Data onboarding

Planon Software Suite

Version: L105

About this Document

Intended Audience

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

Contacting us

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

Document Conventions

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

Italic text
Application names are displayed in italics.

CAPITALS
Names of keys are displayed in upper case.

Special symbols

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

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About Data onboarding

Data onboarding enables customers to gather and import data into Planon easily. The tools involved in this process are easy to use and require no knowledge of XML nor specific Planon configuration skills.

Process description

1. The Application Manager liaises with the customer and creates a Planon configuration.
2. Based on the layout configuration, a data onboarding definition and a template (Excel) is generated.
3. The customer downloads the template (Excel) in **Data onboarding** and fills out the required data.
4. The customer ensures that the Excel file is compliant with the template and uploads it in **Data onboarding**.
5. The file is validated, if no errors occur the data can be imported into Planon.

> ℹ️ For information about the first two steps, refer to Generating an SDI definition in TSIs .

Data onboarding - Concepts

The following sections list the concepts in **Data onboarding**:

- SDI definition
- Template
- Data sheet
- Validation

SDI definition

A ready to use import definition for onboarding data, which comes with a template (Excel) that is based on a Planon layout. You can generate an SDI definition in TSIs or in Layouts .

You can download the template of the data onboarding definition and add data in Excel. Subsequently, this file can be uploaded and imported into Planon by using **Data onboarding** or **SDI Configuration**.

Template

An SDI definition comes with a template (Excel) that can be used to import data into Planon.

When opened in Excel, a specific layout will be visible showing all fields of the layout and their properties, guidelines that will help you when filling out the data.

The cell colors used in the sheet have a specific meaning.

- Green: field properties.
- Red: mandatory field/part of ID field.
- Yellow: specific format is required (picklists). When hovering your mouse over the field, the possible values will be displayed in a tooltip.
- Blue: field name.
- Orange: fields that are needed to set a reference. All fields should be filled in to be able to set the reference.

> ℹ️ Do not edit the header, this information is required for the import.

Amount fields in Excel

Data sheet

The template file that is completed with data that you want to import into Planon. This file must comply with the field properties of the template. When completed, you can upload the data sheet in **Data onboarding** or in **SDI Configuration**.

> ℹ️ Do not edit the header, this information is required for the import.

Amount fields in Excel

Validation

A check to ascertain that the data to be imported complies with specific rules.

For uploading a data sheet, the following initial validation is performed to check whether:

- All fields to be imported (compared against the layout) are available.
- Additional fields are added to the data sheet.
- The maximum number of supported rows in the data sheet (10,000) is not exceeded.

When these validations are passed, the following validations are checked against:

- Are the fields set according to the configuration?
  - Len: Length exceeds Planon input length
  - Man: Mandatory field not populated

> ℹ️ Typically, mandatory fields must have a value in the data sheet (Excel). There is an exception for fields that are mandatory and that have a default value in Planon. If this is the case, the cells in the data sheet can be left empty. If there is a default value available, the header row in the data sheet will indicate this.

  - ID: Part of search key field not populated
  - Uni: Field not unique
  - Type: Field type does not match
  - Form: Format does not match
- Are unknown pick list values entered (warning when non-enforced pick list)?
- Has the configuration changed (layout, BO definition) in between?
- Are/is the (combination of) part of search key unique?

If a reference field without a unique ID is available in the data sheet, and therefore other fields have been added to the data sheet and this reference field is set, the corresponding ID fields should also be filled out.

After encountering 5 empty rows, the validation will stop. After completing the validation, the status of the definition will be set to **Validated** or **Validated with errors**.

Working with Data onboarding

The following topics describe how to use **Data onboarding** for downloading/uploading data. **Data onboarding** has three levels:

- Definitions
- Logs
- Log details

> ℹ️ **Data onboarding** is not meant for adding definitions, this is done by the application manager.

Downloading a template

1. On Definitions level, click Download template on the action panel.

   The template is downloaded and appears in your browser's download location. Apart from the fields based on a Planon layout, this template is empty. You can proceed to fill in the data in the template.

   When filling in the data sheet it is good to keep the specifics in mind.

> ℹ️ • Data onboarding definitions are only visible in the elements panel if they are set to **Active** in SDI Configuration.
>
> • For more information about the fields on the **Definitions** level, see Definition fields.

Uploading a data sheet

Once your are done completing and verifying the data in the Excel file, you can proceed to upload it.

1. On Definitions level, click Upload data sheet.
2. Browse to and select the data sheet that you want to upload.

   The data sheet is uploaded and will be validated. Any errors or warnings that are encountered during validation are subsequently logged and displayed on the Logs level.

Amount fields in Excel

Uploading links

In addition to field values, it is also possible to import reference data, such as links between properties and stores or between properties and permits to work. These links include

- One-to-many (M-to-N) links.
- Multiple select free fields (MSFF) links.

> By generating an SDI definition, a template is created. The template only holds the search (part of ID) fields of the two business objects that need a relation (link). It is possible to add multiple relations to the same business object.

Validating a data sheet

After uploading a data sheet you can validate its content. A valid data sheet is a prerequisite for uploading data into Planon.

1. In the elements panel, select the definition to be validated.
2. On the action panel, click Validate data sheet.

   The data sheet is validated. After completing the validation a message appears, pointing to view the logging for the results. The definition's system status on Definitions level is updated accordingly.

> For an overview of the validation actions, see validation.

3. Go to the Logs level to view the validation results.

Running an SDI definition

Click **Run** to run the SDI definition manually. The process will be initiated as a background action. The progress of the SDI definition process can been seen in the **Background action progress** bar in the **Background actions** TSI. For more information about background actions, see Supporting data.

After running the definition, the data in the data sheet is imported into Planon. Subsequently, logging will be generated for the imported data.

> In order to import the data, the corresponding definition in SDI Configuration must be **Active**.

Viewing logs

After importing your data from the data sheet, errors and warnings encountered during import are displayed on the **Logs** level. You can view the log (details) in order to fix issues.

There are various ways of accessing logs.

Download latest log

To get immediate feedback on the results of the latest run, you can download the latest log. For more information, see Download latest log.

Download logs

To view multiple logs in a single PDF you can download them using the **Download logs** action. For more information, see Download logs.

Navigation selection

1. On Definitions level, select your simple import data definition and go to Logs level.

   The Logs level displays the results of a running the definition.

2. Select one or more items from the list, and go to Log details level to view the details of the issues encountered.

   Here, you can view all errors and warnings for the selected run. For more information about the fields on these levels, see Log / Log details fields.

Download latest log

To get immediate feedback on the results of the latest run, you can download the latest log.

1. On **Definitions** level, select your import definition and click **Download latest log**.

   This will always download the log of latest action that is performed. The log itself is a formatted PDF, which you can view in your browser or by using a PDF viewer.
   Example

Summary of total import:

Document: Employee

Start date-time: 2018/03/01 10:57:59 GMT+5:30

End date-time: 2018/03/01 10:57:59 GMT+5:30

UsrEmployee:

Number of business objects processed: 4

Number of business objects skipped: 2

Number of business objects created: 0

Number of business objects updated: 2

FloorRef:

Number of business objects processed: 2

Number of business objects skipped: 2

Number of business objects created: 0

Number of business objects updated: 0

SpaceRef:

Number of business objects processed: 2

Number of business objects skipped: 2

Number of business objects created: 0

Number of business objects updated: 0

Issues found...

UsrEmployee:

Field Code is empty or contains invalid data.(PN_H00002)

for Row 1 to row200, Row250.

UsrSpace:

Field Code is empty or contains invalid data.(PN_H00002)

for Row 1 to row200, Row250.

Source Imported

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UsrEmployee new.xlsx Failed

The information in this log is as explicit as possible and is clubbed by row.

Download logs

In addition to viewing the logs in the application, you can also download the logs as a formatted PDF.

This feature is available for:

- Enterprise Talk / SDI Configuration > Business object definitions > Import document logs
- Data Onboarding > Logs
- CAD Import > Import logs

1. Go to the appropriate level (see earlier) and select the log(s) that you want to view.

If you select multiple logs, these will be combined in a single PDF.

2. Click Download logs. Your PDF will be downloaded and you can view it in your browser or by using a PDF viewer.

The **Download logs** action only properly works for CSV and Excel imports and not so much for XML.

Deleting logs

If you no longer require the available logs or log details, you can delete them.

1. On the Logs (or Log details) level, select the logs (details) that you want to delete and click Delete on the action panel.

If you delete the logs, the log details will also be deleted.

The selected logs/log details are deleted.

Specifics

This section describes some specific situations that you will need to take into account.

Address type

Address type is a field that has a specific input requirement.

It is possible to define up to 10 address types. Each address type corresponds with a character: CILOUPQRST. The value in the database is a string containing the characters for the selected address types and a space for the non-selected address types.

Example

For an address with address type 2, 5 and 9, the value is:

<space>I<space><space>U<space><space><space>S<space>

1	2	3	4	5	6	7	8	9	10
C	I	L	O	U	P	Q	R	S	T
<space>	I	<space>	<space>	U	<space>	<space>	<space>	S	<space>

Amount fields in Excel

When you are using Excel as a tool for capturing data (import/export), note that Excel stores amount values differently than may be expected.

Values in Excel sheets are internally stored as XML (right-click any Excel > 7-Zip > open archive ...).

In the XML, values may be stored using a much finer degree of precision that what is displayed

Example 305.65 might stored as 305.64999999998.

Planon cannot alter these values coming from the XML.

When using Excel in Planon (**Enterprise Talk**, **Data Onboarding**, **SDI Configuration**), this may result in a differences between Excel and Planon.

Workaround

- Change the format of all numeric cells in Excel to text.

  Or, if this does not work...

- Prefix all numbers in all cells with apostrophe. An apostrophe before a cell value forces Excel to interpret the value as text. This is mostly useful for values that look like a number or date.
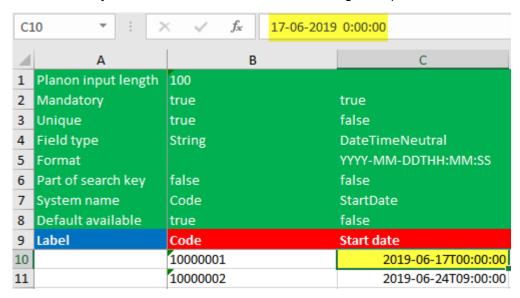
Template

Data sheet

Uploading a data sheet

Date-Time neutral fields

The template header indicates all kinds of information: whether a field is mandatory, what the field length is, and so on. Importantly, when there is a format requirement, the exact format is also listed in the header.

For **DateTimeNeutral** fields, note that the format that you see in Excel may differ from what is actually the cell value as shown in the following example:

Here, when you click the cell, its value is displayed in the formula bar on top (highlighted).

Make sure the value in the cell complies with the DateTimeNeutral format: YYYY-MM-DDTHH:MM:SS. You can type or copy the value in the formula bar. If the cell value does not comply, the import will fail.

Importing a hierarchical structure

When importing a hierarchical structure, a reference to the parent level is required.

Typically, when importing a hierarchical structure, you need to first import the parent and then import the sub (because the sub references the parent). Importing the sub first will result in an error.

If you need to first import the sub, you can do so by filling in NULL for the parent reference.

Planon input length	20	255		255
Mandatory	true	false		false
Unique	false	false		false
Field type	String	String		TechnicalClassification
Format				
Part of search key	false	false		false
System name	Code	Name		ParentRef
Default available	true	false		false
Label	**Code**	**Description**		**Parent level**
	01	Mechanical building services		NULL
	01	Mechanical building services		01
	02	Electrical building services		01

Importing the value of an auto-generated field

If a field value is mandatory in SDI but you cannot fill in a value (for example, because it will be auto-generated), you can override this issue by filling in NULL as a value.

Person type

Person Type being a special field, is stored in the database as string of numbers 0,1,2,3,4,5,6,7,8,9 where each digit matches a particular type.

The value in the database is a string containing the number for selected person types and a space for the non-selected person types.

Example

For a person with person type 2, 5 and 9 the value will be:

<space>2<space><space>5<space><space><space>9<space>

1	2	3	4	5	6	7	8	9	0
<space>	2	<space>	<space>	5	<space>	<space>	<space>	9	<space>

References without a unique lookup

When a reference field does not have a unique lookup it sometimes has a combination of fields that make the referenced business object unique. In this case, automatically all fields that make this business object unique will be added to the template (Excel).

Some business objects do not have a unique key at all, not from business logic and not by configuration (this could be the case for example for free business objects). In this case, no other fields than the reference field (lookup) will be available.

Example

The space lookup (code) is not unique.

When there is a space reference in the layout, next to the **space.code** field, automatically also the **property.code** and **floor.code** fields are added.

Field descriptions

The following sections list a description of fields available in **Data onboarding**.

Definition fields

Field	Description
Code	Displays the code of the generated definition.
Name	Displays the name of the generated definition.
Sequence	Integer specifying the order of importing the data. The lowest sequence number needs to be imported first. If definitions have the same sequence number, the order of importing these is trivial.
Status	Displays the status of processing the template/data sheet.
Insertion date-time	The date and time of generating the definition.
Modification date-time	The date and time of the last modification.
User code	Displays the user who created the definition.
Modified by	Displays the user who modified the definition.
Comment	Here, you can add information regarding the definition. You could use it to register version control, add an explanation about its purpose or routine.

Log / Log details fields

Field	Description
Application log type	Displays the type of log, which is either: • Error • Warning

Field	Description
	• Information
Source	Displays information that identifies the import/export.
Log message	Displays information that will help you understand what went wrong during the import/export.

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