ProCenter</i> will automatically specify Yes in this field.

4. Save your tariff group data.

The new tariff group is now available in the tariff group pick list that can be opened from within the **Tariff group** field. This field is available on the **Asset units** selection step and the **Space unit** selection step in the **Reservations TSI > Components** selection level. In these selection steps, you can actually link tariff groups to reservation units.

 If you delete a tariff group that is linked to a reservation, the tariff group remains linked to that reservation even after it has been deleted and consequently the costs also remain. However, the tariff group concerned can no longer be linked to new reservations. For a description of the tariff group data, see the table in this topic.

Tariff groups - working hours

A tariff group is a detailed set of tariff amounts for working hours. If you have the appropriate authorization, you can define and maintain tariff groups for working hours in the **Tariff groups - working hours** launch item.

Tariff groups for working hours are used in the Work Orders TSI, as a charge back method for order costs. The tariff group must be linked to the internal tradesperson to whom an order is assigned. This is done in the Personnel TSI. Once an order is assigned to this internal tradesperson, the linked tariff group is used to calculate the labor hour costs of the order.

If you want to specify tariffs groups in greater detail, for example define tariffs for *overtime*, *weekends*, *bank holidays* and so on, you must define special tariffs on the **Working hours - special tariffs** selection step. For information on adding special tariffs for working hours see [Tariff groups - special tariffs](#).

Adding a tariff group for working hours

Tariff groups for working hours are added in **Tariff groups (Working hours)**, at the **Tariff groups hours** selection level.

Procedure

1. Select the Tariff group hours selection step.
2. Click Add on the action panel.
3. Enter a description, code (maximum of 30 characters) and date for the tariff group. See the below example for a suggestion on how to configure tariff groups.
4. In the Hourly wage field, select the wage that corresponds with this tariff group.
5. In the VAT tariff field, enter the tax rate that must be applied to the hourly wage.
6. Click Save.

The tariff group is added.

7. Repeat this action for any additional tariff groups you require.

Tariff group code	Tariff group description	Hourly wage
T1	Low	45

Tariff group code	Tariff group description	Hourly wage
T2	Medium high	60
T3	High	80
T4	Consultancy	100

Tariff groups - special tariffs

Special tariffs can be used to define special working hours, such as weekends, bank holidays and overtime. You can define and maintain special tariffs for working hours in the Supporting data navigation group.

If you have the appropriate authorization, you can add, delete, copy, modify and archive special tariffs in the **Tariff groups - working hours** navigation item.

Special tariffs for working hours are used in the Work Orders TSI, as a charge-back method for order costs. The special tariff must be linked to the internal tradesperson to whom orders are assigned. This link is made in the **Special tariff** field in the Personnel TSI. Once an order is assigned to an internal tradesperson, the relevant special tariff and its associated special tariff lines are used on the order to calculate the labor hour costs for special working hours.

Adding a special tariff for working hours

Special tariffs are added in , at the **Tariff groups** selection level.

Procedure

1. Go to Tariff groups (Working hours).
2. Drill down to Tariff groups > Working hours-special tariffs.
3. On the action menu, click Add.
4. Enter a name and code for the special tariff. See the example below for a suggestion on how to configure special tariffs.
5. Click Save. A special tariff is added. Repeat this action for any additional special tariffs.

Special tariff code	Special tariff name
01	Electricians
02	Plumbers
03	Painters

Special tariff code	Special tariff name
04	Inspectors

Adding a special tariff line

Special tariffs lines are added to a special tariff in **Tariff groups (Working hours)**, at the **Working hours tariff group details** selection level.

Procedure

1. Select the Working hours special tariff lines selection step.
2. Click Add on the action menu.
3. Enter a name and code for the special tariff line. See the below example for a suggestion on how to configure special tariff lines.
4. In the Special tariff field, select the special tariff to which you want to link the special tariff line.
5. In the Surcharge field, enter the percentage that must be applied to the hourly rate, for example 200, if the hourly rate is doubled.
6. You can also only select a tariff group in the Working hours tariff group field and apply that as a special tariff. For example a higher tariff group. You can select this tariff group instead of a surcharge or *in combination* with a surcharge.
7. Click Save. The special tariff line is added.
8. Repeat this action for any additional special tariff lines you require.

Special tariff code	Special tariff name	Special tariff line code	Special tariff line name
01	Electricians	BH	Bank holiday
01	Electricians	W	Weekends
02	Plumbers	BH	Bank holiday
02	Plumbers	W	Weekends
02	Plumbers	O	Overtime

Tax rates / VAT rates

In Supporting data , you can create your own specific list of tax/VAT rates and link a specific tax/VAT rate to, for example, an order or a contract line. When order costs or contract line commitments are calculated, the costs including tax/VAT are calculated according to the linked tax/VAT rate.

Adding tax/ VAT rates

Procedure

1. Go to **Tax/VAT**.
2. On the action panel, click Add.
3. Complete the fields in the data panel.

For description of these fields, see the following table:

Field	Description
Code	Specify the tax rate code.
Description	Enter a description for the tax rate.
Percentage	Enter the tax percentage.

4. Save your tax/VAT rate data.

The new tax rate is now available in the tax rate pick list that can be opened from within the **Tax rate/VAT rate** field in the following TSIs:

- Assets
- Contracts
- Cost settlement
- Invoices
- Purchasing
- Reservations
- Service providers-subcontractors
- Service Level Agreements
- Stock
-

Work Orders

User sessions

The **User Sessions** TSI allows you to view all currently active Planon ProCenter user sessions as well as previous user sessions. This enables you to see who is currently logged on to the application and who was previously logged on and is subsequently logged off.

Logon and logoff timestamps are recorded in both the server's and the user's time zone. To distinguish between the server's and the user's time zone, multi-time zone must be enabled.

The field **Last activity's timestamp** records timestamps of whenever users last saved or accessed an element in Planon ProCenter. This field is disabled by default and before it can be used, it must first be enabled in **Field Definer** by a Planon administrator.



- The **Last activity's timestamp** setting is not enabled by default because it comes with a performance penalty. If you start logging for each user this will create a considerable overhead. Only enable this setting if you need the information to retrieve more detailed information for analyzing issues.
- For details on how to do this, see [Settings for the User sessions business object](#) (Field definer).

Viewing active user sessions

The procedure to view active user sessions is as follows:

Procedure

1. Go to User sessions.
2. On the Active user sessions level, the elements section displays a list of all currently logged on users, together with their logon time stamps. This information is also duplicated in the data section, in which the logon time stamp can be overwritten if necessary. The data section also includes a time stamp of when a user last saved or accessed an element in Planon ProCenter, if this option is enabled.

Viewing all user sessions

The procedure to view both active and previous user sessions simultaneously is as follows:

Procedure

1. Go to User sessions.

2. On the All user sessions level, the elements section displays a list of all users who are currently logged on and those who have used the application in the past, together with their logon and logoff time stamps. This information is also duplicated in the data section, in which the time stamps can be overwritten if necessary. The data section also includes a time stamp of when the user last saved or accessed an element in Planon ProCenter if this option has been enabled.

Deleting user sessions

The **User sessions** TSI enables the Planon Administrator to view which user accounts are currently in use, and which user accounts were previously in use.

The Planon Administrator can delete user sessions stored in the list as required.



Deleting a user session while the respective user is logged on will not actually log the user off. The user is able to continue using Planon ProCenter.

Procedure

1. In the User sessions list, select a user session.
2. In the data section, check whether a logoff time stamp is entered, or enter one manually and click Save.
3. On the action menu, click Delete, and click OK in the Question dialog box that appears. A warning message appears.
4. Click Proceed.
5. The user session is deleted from the list.

Workspace types

Workspace types in Supporting data is used to create a particular type of a workspace such as a lab, a doctor's workspace, an architect's desk, a Manager's workspace and so on.

A workspace detail can only have one workspace type. A workspace type can be linked to more than one workspaces. You can see the workspace types being used in Spaces & Workspaces , Moves and CAD Import.

Appendix - Maintainable pick lists

Maintainable pick lists provided by Planon (code descriptive)

The following table lists the BO name and the corresponding system pick lists available in Planon ProCenter.

BO name	System pick list
AddressCategory	ADRSOORT
CauseGroup	OORZGRP
ContractClass	CONCLAS
ContractFormCCN	CONVORM
ContractTrade	VAKGROEP
ContractType	CONTRTYPE
ControlCertificate	CONT CER
DimensionCode	DIMENSIE
EscalationLevel	ESCALATIONLEVEL
FinancialAccount	REKENING
Floorcode	ETAGECODE
FunctionalityClass	FUNCTIONALITYCLASS
GeographicalLocation1	GEO1
GeographicalLocation2	GEO2
GeographicalLocation3	GEO3
Inex	INEX
Inspection	CONTROLE
InspectionRegime	ASPECT

BO name	System pick list
LocationType	LOCATIONTYPE
MaintenanceBudget	BUDGET
MaintenanceFreeGroup1	VRIJECODE1
MaintenanceFreeGroup2	VRIJECODE2
MaintenanceLevel	MAINTENANCELEVEL
MaintenancePriority	URGENTIE
MaintenanceWorkType	WERKSOORT
OwnershipType	OWNERSHIPTYPE
PropertyContractType	KONTYPE
PropertyType	OBJTYPE
ProtectionClass	BEKLAS
RiskLevelCode	RISKLEVEL
TerrainType	TERRAINTYPE
TradeCode	VAKGROEP

Maintainable pick lists provided by Planon (descriptive)

The following table lists the BO name and the corresponding system pick lists available in Planon ProCenter.

BO name	System pick list
Country	LAND
DeskConfigurationType	OPSTYPE
Neprom	NEPROM
ReservationInventoryUnitCategory	IRESEENHSRT
ReservationSpaceUnitCategory	RESEENHSRT

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