COBie Configuration Guide Bentley Facilities

Overview:

A Bentley Facilities system provides flexible configuration options to work with a variety of industry standards. COBie is one of the leading standards when it comes to data handover for Facilities Management. This Document describes in detail how to configure your Bentley Facilities system to utilize data that is provided to you in COBie format. Typically an IFC model accompanies the COBie data. Bentley Facilities can link the imported COBie data to objects in the IFC model for graphical representation.

Step 1: Loading COBie Documents and Meta-data

Documents

A typical COBie package contains documents with meta data and relationships to components. In order for us to import this data the following configurations need to be done to the ProjectWise portion of the Bentley Facilities system:

Installations and Configurations

Install the PW Export-Import tools

The PW Export-Import tools are delivered with both the Facilities and PW Administrator Ss4 installers.

🖞 ProjectWise Export/Import - WIX Wizard						
	Welcome to the WIX Wizard for ProjectWise Export/Import					
401	The WIX(R) Wizard will install ProjectWise Export/Import on your computer. To continue, dick Next.					
	WARNING: This program is protected by copyright law and international treaties.					
🚰 Bentley						
	< Back Next > Cancel					







Import Environment

Bentley provides a preconfigured Environment that lets you easily import all necessary COBie document properties. To import and configure the environment start ProjectWise Administrator:



Locate the cobie_env.aam file and click "Open"

🙀 Open					×
🚱 🛇 🗢 📙 « Deployr	ment 🕨 Final 🕨 Document Environment	•	Search Documer	nt Environment	٩
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DPR 🔶	Name	Date modified	Туре	Size	
🎍 dgn 퉬 Timesheets	cobie env.aam	<u>16.1.2013 15:42</u>	AAM File	<u>8 KB</u>	
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■ Desktop ■ Desktop ■ Libraries ■ Documents ■ Music ■ Pictures ■ Videos ■ Videos ■ Pirkka Lankinen ■ Computer ■ bentley (C:) ■ Data (D:) ■ BD-ROM Drive ▼					
File	<u>n</u> ame: cobie_env.aam		Script files (.aam) Open	Cancel	•]
			Spen		

The ProjectWise Administrator imports and configures the environment

Message window for Export/Import	X
	Close
Importing attribute definition (table '138400048' column 9) Importing attribute definition (table '138400048' column 10) Importing attribute definition (table '13840048' column 11) Importing attribute gui definition (table 'COBIeDocs' column 2 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 3 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 3 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 5 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 5 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 7 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 7 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 9 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 9 gui 1) Importing attribute gui definition (table 'COBIeDocs' column 11 gui 1) Done - 0 error(s), 0 warning(s)	E
< Ⅲ	4

Now you are ready to get started with loading the actual documents

Loading COBie Project Documents

Separate the Document Info from the Package

Open the COBie Package with Microsoft Excel and Copy the Document sheet into a separate Excel file in the Document folder.



Create Project Folder

Login to ProjectWise Explorer and create a Project Folder into which you would like to import the COBie documents. When creating the folder make sure to select the **COBie Docs** Environment that we had imported earlier as the environment to be used for the folder.

reate Folder		X
General		
Na <u>m</u> e:	Clinic Handover	
Description:	Clinic Handover	
Parent:	COBie Projects	Change
Environment:	COBieDocs) 🔻
Description:	COBie documents environmer	nt
<u>S</u> torage:	Storage	•
Owner:	admin	C <u>h</u> ange
	OK Ca	ncel Add

Import Documents

To import the documents, right click on the COBie Project Folder and select "Import from Excel:



Follow the steps of the import wizard to import the documents with their COBie meta data

Excel file name to import: D:\COBie\2012-03-23-Clinic-05-Handover-COBie\document\2012-08-21-ClinicBrowse	
D:\COBie\2012-03-23-Clinic-05-Handover-COBie\document\2012-08-21-Clinic	
Create les file:	
D:\COBie\Import.log Browse	
,	
Use status and message columns	
Only undo export	
🔟 Delete files	
🗖 Delete Excel document	
< Back Next > Cancel	

Import Wizard	Land Land
Select environment for import:	
COBieDocs	<u> </u>
COBie	
1	_
	< Back Next > Cancel

Import Wizard	Import Wizard
Select not folder for incoming documents:	Select mot folder for incoming documents:
\\COBie Projects\Clinic Handover\Refs	\\COBie Projects\Clinic Handover\Refs
Create subfolders	Create subfolders
Always locate documents by name (ignore ID columns)	Always locate documents by name (ignore ID columns)
Create new documents	☐ Create new documents
Create new versions for existing documents	Create new versions for existing documents
🔲 Update files	Update files
I Update attribute data	✓ Update attribute data
Delete document if attribute update fails	Delete document if attribute update fails
Update code fields	Update code fields
Document workflow state: Do not change	Document workflow state: Do not change
< Back Next > Cancel	< Back Next > Cancel
Import Wizard	Import Wizard
Status: Ready Pause	Status: Done. Pause
Progress:	Progress:
^ ^	Processing document "\\COBie Projects\Ginic Handover\Refs\Grab Bars Type A Product Data Creating document
	Updating attributes Success.
	Processing Excel row 239 Processing document "\\COBie Projects\Clinic Handover\Refs\Workstation D-0935M Product
	Creating document
	Success.
	Processing Excel row 240 Processing document "\\COBie Projects\Clinic Handover\Refs\Workstation D-0985 Product D;
	Creating document
	Success.
	System has finished importing the "D:\COBie\2012-03-23-Clinic-05-Handover-COBie\document\
	0 row(s) were detected.
	23 / document(s) created. 0 document(s) updated.
	2 document(s) had errors. Done.
*	· · · · · · · · · · · · · · · · · · ·
) <	
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<back cancel<="" import="" th=""><th><<u>B</u>ack Import</th></back>	< <u>B</u> ack Import

You now have all documents and their meta data imported from the COBie package



Step 2: Loading all other COBie Facilities Information

Installations and Configurations

The installation requires typical Bentley Facilities SELECTseries 4 installations with ProjectWise Ss4 and MicroStation Ss3. The used data model has been configured for COBie attributes, so while importing the Facilities Data Source the specific SMM and AMM Model scripts needs to be used. This can be done by copying the SMM_model.xls and AMM_model.xls to the script folder.

The files are delivered with the Facilities Ss4 install.

COBie Project Import

Once you have insured that your Facilities datamodel is configured to load the COBie data you are ready to run the COBie import tool: Run **COBie2OdsImporter.exe** :

COBie Data Import
CQBie data file
D:\COBie\2012-03-23-Clinic-05-Handover-COBie\2012-08-21
Mapping file
D:\COBie\mapping.xml
Imported PW document location
COBie Projects\Clinic Handover\Refs
Import

Specify the location of the COBie excel sheet

Select the preconfigured COBie mapping file which contains all necessary mapping for the current COBie specification.

Select the ProjectWise Folder location into which you had imported the documents in step 1.

Click the "Import" button

Please wait		The second second second
COBie Data Import Importing Zone instances: (298 out of 4539)		rt es: (298 out of 4539)
Estimate Time left 52s.	Import complete.	8.
Cancel	ОК	Cancel

Be prepared that if you are importing a large COBie handover project, the import can take several minutes.

After the import, all items are already linked together by the system. Documents imported in Step 1 are also liked to components that were imported in step 2.

The only thing remaining is to add the imported Building into the Bentley Facilities Hierarchy. You can add the building as the top level item or create a location hierarchy in which the building will fit (as shown in the example screenshot below).

BFSs4:COBie - Bentley Facilities Manager		-	-	-		_	-	
Eile View Favorites Iools Help								
😼 Navigate 🗟 Search 🖑 History 📧 Favorites 📰 List								
Create instance Create instance Create instance Create instance								
Navigate ×	List							×
E- OBie Projects - COBie Projects	Instance	Area	Perimeter	Net Area	Gross Area	Area Category	Name	CreatedBy
Site: COBie Challenge - COBie Challenge Mar 2013	Space: 2A01 - LIBRARY / CONF. ROOM	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A01	danielle.r.love@usace.army.mil
E Facility: PN 0001 - Medical-Dental Clinic	Space: 2A02 - SUPER OFFICE	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A02	danielle.r.love@usace.army.mil
Floor: First Floor - First Floor	Space: 2A03 - SEC. OFFICE	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A03	danielle.r.love@usace.army.mil
Electric Second Floor, Second Floor	Space: 2A04 - DENTAL SURGEON OF	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A04	danielle.r.love@usace.army.mil
Eloor Site - Site	Space: 2A05 - OH DTR #1	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A05	danielle.r.love@usace.army.mil _
Space: Site - Site	Space: 2A06 - OH DTR #2	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A06	danielle.r.love@usace.army.mil
Floor: TOF Footing - TOF Footing	Space: 2A07 - OH DTR #3	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A07	danielle.r.love@usace.army.mil
Zone: Administration - Administration Department	📕 Space: 2A08 - GEN. DENT. DTR #4	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A08	danielle.r.love@usace.army.mil
Bace: 1A01 - PATIENT ADMIN. RECEPT.	Space: 2A09 - GEN. DENT. DTR #5	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A09	danielle.r.love@usace.army.mil
E Space: 1A02 - RMO ANALYST	Space: 2A10 - DENTAL WAITING	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A10	danielle.r.love@usace.army.mil
B	Space: 2A11 - DENTAL WAITING	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A11	danielle.r.love@usace.army.mil
B - Space: 1A04 - TRICARE OFFICE	Space: 2A12 - X-RAY	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A12	danielle.r.love@usace.army.mil
Space: 1A05 - TRICARE OFFICE	Space: 2A12A - X-RAY ALCOVE	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A1	danielle.r.love@usace.army.mil
Space: 1A06 - TRICARE OFFICE	Space: 2A13 - DEVELOPING	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A13	danielle.r.love@usace.army.mil
👜 📃 Space: 1A07 - TRICARE OFFICE	Space: 2A14 - ADMIN	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2A14	danielle.r.love@usace.army.mil
Zone: AdultMedicine - Adult Medicine Department	Space: 2AC1 - CORRIDOR	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2AC1	danielle.r.love@usace.army.mil
Zone: Biomedical - Biomedical Department	Space: 2AC2 - CORRIDOR	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2AC2	danielle.r.love@usace.army.mil
Zone: Circulation - Circulation Area	Space: 2AC3 - CORRIDOR	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2AC3	danielle.r.love@usace.army.mil
Zone: Dental - Dental Department	Space: 2AC4 - CORRIDOR	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2AC4	danielle.r.love@usace.army.mil
Zone: EKOM - EKOM Department	Space: 2AC5 - CORRIDOR	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2AC5	danielle.r.love@usace.army.mil
Cone: Engritimedicine - Flight Medicine Department	Space: 2AS1 - STAIR	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2AS1	danielle.r.love@usace.army.mil
Zone: Logistics - Logistics Department	Space: 2B01 - OFFICE	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B01	danielle.r.love@usace.army.mil
20ne: Mental read - Mental read - Department	Space: 2B02 - JAN. CL.	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B02	danielle.r.love@usace.army.mil
Q Zone: Pathology - Pathology Department	E Space: 2803 - CONF. / GROUP THER	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B03	danielle.r.love@usace.army.mil
- Q Zone: Pediatrics - Pediatric Departments	Space: 2B04 - PSYCH TEST	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B04	danielle.r.love@usace.army.mil
Zone: Pharmacy - Pharmacy Department	Space: 2B05 - W. TOILET	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B05	danielle.r.love@usace.army.mil
Zone: Radiology - Radiology Department	Space: 2B06 - STAFF TOILET	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B06	danielle.r.love@usace.army.mil
Zone: Records - Records Area	Space: 2807 - TECH OFFICE	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B07	danielle.r.love@usace.army.mil
	Space: 2B08 - OFFICE / EXAM	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2808	danielle.r.love@usace.army.mil
	Space: 2809 - TECH OFFICE	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B09	danielle.r.love@usace.army.mil
	Space: 2B10 - RECEPTION	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B10	danielle.r.love@usace.army.mil
	Space: 2B11 - WAITING	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B11	danielle.r.love@usace.army.mil
	📕 Space: 2B12 - COMM. ROOM	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B12	danielle.r.love@usace.army.mil
	Space: 2B13 - ELECTRICAL	0.00 m2	0.00 m	0.00 m2	0.00 m2	0	2B13	danielle.r.love@usace.army.mil
	Searce 2014 DECS / EODIAS STORAGE	0.00	0.00	0.00	0.00	0	2014	daniella e louo@usaco amu mil
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