



BIM Exchange

Planon Software Suite

Version: L105

© 1997 - 2024 Planon. All rights reserved.

Planon and the Planon logo are registered trademarks of Planon Software Development B.V. or its affiliates. All other product and company names mentioned herein are trademarks or registered trademarks of their respective companies. Planon Software Development B.V., its affiliates and/or licensors own the copyright to all Planon software and its associated data files and user manuals.

Although every effort has been made to ensure this document and the Planon software are accurate, complete and up to date at the time of writing, Planon Software Development B.V. does not accept liability for the consequences of any misinterpretations, errors or omissions.

A customer is authorized to use the Planon software and its associated data files and user manuals within the terms and conditions of the license agreement between customer and the respective legal Planon entity as soon as the respective Planon entity has received due payment for the software license.

Planon Software Development B.V. strictly prohibits the copying of its software, data files, user manuals and training material. However, customers are authorized to make a back-up copy of the original CD-ROMs supplied, which can then be used in the event of data loss or corruption.

No part of this document may be reproduced in any form for any purpose (including photocopying, copying onto microfilm, or storing in any medium by electronic means) without the prior written permission of Planon Software Development B.V. No copies of this document may be published, distributed, or made available to third parties, whether by paper, electronic or other means without Planon Software Development B.V.'s prior written permission.

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.

Table of Contents

About BIM Exchange.....	5
BIM Exchange - Concepts.....	6
Asset type.....	6
BIM.....	6
BIM Exchange.....	6
BIM source definition.....	7
BIM import / export definition.....	7
BIM business object.....	7
COBie Lite.....	8
Working with BIM source definitions.....	9
Adding a BIM source definition.....	9
Adding BIM business objects.....	9
Adding BIM field mapping.....	10
Refreshing the BIM XML structure.....	12
Working with BIM import / export definitions.....	13
Creating a BIM import / export definition.....	13
Running a BIM import.....	14
Running a BIM export.....	15
Importing BIM GUIDs via surveys.....	15
BIM Exchange – Field Descriptions.....	18
BIM source definition fields.....	18
BIM business objects fields.....	18
BIM field mapping fields.....	20
BIM import / export definition fields.....	21
Index.....	24

About BIM Exchange

BIM Exchange is a navigation group that allows you to exchange specific BIM (Building Information Modeling) data (from BIM source files) with Planon ProCenter. BIM 3D models represent the physical, technical and functional characteristics of a building, for example a floor plan and construction details.

BIM Exchange is part of a wider BIM solution that is a co-development by Planon and the Cadac Group. For this solution Planon has developed several Enterprise Talk scripts to import and export BIM data. Cadac has developed a Revit add-on, which makes it possible to map the Revit model onto Planon data and to export/import alphanumeric data between the Revit model and Planon.



- For a complete overview of the solution and for installation and configuration instructions, see *BIM Installation and Configuration Guide*. This technical guide also informs you at what point in the process you should consult the **BIM Exchange** user guide.
- For more information about Enterprise Talk, see [Enterprise Talk](#).

By using BIM Exchange you can:

- Import data on properties, floors, spaces, assets, building elements from BIM source files.
- Export data from Planon to BIM source files.

Interaction with other TSIs

BIM Exchange interacts with the following TSIs in Planon ProCenter:

- Spaces & Workspaces
- Assets

BIM Exchange - Concepts

This section describes the concepts used in **BIM Exchange**.

Asset type

An asset type is a COBie.xml node. This node is used during an import/export to determine which entities in the BIM source files should be interpreted as assets and which should be interpreted as building elements in Planon ProCenter.

There are two fields connected to **Asset type** that are used for this purpose:

- Asset type value
- Asset type node

See [BIM business object fields](#) for more information.

BIM

BIM (Building Information Modeling) can mean two things:

- the *procedure* for creating digital 3D building models
- the 3D building information model itself

BIM 3D models represent the physical, technical and functional characteristics of a building, for example a floor plan and construction details. They consist of XML files which include data which are of interest to various stakeholders during the full life cycle of a building, such as operational space managers, owners, occupants, facility and real estate managers.

BIM Exchange

The bi-directional BIM Exchange solution enables data exchange between a BIM model created in 3D modeling software (for example Autodesk Revit) and Planon ProCenter. It includes two TSIs that allow you to configure the import of the BIM model data (Bill of Materials) into the Planon database and the export of Planon data to the model.

BIM Exchange includes the following TSIs:

- **BIM source definitions**
- **BIM import / export definitions**

BIM source definition

BIM source definitions define the relation between data in Planon ProCenter and information in the BIM source files. The information in the BIM source files is in [COBieLite](#) (XML) format.

The BIM source definition enables you to map the entities in a BIM model onto business objects in Planon ProCenter.

Example of data from an XML node that can be mapped to a Planon field: the **Quantity** xml node can be mapped to the Planon field **Quantity**.

The model's entities can be mapped onto the following Planon ProCenter business objects: properties, floors, spaces, assets and building elements.

A BIM source definition relates to a single XML file. In order to build a tree structure with XML nodes, Planon iterates through all the first elements and their child elements in the XML. It is recommended to add the nodes that are required for mapping to each *first* element in the XML file. The source definition can be used for all the XML files which are structured in the same way.



It is recommended to use one standard XML structure (based on the COBieLite format) for all models. This makes it possible to use one source definition for multiple models. Using one source definition for all models will make the BIM Exchange solution easier to maintain.

BIM import / export definition

The BIM import / export definition includes the parameters that determine which XML files should be imported or exported.

In the import / export definition, you can specify the inboxes and outboxes and the effective dates of the import / export. In addition, you can determine the structure of the input and output folders, specify the link to a source definition, choose to import assets as move lines, choose to resume / end spaces, and more.

You can import either a single or multiple models at a time.

[Creating a BIM import / export definition](#)

BIM business object

In Planon ProCenter, BIM business objects include properties, floors, spaces, assets and building elements. In the BIM source files, these business objects are present as 'entities'.


BIM business objects are used when creating a source definition. You can use both system-defined and user-defined business objects as BIM business objects.

COBie Lite

Construction Operations Building Information Exchange (COBie) is an XML data format used as a general purpose exchange format for BIM processes.

Working with BIM source definitions

In Planon ProCenter, you can import / export data from / to a BIM model (COBie Lite XML file), by mapping Planon ProCenter business objects and fields onto the entities that are present in the BIM source files.

 The COBie Lite XML file should contain the following XML headers in order to work properly: `<Facility externalID="varies" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://docs.buildingsmartalliance.org/nbims03/cobie/cobielite">`

In order to import data from a BIM 3D model, you must first define a **BIM source definition**. Next, you must define the import parameters in a **BIM import / export definition**.

See the links below for more information:

- [Adding a BIM source definition](#)
- [Creating a BIM import / export definition](#)

Adding a BIM source definition


Procedure

You can create a BIM source definition in Planon ProCenter.

1. Go to BIM source definitions.
2. Click Add on the action panel.
3. In the data section, complete the relevant fields.

For a description of these fields, see [BIM source definition fields](#).

4. Click Save.

 Do not forget to specify the file locations for BIM Exchange in System settings File locations.

You have now added a BIM source definition.


Adding BIM business objects

At the **BIM business objects** selection level, you can link Planon business objects to entities from the BIM source model.


Procedure

1. Go to BIM source definitions > BIM business objects.

2. Click Add on the action panel.
3. Select the business objects you want to link. You can add BIM - linked properties, floors, spaces, assets and building elements to the source definition.

 If you work with user-defined business objects, you have to select the relevant user-defined business object. If you select a user-defined business object, it will only be used for the **creation** of new Planon records. During the import, Planon will update **all** the Planon records of the user-defined business objects that belong to the main business object, independent of the selected user-defined business object.

4. In the BIM XML node field, select the BIM XML node that contains the relevant XML attributes. For a description of this field and the other fields on this layout, see BIM business objects fields.


 If you select an incorrect node for **Facility** (Property), **Floors**, **Spaces**, **Building elements** or **Assets**, the application will still process the import, but it will produce a log file listing all individual errors per business object subnode. For example, if you import 1 floor with 3 spaces and you enter the wrong node, you might expect a single error, but you will get 4 errors: 1 for the floor and 3 for the spaces.

5. Complete the other relevant fields.
6. Click Save.

The linked business objects are automatically populated.

Adding BIM field mapping

At the **Details** selection level, you can define the BIM field mapping.

 When creating an export XML and specifying the XML node names, make sure to make them unique.
When using a compound word for XML nodes containing dots (.) as a separator, only the last word is used for identification.

Example

Since only the last word is used, the node names are considered not to be unique:

- COBie.Component.Description
- COBie.Type.Description

Procedure

1. Go to BIM source definitions > Details.

By default, the mandatory fields of the business objects are available in the list.

2. Click Add on the action panel.
3. Select the business object and field you want to link to an XML node.

See **BIM field mapping fields** for more information on the available fields.

4. Select the XML node that contains the relevant data or select a default value.
5. Click Save.



- For the **Assets** business object, the location of the asset can automatically be imported. This can only be done if **Floors** and **Spaces** are present as main element nodes in the XML tree and mapped onto relevant business objects in Planon. In addition, a reference must be made in the XML, at **Assets**, to these valid floors and spaces. The following example shows what this reference should look in the XML file:

```
<AssetSpaceAssignments>
  <AssetSpaceAssignment>
    <FloorName>00</FloorName>
    <SpaceName>0.09</SpaceName>
  </AssetSpaceAssignment>
</AssetSpaceAssignments>
```

- If you map a field referring to a *unit of measurement*, you must provide the preferred unit in the XML file. The following example shows what this reference could look like:

```
<AreaRequired>
  <DecimalValue>27.23</DecimalValue>
  <UnitName>meters</UnitName>
</AreaRequired>
```

The following units are supported in the XML source and will be converted to the unit defined in Field Definer. The drawing units must be provided in lower case. **Area units:** square centimeters, square feet, square inches, square kilometers, square meters, square miles, square millimeters, square yards. **Linear units:** centimeters, feet, inches, kilometers, meters, miles, millimeters, yards. **Volume units:** cubic centimeters, cubic feet, cubic inches, cubic meters, cubic millimeters, cubic yards.

- If the field type of the mapped field is **Boolean**, for example the **Is planned maintenance required?** field of an asset, either **Yes** or **No** must be selected as default value. If there is no value is specified in the XML file, the default value as specified in the source definition will be used on the import. If a mapped field in Planon (for example a field on Assets or Spaces) does not contain a value, the default value as specified in the source definition will be used on the export. After saving a field in the source definition, its value is

also displayed in the **Default XML value** field. For Boolean fields **None** is not a valid value. If you select that value, it is treated as **No**.

Refreshing the BIM XML structure

You can refresh the XML structure of the BIM source files with the data you entered in the BIM source definition.

Procedure

1. Go to BIM source definitions.
2. Select the relevant source definition that is to be used for refreshing the XML structure.
3. On the action panel, click Under construction.

The Refresh XML structure action becomes available on the action panel.

4. Click Refresh XML structure.

The XML structure in the source files is updated.

Working with BIM import / export definitions

In Planon ProCenter, you can create a BIM import / export definition which defines the required parameters for importing / exporting Planon data such as properties, floors, spaces, assets and building elements, from or to BIM drawings.

The import / export definition defines, for instance, the location where the drawings to be imported / exported are found, which business objects (floors, spaces, assets etc.) have to be imported / exported, the date as of which the changes will be active, file handling etc.



Models used in a test environment should not be used in a production environment. It is recommended to use a *copy* of the original file for the import into the various environments (acceptance, test and production). Importing the same model in production will result in incorrect data, as deviating properties, spaces, floors, assets and building elements are updated. Also, make sure not to import old models when more recent models have already been imported. Although this is possible, in certain cases this may lead to discrepancy in data.

For example, if a space was ended via the import because its data is no longer in the drawing, importing the same drawing on an earlier date will not end the space on the earlier import date.

You can create a BIM import / export definition, by performing the steps in:

[Creating a BIM import / export definition](#)

Creating a BIM import / export definition

In order to configure the information to be imported from or exported to a BIM model (COBie Lite XML file), you must create a BIM import / export definition.

Procedure

1. Go to BIM import / export definitions.
2. Click Add on the action panel.
3. In the data panel, complete the relevant fields to create an import / export definition. For a description of the fields, see [BIM import / export definition fields](#).

Only fields that are primary to run a BIM import / export are described in [BIM import / export definition fields](#).

4. Click Save.



You can create a mail merge report for a specific action on the BIM import / export definition > Report action panel. The mail merge report can be used as a reply of a scheduled action. For more information on scheduling import actions, see [Alerts](#).

BIM import / export definition

Running a BIM import

This procedure describes how to run a BIM import and get model data from one or more BIM models into Planon ProCenter, as defined in the import definition. It is possible to import data from different models such as a constructual model, electrotechnical, etc.



You can also run a BIM import on assets without space assignments (i.e. floor and space node in the XML source).

Procedure

1. Go to BIM import / export definitions.
2. On the action panel, click Run BIM import.

All BIM models in the import source folder are imported, in accordance with the settings specified in the import definition.

During the import the XML file from the import source folder is copied to the export source location. The properties, floors, spaces, assets and building elements are created or updated in Planon ProCenter with the data from the XML file as defined in the source definition.



To prevent space types or departments from being emptied by a small mistake in the BIM import, Planon will never clear fields, only update them.

3. After a successful import, the following takes place in Planon ProCenter:
 - Update of the existing data of properties, floors, spaces, assets (including their location assignment) and building elements.



Assets are not updated directly, if you import them as move lines.

- Creation of new properties, floors, spaces, assets and building elements, if they do not exist.
- Display of basic information regarding the import of XML files on the **Import logs** selection level.
- Display of detailed information regarding the import of XML files on the **Import log details** selection level.



In Planon ProCenter, system codes are assigned to the imported properties, spaces, floors, assets of a BIM XML file. These system codes are written back to the BIM XML file.

Running a BIM export

This procedure describes how to run a BIM export and get the relevant Planon ProCenter data into a BIM model, as defined in the import / export definition.

Procedure

1. Go to BIM import / export definitions.
2. Click Run BIM export on the action panel.

All Planon data, including read-only fields, is exported in accordance with the settings specified in the import / export definition.

Properties, floors, spaces, assets, and building elements are created or updated in the BIM model.

3. After a successful export, the following takes place:
 - Update of the BIM model with Planon data on properties, floors, spaces, assets (including their location assignment) and building elements.
 - Creation of new properties, floors, spaces, assets and building elements, if they do not exist in the source files.
 - Display of basic information regarding the export on the **Import / export logs** selection level.
 - Display of detailed information regarding the export on the **Import / export log details** selection level.

Importing BIM GUIDs via surveys

To view elements correctly in BIM viewer, it required that the BIM GUIDs of elements are linked in BIM systems.

It has been made possible for new and existing customers to use the functionality of processing survey data in order to import the BIM GUIDs of elements into [BIM Systems](#). This works for new and for surveys that have already been processed. **Precondition**

- **BIM System BO links** is added to the navigation panel.
- The feature switch '[Discontinue support for BIM-GUID field on the 'Assets' and 'Spaces' business objects](#)' has been enabled.
- The survey's property is linked to a BIM system
 - The property's BIM model is visible in Assets.
 - This BIM model must be linked to BIM systems.

- Go to **BIM models** (make sure that **BIM system** is added to the layout) and link the model to a BIM system.


Configuration

1. Go to TSIs > Core BIM import/export definitions and set it Under construction.
2. On the BIM import/export definition level, add the Surveys - BIM import definitions step (BIMImportDefinitionSurveyStep).
3. on BIM import / export logs level, add the Survey logs - BIM import step (BimImportSurveyLog).
4. The the BO to Completed, log out and log in.

You are now ready to import the BIM GUIDs of elements that are available in surveys.

Creating a survey for BIM import definitions

1. Go to BIM import/export definitions > Surveys - BIM import definitions >
2. Click **Add** on the action panel.
3. In the data panel, complete the relevant fields to create a survey for a BIM import definition.
4. In the **Survey** field, only the processed surveys are shown in the picklist. Select the appropriate survey and click **Save**.

 When [processing survey data](#), now the survey elements (containing the BIM GUIDs) will be shown in **Assets**.


Importing BIM GUIDs via surveys

1. Go to BIM import/export definitions > Surveys - BIM import definitions
2. Select the survey for whose elements you want to import BIM GUIDs and click **Run BIM import** on the action panel.

The BIM GUIDs of survey elements will now be added to **BIM systems**.

3. (Optional) Check the log on the **BIM import/export logs** step: this lists the results of the import.

To verify this, go to **Assets** and select your property. On **Assets** level you will see the imported assets. These imported assets together contain the number of elements that have been imported via the survey and that were mentioned in the import log.

 These assets have not been generated via **Surveys - BIM import definitions**. These assets were already generated via processing survey data earlier.

Go to **BIM systems** to verify it. Select your property and go to **BIM system BO links** level and notice that the elements and their GUIDs have been added.

Undoing a survey import

If you have made a mistake or would like to roll back your changes, you can undo your import.


1. Go to BIM import/export definitions > Surveys - BIM import definitions step.
2. Select your survey and click **Undo import BIM links of survey**.
3. (Optional) Check the log on the **BIM import/export logs** step. This lists the results of the undo action.
4. Go to **BIM systems** to verify it. Select your property and go to **BIM system BO links** level and notice that the elements and their GUIDs have been removed.

BIM Exchange – Field Descriptions


BIM source definition fields


Field	Description
BIM source file	Upload or select the XML source file to be used for BIM Exchange from the WebDAV folder.
Code	Enter a code for the BIM source definition.
Name	Enter a name for the BIM source definition.

BIM business objects fields


Field	Description
General Fields	
BIM source definition	Displays the name and code of the selected BIM source definition.
BIM XML node	Select the BIM XML node that must be used for mapping your business objects.
	<div data-bbox="602 1266 1318 1587" style="border: 1px solid #0070C0; padding: 10px;"> For Properties you must select the highest node: Facility.<ul style="list-style-type: none">For Assets and Building elements you must select the AssetTypes node. This is the highest node of that name in the tree structure.For Floors and Spaces, simply select the highest node of that name available in the tree structure: Floors and Spaces respectively.</div>
User-defined type	If you use user-defined business objects, select the relevant user-defined type.
Name	Enter a name for the BIM business object.


Space related

Field	Description
Generate space code per floor	<p>Enter a macro to generate a code to a space of a floor. A macro can be used in combination with field mapping to generate a space code. For example, field mapping is created for a space to retrieve the space code from a layer in a drawing. If no space code exists for a space, the code is generated using the macro specified in the field.</p> <p>This field accepts the following macros:</p> <ul style="list-style-type: none"> • ? Indicates the floor code. The number of question marks represents the number of displayed digits in a floor code. • # Represents the space code. The number of hashes represent the number of digits in which the space code should be displayed. • - and _ can be used to separate the floor and space codes for clarity, but are not mandatory to use. • , is used as a separator and cannot be used in a macro. <p>Examples:</p> <p>?-## matches with the codes of the first floor as 1-01, 1-02, 1-03 and so on.</p> <p>?## matches with the codes of the first floor as 101,102 and so on.</p> <p>F??_S### matches with codes of the first floor as F01_S001, F01_S002 and so on.</p>
Asset related	<p>Select the node in the BIM XML element structure that must be used to distinguish different types of assets. Multiple Assets business objects can be added to one source definition. This makes it possible to distinguish between assets and apply different default values and mappings to different assets. The 'filtering' is applied based on this node.</p>
Asset type node	<div style="border: 1px solid red; padding: 5px;">  Within a single BIM source definition, you must make sure that you use the same import / export </div>

Field	Description
	parameters for assets in Asset type node , to prevent the corruption of your data.
Asset type value	Enter a value that must be applied to make the distinction between the various types of assets, in order to check which field mapping should be applied.
Building element related	
Asset type node	Select the node in the BIM XML element structure that must be used to distinguish different types of building elements. Multiple Building elements business objects can be added to one source definition. This makes it possible to distinguish between building elements and apply different default values and mappings to different building elements. The 'filtering' is applied based on this node.
	 Within a single BIM source definition, you must make sure that you use the same import / export parameters for building elements in Asset type node , to prevent the corruption of your data
Asset type value	Enter a value that must be applied to make the distinction between the various types of building elements, in order to check which field mapping should be applied.


BIM field mapping fields

Field	Description
BIM import-export type	Select the relevant import-export type from the list. The options are: Import and Export , Import only or Export only .
	 If you select Export only , you must enter an XML node in the User-defined XML node field.
BIM linked business object	Displays the business object for which you are mapping fields.
Field	Select the field you want to map onto the BIM source files. For example the Name field for the Spaces business object.

Field	Description
Business object definition	Displays the business object whose fields you are mapping. Examples of space related business objects: Spaces, Space usage, Space dimensions.
BIM - default value	If required, enter a default value for the mapped field. For example, a default value for the field Classification group.
	<div style="border: 1px solid red; padding: 5px;">  If the field type of the mapped field is Boolean, for example the Is planned maintenance required? field, either Yes or No must be selected as default value. If the XML contains a default value, this will be leading in the import. An unspecified default value is treated as a No. If you select a default value for a Boolean field in Planon, this is leading in the export. After saving it, the value is also displayed in the Default XML value field. Note: for Boolean fields None is not a valid value. If you select that value, it is treated as No. </div>
BIM XML node	Select the BIM XML node that corresponds with the field from Planon, for example SpaceDescription.
Name	Enter a name for the mapped field.
User-defined XML node	For the Export only option, you must define an XML node to place the exported data in.

BIM import / export definition fields

Field	Description
BIM source definition	Select the BIM source definition that must be linked to the BIM import / export definition.
Code	Enter a code for the BIM import / export definition.
Name	Enter a name for the BIM import / export definition.
Add file as folder to import-processed location subfolders	Select Yes if you want the file to be added as a separate folder during the import.
Add month to import-processed location subfolders	Select Yes to add a month-stamped subfolder during the import.

Field	Description
Add date to import-processed location subfolders	Select Yes to add a date-stamped subfolder during the import.
End spaces?	Select Yes , if you want to end spaces that do not exist in the imported BIM source files.
Import assets?	Select Yes if you want to import assets from the BIM source files in Planon ProCenter.
Import based on	Specify whether you want the import to be based on the BIM source file or on the Import date . If you select Import date , the Import date field must contain a value. If you select BIM source file , the XML file must contain an export date from the 3D modeling software. The name of the attribute should be: <div style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <pre><AttributeName>DateOfExport</ AttributeName></pre> </div>
Import spaces?	Select Yes if you want to import spaces from the BIM model in Planon ProCenter.
Include subfolders?	Select Yes , if you want to include the subfolders from the BIM source files in the import.
Level of detail in import log	Select the level of detail you want the import log to have: Low , Medium or High . Low is selected by default.
New space size or usage after change	Select Yes if you want the space size or space usage data updated after the import.
Delete input files?	Select Yes if you want to delete the input files after the import.
Remove simple assets	Select Yes if you want to remove simple assets that are not present in the BIM source files from the linked space in Planon ProCenter. These assets will not be removed from the Planon database, but all their references to spaces will be cleared. <div style="border: 1px solid red; padding: 10px; margin: 10px 0;">  This option can be very risky, for the following reason: if the imported XML file only contains a few assets from the building, all space references of assets that are not in the model will be lost! </div>

Field	Description
Resume spaces	Select Yes if you want to resume spaces as a result of the import / export.
Export date	Select an export date.
Export-processed location	This is the location where the exported XML file will be placed. This XML file contains the exported Planon data.
Export source location	This is the location where the imported XML file is placed after a successful import. This imported XML file is also the source file which will be updated with the latest Planon data during the export.
File name wildcard filter	Standard all XML files in the folder will be imported or exported. If you apply a wildcard filter, only the files that meet the filter requirements will be imported.
Import date	The date on which the changes become effective in Planon, for example the start date of a space etc.
Import-processed location	After a successful import, the XML file from the source file will be copied to this location and the Export source location .
Import source location	The import source location is the source for the BIM import. The XML files in this directory will be imported into Planon.
Last import log	Displays information on the last import log that was created.

Index

B

BIM

- 3D model 6
- Asset type 6
- Asset type node 6
- Asset type value 6
- Building Information Modeling 6

BIM - linked business objects

- assets 9
- building elements 9
- floors 9
- properties 9
- spaces 9

BIM business object 7

BIM Exchange 6

BIM Exchange concepts 6

BIM Exchange fields 18

BIM Exchange: introduction 5

BIM export

- run 15

BIM field mapping 10

BIM GUID 15

BIM import

- import logs 14
- log details 14
- run 14

BIM import / export definition 7

- create 13
- work with 13

BIM source definition 7

- add 9
- define import parameters 9

BIM XML structure

- refresh 12

C

COBie Lite

- BIM data set 8
- XML format 8

I

Importing BIM GUIDs via Surveys 15