



ONUMA Planning System

- buildingSMART alliance / USACE Demonstration
- OPS and COBIE Process
 - SCIE
 - COBIE Design Demonstration



ONUMA Planning System

- OPS is:
- BIM Model Server
- Web Based Editor
- Multi User Real Time System
- Web Feature Service using OGC Standard



SCIE Demonstration (Spatial Compliance Information Exchange) & COBIE Design Data

- OPS will be used to demonstrate the rapid way in which SCIE data can be exported directly from the OPS Model server.
- OPS will be used to demonstrate the rapid way in which COBIE Design data can be exported directly from the OPS Model server.
- Both can be exported from individual projects or a list of projects from the OPS Model Server
- Web services as a list or from a Google Map view can export COBIE and IFC for viewers without an OPS account.

(Web Feature Services was used in OGC Demonstration to show Bentley Architecture, getting IFC file from OPS Model Server.)



SCIE & COBIE Design Data Demonstration

OPS Process

1. Open Site Plan in OPS
2. Open Floor Plan
3. Revision Challenge in OPS
 - Change space name or area
 - Settings change
 - Show Floor Plan Revision

Export to COBIE SCIE, Export > Building > Data COBIE SCIE

Open Excel file to show changes in COBIE

1. Show multiple tabs
2. Created from scratch from OPS Model Server not through IFC

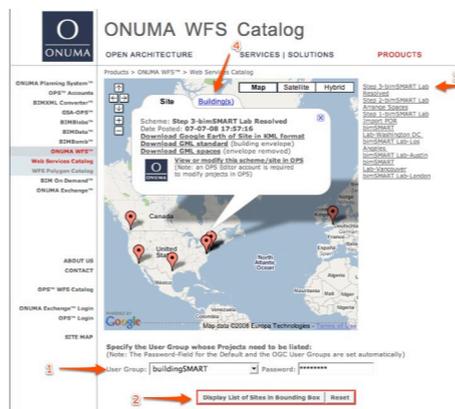
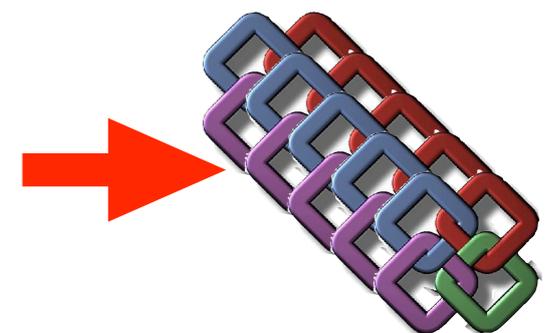
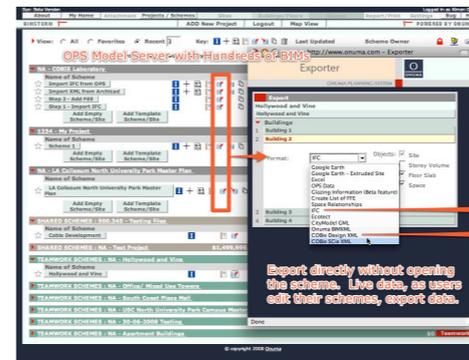
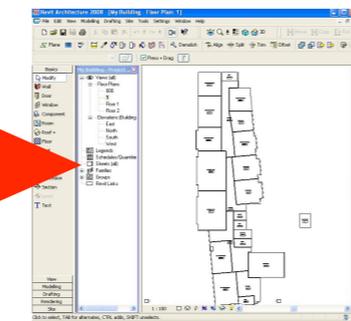
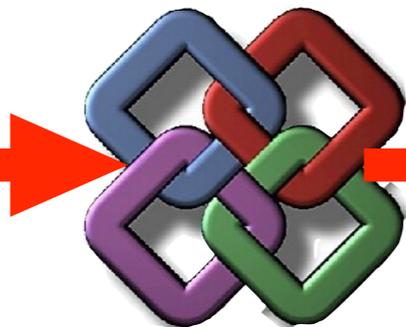
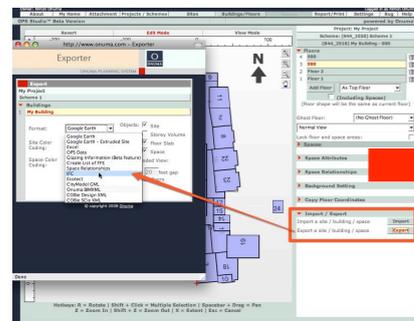
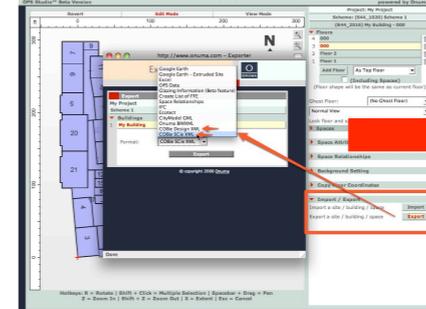
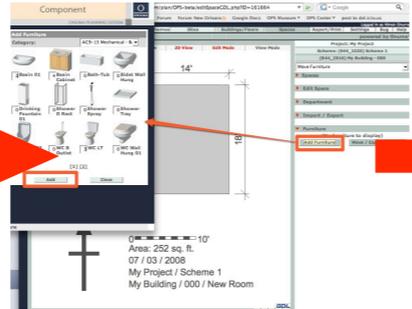
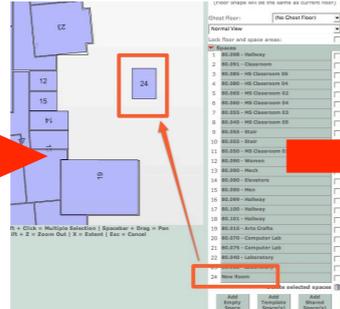
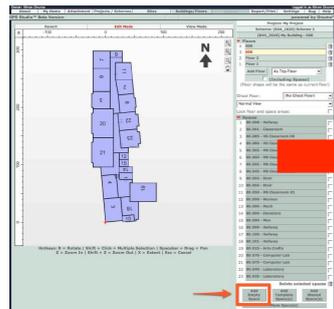
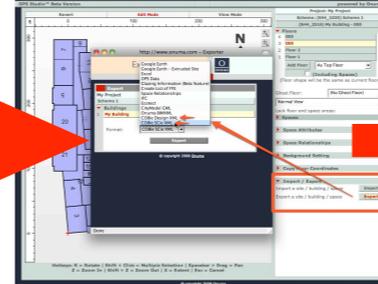
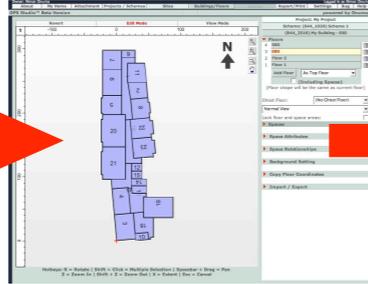
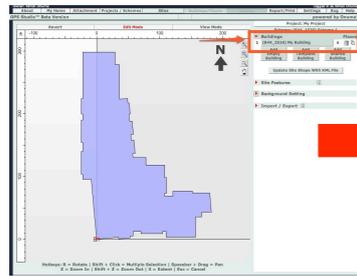
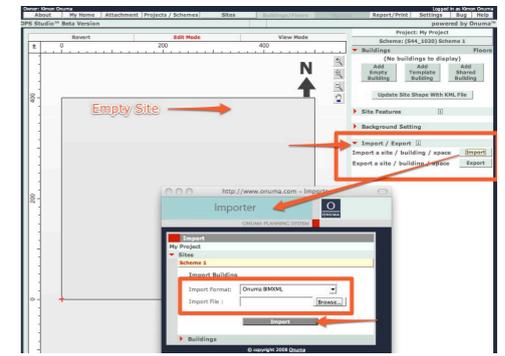
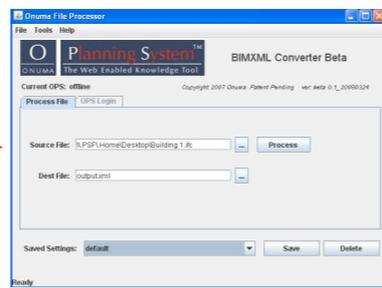
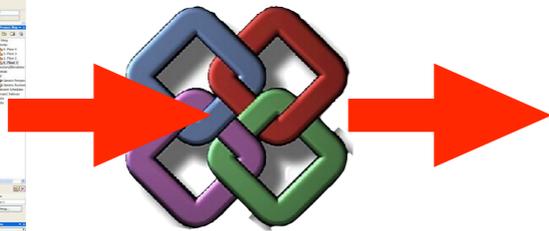
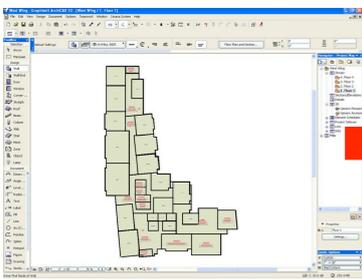
Export to COBIE SCIE, Export > Building > IFC

Optional Processes

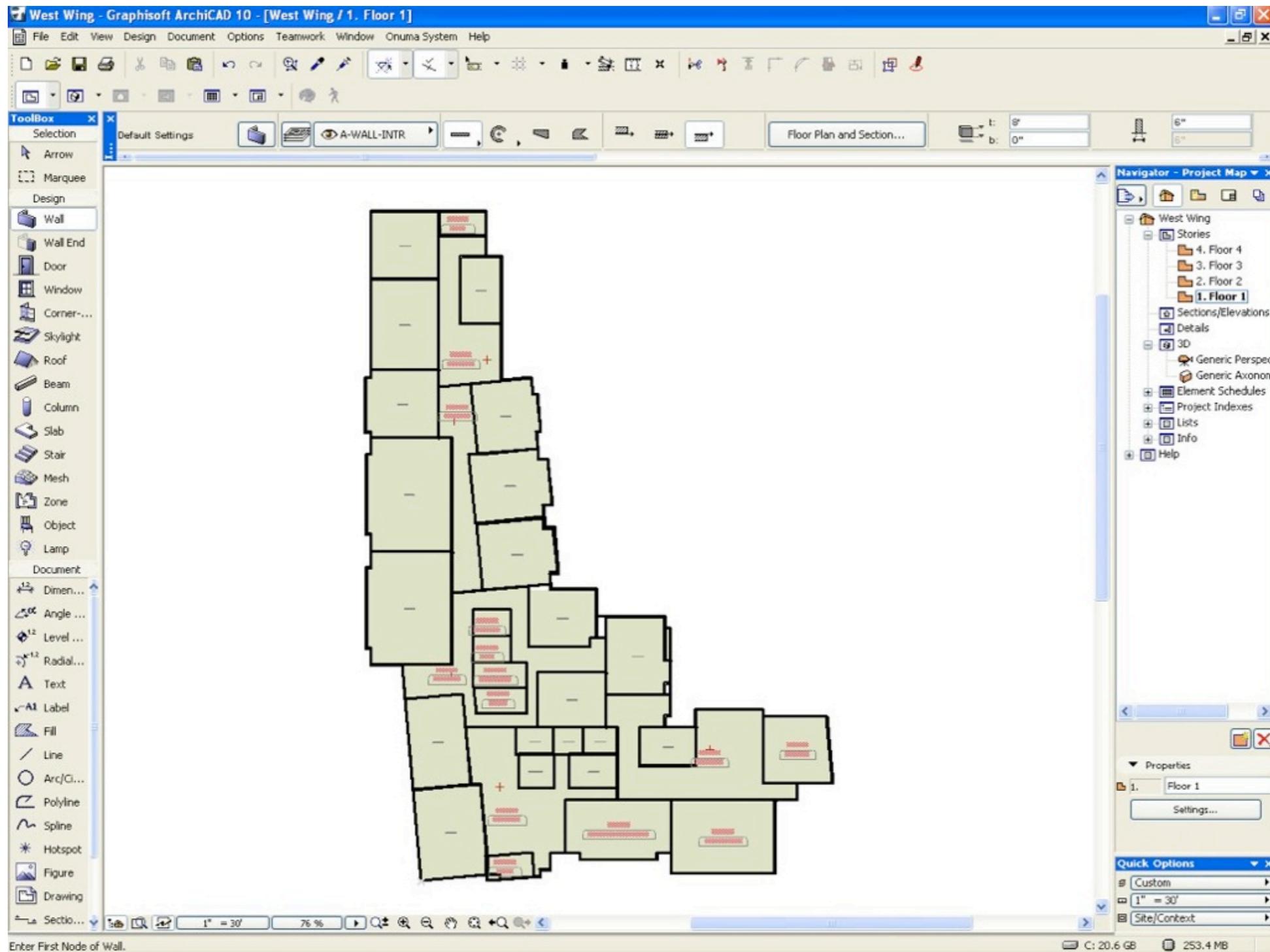
- Export Excel of Furniture and Equipment, Edit Component Name and Register for COBIE on multiple components.
- Inject changes back to OPS for export to COBIE
- OPS Web Services, Live link to COBIE data and IFC changes for reviewer and audience

Show export of multiple building data (optional to show OPS)

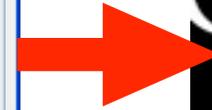
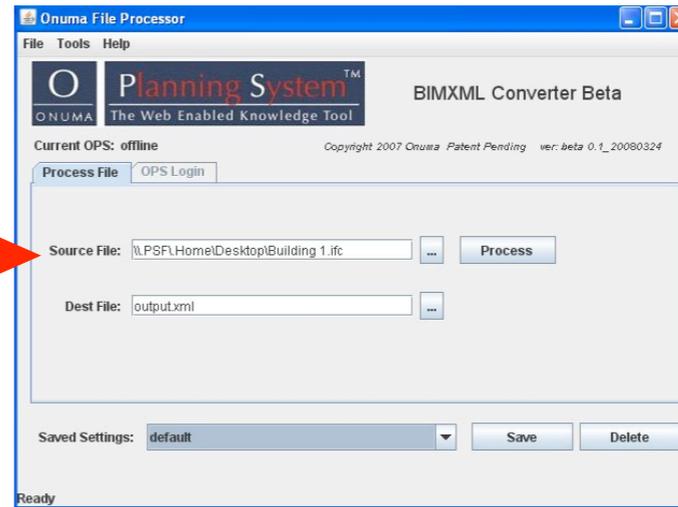
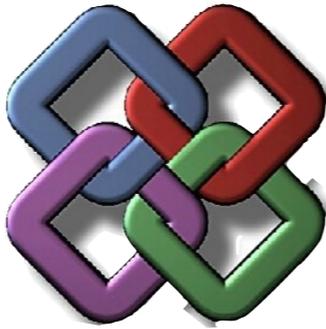
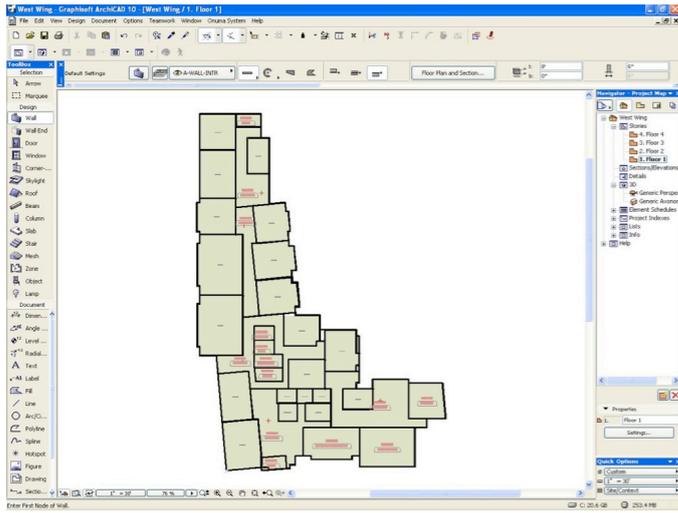
1. From Project list export button
2. Model server has many buildings, no need to open them to export data.



Desktop BIM



A-Desktop BIM to OPS, Excel to OPS



1- Desktop BIM
This sample is Archicad.

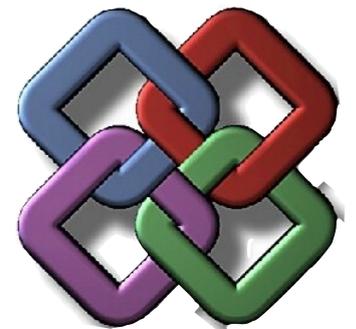
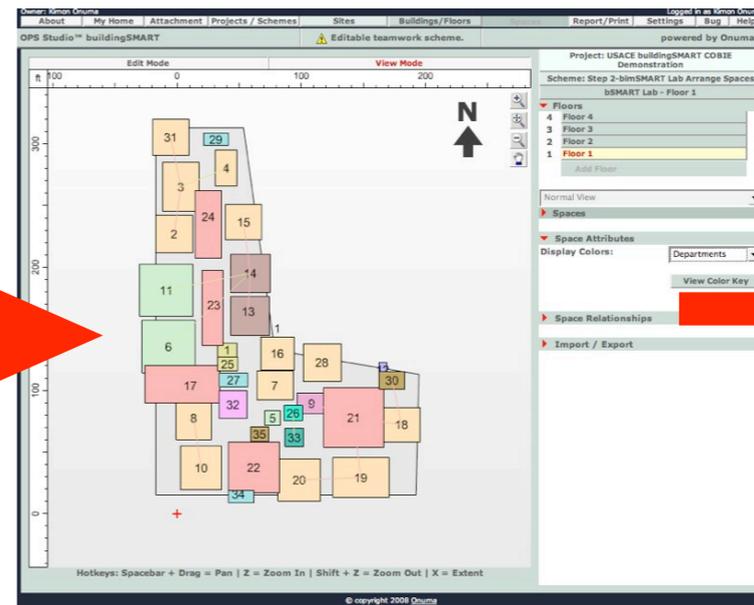
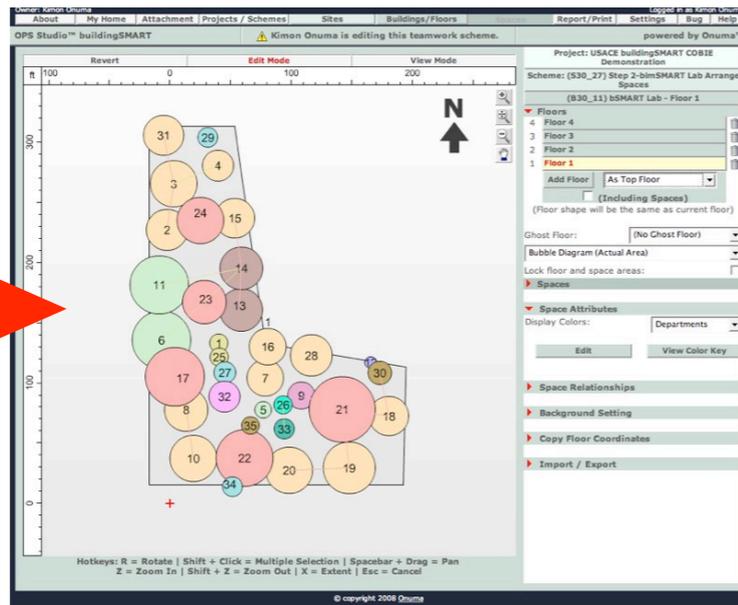
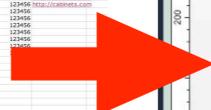
2-Save IFC

3-OPS BIMXML Converter

4-Save OPS BIMXML

Note: BIM does not have to be imported from Desktop BIM Applications.
A BIM IFC file can also be created directly in OPS.

ID	Floor Name	Space Name	Furniture Name	Register ID	Component Name	Default Cost	Cost	SKU Number	URL
4311	2912 Floor 1	301	LABORATORY	CO-0-2	100	300	123456	http://www.onuma.com	
4312	2913 Floor 1	301	LABORATORY	CO-0-3	100	300	123456	http://www.onuma.com	
4313	2914 Floor 1	301	LABORATORY	CO-0-4	100	300	123456	http://www.onuma.com	
4314	2915 Floor 1	301	LABORATORY	CO-0-5	100	300	123456	http://www.onuma.com	
4315	2916 Floor 1	301	LABORATORY	CO-0-6	100	300	123456	http://www.onuma.com	
4316	2917 Floor 1	301	LABORATORY	CO-0-7	100	300	123456	http://www.onuma.com	
4317	2918 Floor 1	301	LABORATORY	CO-0-8	100	300	123456	http://www.onuma.com	
4318	2919 Floor 1	301	LABORATORY	CO-0-9	100	300	123456	http://www.onuma.com	
4319	2920 Floor 1	301	LABORATORY	CO-0-10	100	300	123456	http://www.onuma.com	
4320	2921 Floor 1	301	LABORATORY	CO-0-11	100	300	123456	http://www.onuma.com	
4321	2922 Floor 1	301	LABORATORY	CO-0-12	100	300	123456	http://www.onuma.com	
4322	2923 Floor 1	301	LABORATORY	CO-0-13	100	300	123456	http://www.onuma.com	
4323	2924 Floor 1	301	LABORATORY	CO-0-14	100	300	123456	http://www.onuma.com	
4324	2925 Floor 1	301	LABORATORY	CO-0-15	100	300	123456	http://www.onuma.com	
4325	2926 Floor 1	301	LABORATORY	CO-0-16	100	300	123456	http://www.onuma.com	
4326	2927 Floor 1	301	LABORATORY	CO-0-17	100	300	123456	http://www.onuma.com	
4327	2928 Floor 1	301	LABORATORY	CO-0-18	100	300	123456	http://www.onuma.com	
4328	2929 Floor 1	301	LABORATORY	CO-0-19	100	300	123456	http://www.onuma.com	
4329	2930 Floor 1	301	LABORATORY	CO-0-20	100	300	123456	http://www.onuma.com	
4330	2931 Floor 1	301	LABORATORY	CO-0-21	100	300	123456	http://www.onuma.com	
4331	2932 Floor 1	301	LABORATORY	CO-0-22	100	300	123456	http://www.onuma.com	
4332	2933 Floor 1	301	LABORATORY	CO-0-23	100	300	123456	http://www.onuma.com	
4333	2934 Floor 1	301	LABORATORY	CO-0-24	100	300	123456	http://www.onuma.com	
4334	2935 Floor 1	301	LABORATORY	CO-0-25	100	300	123456	http://www.onuma.com	
4335	2936 Floor 1	301	LABORATORY	CO-0-26	100	300	123456	http://www.onuma.com	
4336	2937 Floor 1	301	LABORATORY	CO-0-27	100	300	123456	http://www.onuma.com	
4337	2938 Floor 1	301	LABORATORY	CO-0-28	100	300	123456	http://www.onuma.com	
4338	2939 Floor 1	301	LABORATORY	CO-0-29	100	300	123456	http://www.onuma.com	
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4340	2941 Floor 1	301	LABORATORY	CO-0-31	100	300	123456	http://www.onuma.com	
4341	2942 Floor 1	301	LABORATORY	CO-0-32	100	300	123456	http://www.onuma.com	
4342	2943 Floor 1	301	LABORATORY	CO-0-33	100	300	123456	http://www.onuma.com	
4343	2944 Floor 1	301	LABORATORY	CO-0-34	100	300	123456	http://www.onuma.com	
4344	2945 Floor 1	301	LABORATORY	CO-0-35	100	300	123456	http://www.onuma.com	
4345	2946 Floor 1	301	LABORATORY	CO-0-36	100	300	123456	http://www.onuma.com	
4346	2947 Floor 1	301	LABORATORY	CO-0-37	100	300	123456	http://www.onuma.com	
4347	2948 Floor 1	301	LABORATORY	CO-0-38	100	300	123456	http://www.onuma.com	



1-Excel

2-Import to OPS

3-Design in OPS

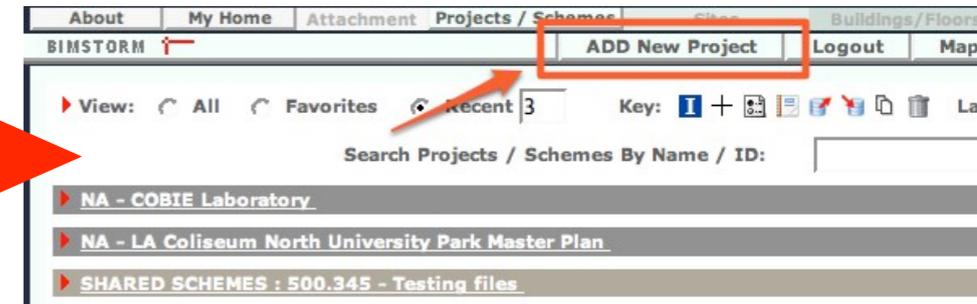
B-Create Project and Scheme in OPS



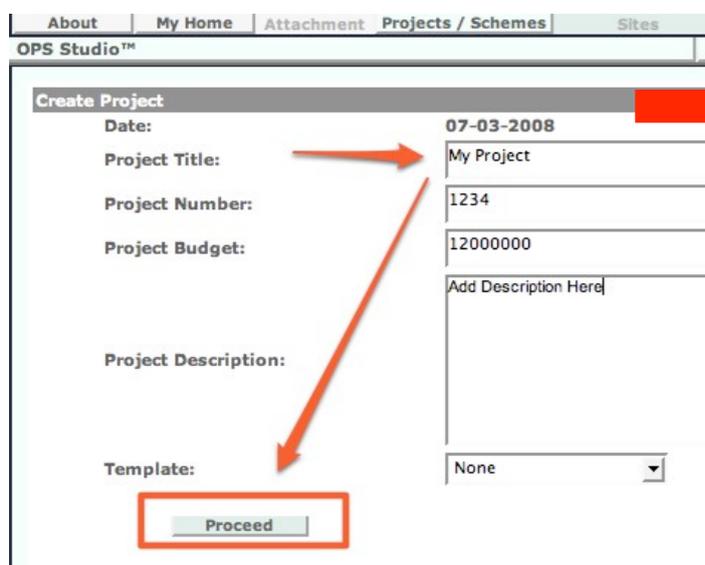
1- Log In



2-Select Studio



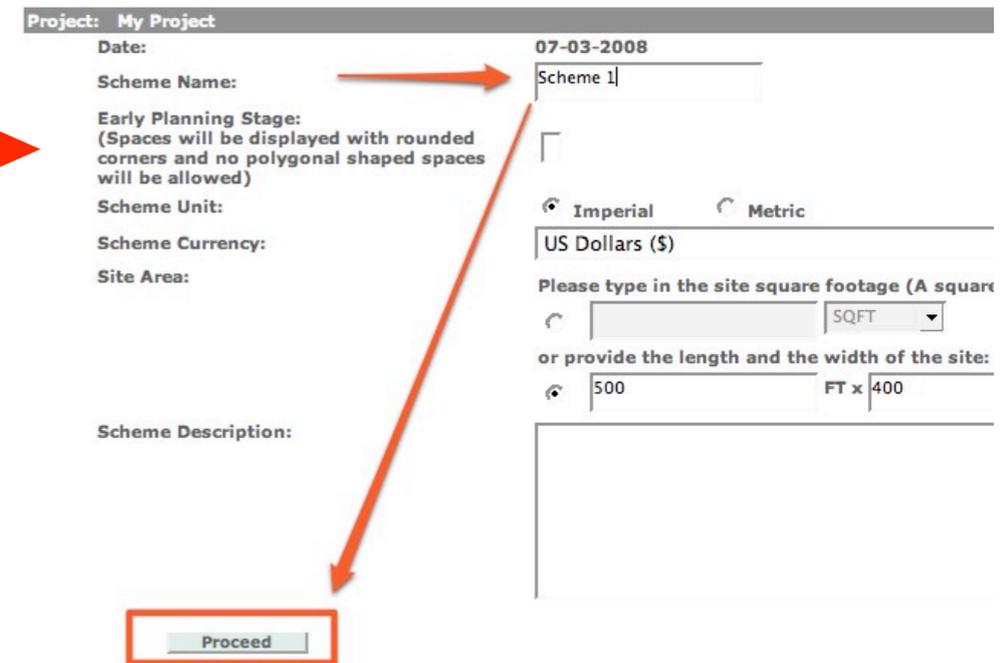
3-Add New Project



4-Name Project



5-Add Scheme to Project



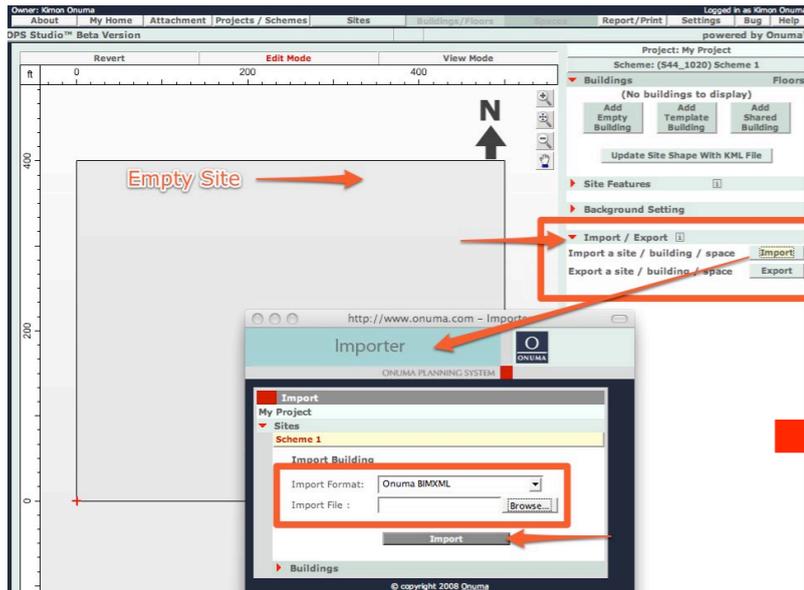
5-Name Scheme

A project can end up having multiple schemes.

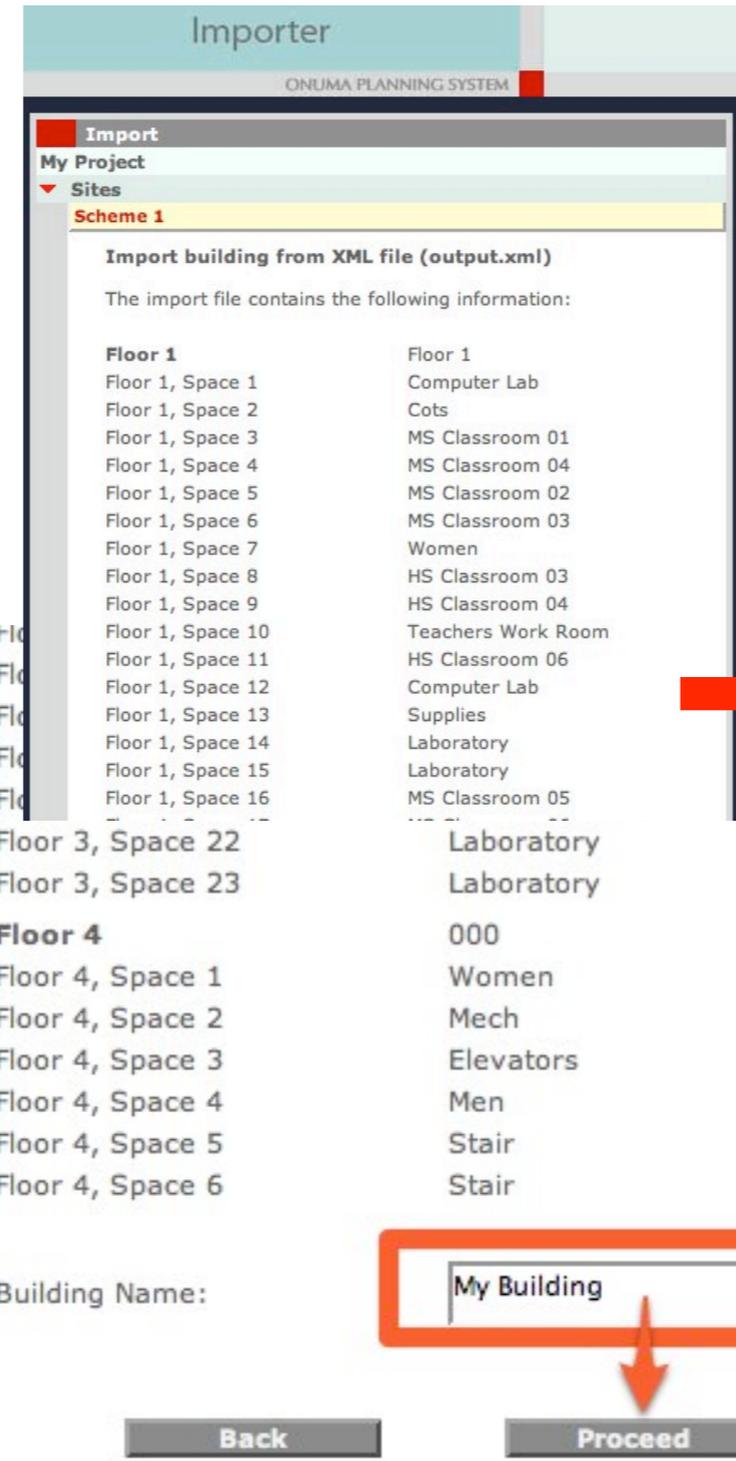
C-Import BIMXML File to OPS

The screenshot shows the OPS Studio software interface. At the top, the user is logged in as Kimon Onuma. The main workspace displays a site plan with a red box labeled "Empty Site" and a north arrow. A sidebar on the right contains a tree view with "Import / Export" highlighted. A modal window titled "Importer" is open, showing "Import Format" set to "Onuma BIMXML" and an "Import File" field with a "Browse..." button. An "Import" button is at the bottom of the modal.

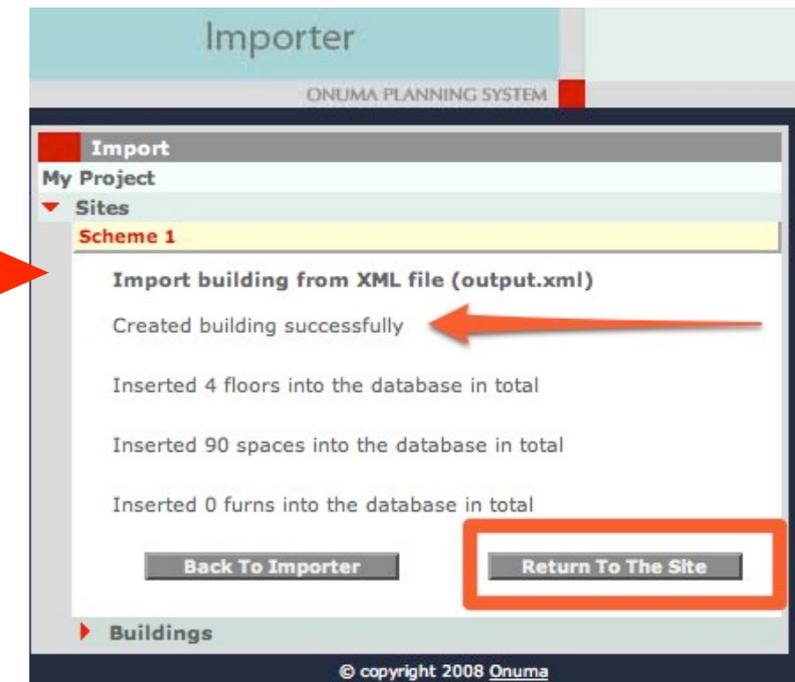
D-Create Building from Import



1- Import

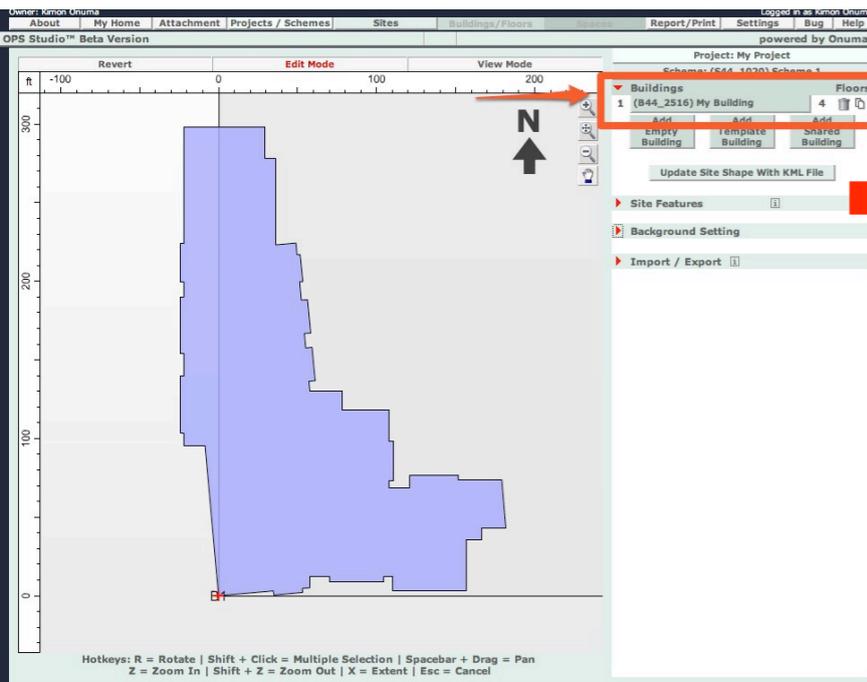


2-Name Building

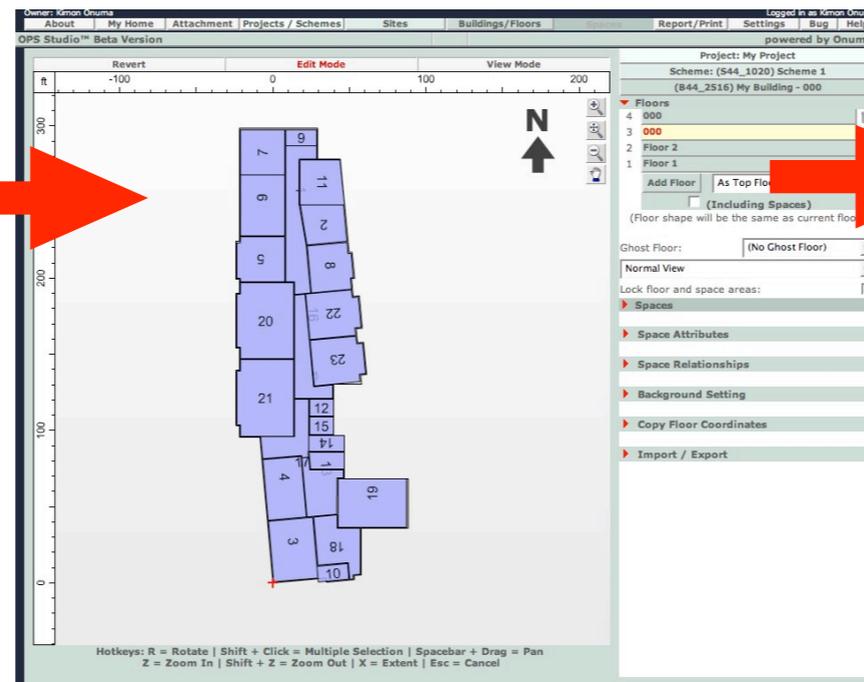


3-Confirm Import

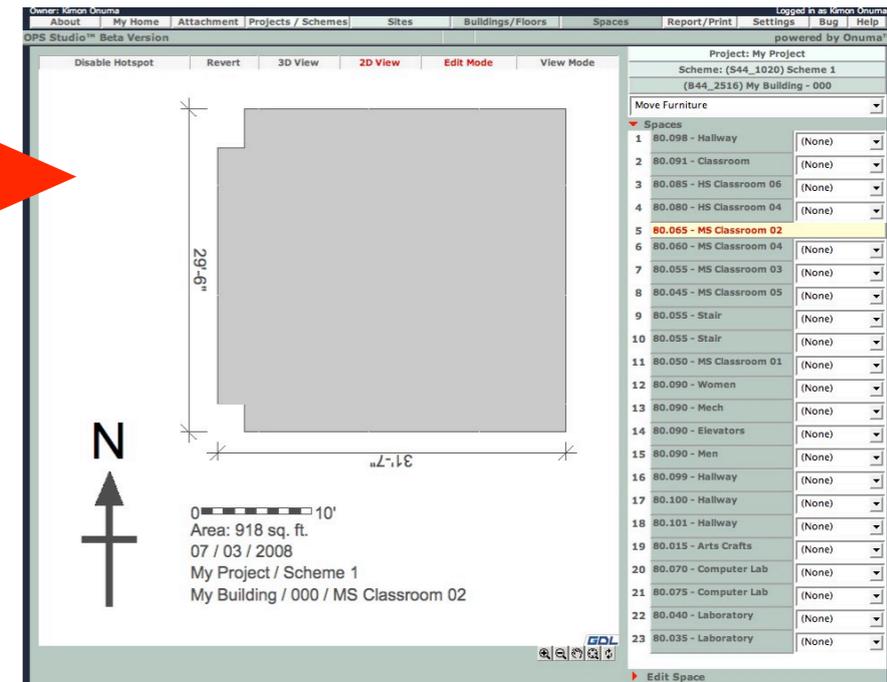
E-Building Imported to OPS



Site Plan



Floor Plan



Room Plan

F-Export to COBIE

OPS Studio™ Beta Version powered by Onuma™

Project: My Project
Scheme: (S44_1020) Scheme 1
(B44_2516) My Building - 000

Flors: 4 000, 3 000, 2 Floor 2, 1 Floor 1

Export formats: Google Earth, Google Earth - Extruded Site, Excel, OPS Data, Glazing Information (Beta feature), Create List of FFE, Space Relationships, IFC, Ecotect, CityModel GML, Onuma BIMXML, **COBie Design XML**, **COBie SCie XML**, COBie SCie XML

Format: COBie SCie XML

Export

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Hotkeys: R = Rotate | Shift + Click = Multiple Selection | Spacebar + Drag = Pan
Z = Zoom In | Shift + Z = Zoom Out | X = Extent | Esc = Cancel

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My Building_COBieSCie.xml

System	External Name	Space Number	Space Name	Space Description	Space Usable
OPS 2008, b	80.005	Computer Lab		9.84 f	
OPS 2008, b	80.005	Cots		9.84 f	
OPS 2008, b	80.005	MS Classroom 01		9.84 f	
OPS 2008, b	80.005	MS Classroom 04		9.84 f	
OPS 2008, b	80.005	MS Classroom 02		9.84 f	
OPS 2008, b	80.005	MS Classroom 03		9.84 f	
OPS 2008, b	80.090	Women		9.84 f	
OPS 2008, b	80.005	HS Classroom 03		9.84 f	
OPS 2008, b	80.005	HS Classroom 04		9.84 f	
OPS 2008, b	80.005	Teachers Work Room		9.84 f	
OPS 2008, b	80.005	HS Classroom 06		9.84 f	
OPS 2008, b	80.005	Computer Lab		9.84 f	
OPS 2008, b	80.005	Supplies		9.84 f	
OPS 2008, b	80.005	Laboratory		9.84 f	
OPS 2008, b	80.005	Laboratory		9.84 f	
OPS 2008, b	80.005	MS Classroom 05		9.84 f	
OPS 2008, b	80.005	MS Classroom 06		9.84 f	
OPS 2008, b	80.005	Physician		9.84 f	
OPS 2008, b	80.005	HS Classroom 02		9.84 f	
OPS 2008, b	80.055	Stair		9.84 f	
OPS 2008, b	80.005	Library Work		9.84 f	
OPS 2008, b	80.055	Stair		9.84 f	
OPS 2008, b	80.005	Nurse		9.84 f	
OPS 2008, b	80.005	Nurse		9.84 f	
OPS 2008, b	80.090	Mech		9.84 f	
OPS 2008, b	80.090	Elevators		9.84 f	
OPS 2008, b	80.090	Men		9.84 f	
OPS 2008, b	80.100	Hallway		9.84 f	
OPS 2008, b	80.101	Hallway		9.84 f	
OPS 2008, b	80.102	Hallway		9.84 f	
OPS 2008, b	80.103	Hallway		9.84 f	
OPS 2008, b	80.104	Hallway		9.84 f	
OPS 2008, b	80.005	Home Economics		15 f	
OPS 2008, b	80.005	Arts Crafts		15 f	
OPS 2008, b	80.005	Library		15 f	
OPS 2008, b	80.070	Computer Lab		9.84 f	
OPS 2008, b	80.085	HS Classroom 06		9.84 f	
OPS 2008, b	80.020	HS Classroom 03		9.84 f	
OPS 2008, b	80.080	HS Classroom 04		9.84 f	
OPS 2008, b	80.075	Computer Lab		9.84 f	
OPS 2008, b	80.065	MS Classroom 02		9.84 f	
OPS 2008, b	80.060	MS Classroom 04		9.84 f	
OPS 2008, b	80.055	MS Classroom 03		9.84 f	
OPS 2008, b	80.045	MS Classroom 05		9.84 f	
OPS 2008, b	80.040	Laboratory		9.84 f	
OPS 2008, b	80.035	Laboratory		9.84 f	
OPS 2008, b	80.030	MS Classroom 06		9.84 f	
OPS 2008, b	80.025	HS Classroom 02		9.84 f	
OPS 2008, b	80.015	Arts Crafts		9.84 f	
OPS 2008, b	80.055	Stair		9.84 f	

G-Edit Design in OPS

Owner: Kimon Onuma
About My Home Attachment Projects / Schemes Sites Buildings/Floors Spaces Report/Print Settings Bug Help
OPS Studio™ Beta Version powered by Onuma™

Project: My Project
Scheme: (S44_1020) Scheme 1
(B44_2516) My Building - 000

Floors
4 000
3 000
2 Floor 2
1 Floor 1
Add Floor As Top Floor
(Including Spaces)
(Floor shape will be the same as current floor)

Ghost Floor: (No Ghost Floor)

Normal View

Lock floor and space areas:

Spaces
1 80.098 - Hallway
2 80.091 - Classroom
3 80.085 - HS Classroom 06
4 80.080 - HS Classroom 04
5 80.065 - MS Classroom 02
6 80.060 - MS Classroom 04
7 80.055 - MS Classroom 03
8 80.045 - MS Classroom 05
9 80.055 - Stair
10 80.055 - Stair
11 80.050 - MS Classroom 01
12 80.090 - Women
13 80.090 - Mech
14 80.090 - Elevators
15 80.090 - Men
16 80.099 - Hallway
17 80.100 - Hallway
18 80.101 - Hallway
19 80.015 - Arts Crafts
20 80.070 - Computer Lab
21 80.075 - Computer Lab
22 80.040 - Laboratory
23 80.035 - Laboratory

Delete selected spaces
Add Empty Space Add Template Space(s) Add Shared Space(s)
Move Space(s)

Hotkeys: R = Rotate | Shift + Click = Multiple Selection | Spacebar + Drag = Pan
Z = Zoom In | Shift + Z = Zoom Out | X = Extent | Esc = Cancel

Owner: Kimon Onuma
About My Home Attachment Projects / Schemes Sites Buildings/Floors Spaces
OPS Studio™ Beta Version

Project: My Project
Scheme: Scheme 1
Building: My Building - 000

Space Name: New Room

Please type in the space square footage (A square space v
SQFT

Space Area: 14 FT x 18
or provide the length and the width of the space:

Proceed

(Floor shape will be the same as current floor)

Ghost Floor: (No Ghost Floor)

Normal View

Lock floor and space areas:

Spaces
1 80.098 - Hallway
2 80.091 - Classroom
3 80.085 - HS Classroom 06
4 80.080 - HS Classroom 04
5 80.065 - MS Classroom 02
6 80.060 - MS Classroom 04
7 80.055 - MS Classroom 03
8 80.045 - MS Classroom 05
9 80.055 - Stair
10 80.055 - Stair
11 80.050 - MS Classroom 01
12 80.090 - Women
13 80.090 - Mech
14 80.090 - Elevators
15 80.090 - Men
16 80.099 - Hallway
17 80.100 - Hallway
18 80.101 - Hallway
19 80.015 - Arts Crafts
20 80.070 - Computer Lab
21 80.075 - Computer Lab
22 80.040 - Laboratory
23 80.035 - Laboratory
24 New Room

Delete selected spaces
Add Empty Space Add Template Space(s) Add Shared Space(s)
Move Space(s)

ft + Click = Multiple Selection | Spacebar + Drag = Pan
ift + Z = Zoom Out | X = Extent | Esc = Cancel

H-Add COBIE System and Register

Settings 

ONUMA PLANNING SYSTEM

Admin Settings | General Settings | Site Settings | Building Settings | Space Settings

Bldg Settings | Floor Matrix | PPD Uniformat | LEED | **COBie** | Cost Est

COBie Settings All Buildings

Laboratory Building

COBie Systems

System Name	Function Number	Function Name
Radiant heaters	51 51 12 11	Heat Generation for Single Facility
Ventilation	51 51 16 11	Ventilation
Heat pump	51 51 18 00	HVAC Distribution
Potable hot and cold	51 31 11 11	Water Supply
Air compressor	81 31 32 41	Compression Equipment
Fire Alarm System	51 11 11 00	Fire and Smoke Detection and Alarm
Electrical Service	51 71 11 14	Electric Service and Distribution for Single Facility
Fluorescent Fixtures	51 71 15 11	Interior Lighting
Exterior Floods	51 71 15 51	Exterior Lighting
LED Exit Signs	51 71 15 91	Emergency Lighting
Comm Inside Plant	51 71 17 00	Communications for Single Facility
Power Distribution	71 61 67 00	Electrical Power Distribution
Comm Outside Plant	71 61 68 00	Communication Utility Distribution
Windows	41 51 13 11	Transparent Openings

Add a new system:

System Function:

System Name:

System Description:

COBie Registers

Name	Type Num	Type Name	System Name
Metal Roof Panel	35 20 14 11 11	Metal Roof Panels	(None)
Metal Roof Panel	35 20 14 11 11	Metal Roof Panels	(None)
Doors, frames and Accessories	30 10 00 00	Doors	(None)
Doors, frames and Accessories	30 10 00 00	Doors	(None)
Overhead Coiling Doors	30 10 00 00	Doors	(None)

FA System	85 30 21 11	Fire Detection, Monitoring and Alarm	(None)
FA System	85 30 21 11	Fire Detection, Monitoring and Alarm	(None)
FA System	85 30 21 11	Fire Detection, Monitoring and Alarm	(None)
FA System	85 30 21 11	Fire Detection, Monitoring and Alarm	(None)
Record Documents	85 30 21 11	Fire Detection, Monitoring and Alarm	(None)
Lighting Controls	85 80 11 27	Lighting Controls	(None)
Lighting Controls	85 80 11 27	Lighting Controls	(None)
Grinder Pump Station	70 50 11 14 14	Packaged Sewage and Sludge Pump Stations	(None)
Grinder Pump Station	70 50 11 14 14	Packaged Sewage and Sludge Pump Stations	(None)
Metal Windows	30 20 14 11	Metal Windows	Windows

Add a new register:

Product Type:

Register Name:

Asset Type:

Approval By:

Cobie System:

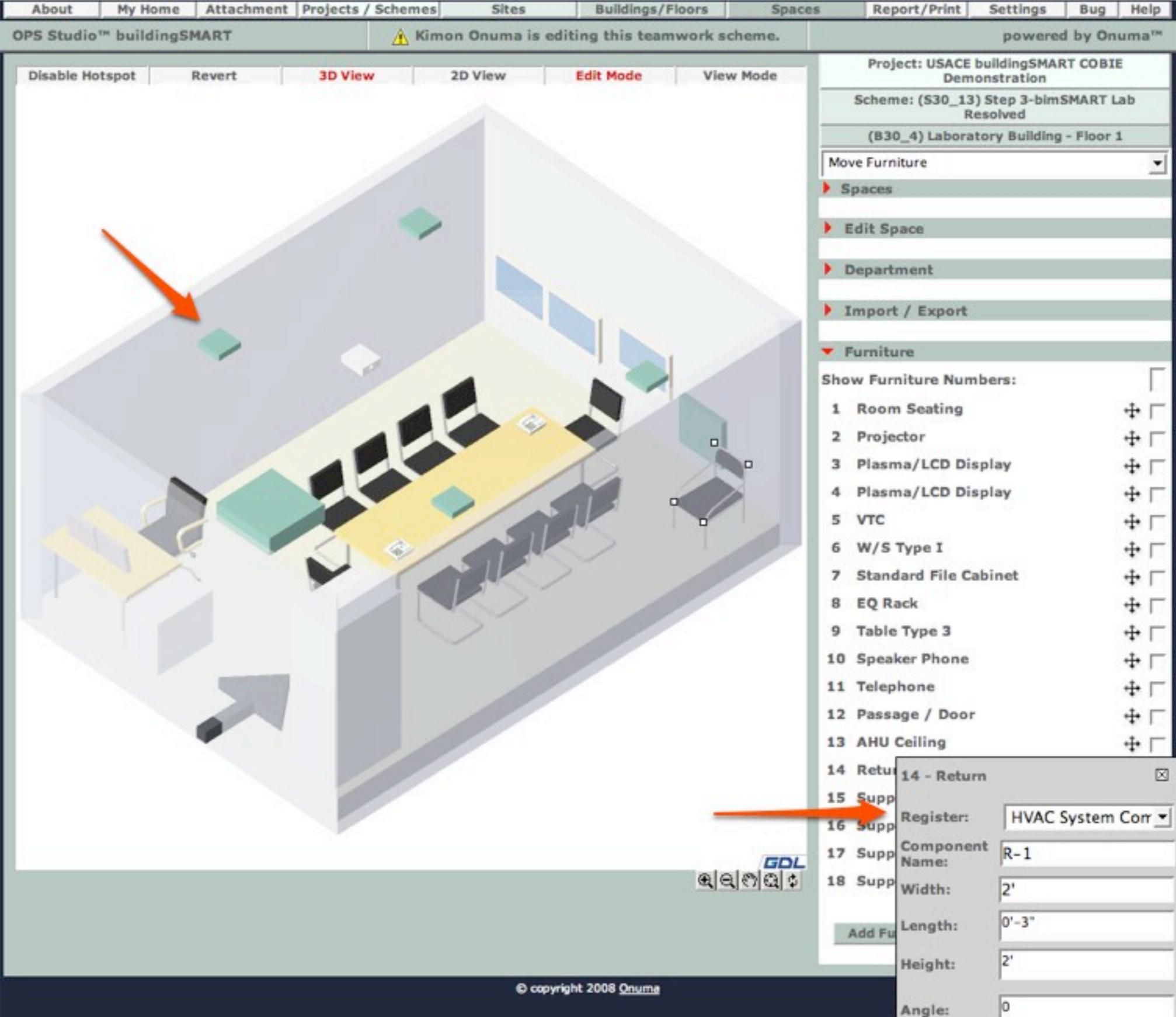
Register Type:

Register Reference:

Expected Life:

Replacement Cost:

K-Move into Room, Register and Name



L-Edit Entire Building Furniture and Equipment

Step 1.
Export
Furniture &
Equipment to
Excel.
3374 pieces in
this example.

The screenshot displays the OPS Studio buildingSMART interface. The main window shows a floor plan with various rooms numbered 1 through 40. The interface includes a top menu bar with 'Revert', 'Edit Mode', and 'View Mode'. A status bar at the bottom indicates 'Hotkeys: R = Rotate | Shift + Click = Multiple Selection | Spacebar = Zoom In | Shift + Z = Zoom Out | X = Extent | Esc ='. An 'Exporter' window is open, showing the 'Export' dialog for the 'Laboratory Building'. The 'Format' dropdown is set to 'Create List of FFE'. A red arrow points from the 'Export' button to a text box that reads 'Creates Excel of All Bldg. Furn. & Equip.'. The exporter window also shows a list of buildings and a 'Format' dropdown set to 'Create List of FFE'. The background shows a floor plan with rooms numbered 1 through 40. The interface is powered by Onuma™.

M-Edit data in Excel for Injection Back to OPS

Laboratory Building_furn_cost.csv

The columns "Cost (user defined)", "SKU Number", and "URL" can be modified and the CSV file re-imported to update user defined values.
 The columns "ID", "Floor Name", "Space Name", "Furniture Name", and "Default Cost" cannot be modified (changes will be ignored).
 Note: The default cost cannot be adjusted by user and is used in the cost calculations if the field "Cost (user defined)" is empty or zero.

ID	Floor Name	Space Name	Furniture Name	Register ID	Component Name	Default Cost	Cost (user defined)	SKU Number	URL		
431	2912	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-1	160	350	123456	http://cabinets.com
432	2913	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-2	160	350	123456	http://cabinets.com
433	2928	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-3	160	350	123456	http://cabinets.com
434	2931	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-4	160	350	123456	http://cabinets.com
			LABORATORY		Cab Base-MultiDrawer	0	CB-5	160	350	123456	http://cabinets.com
			LABORATORY		Cab Base-MultiDrawer	0	CB-6	160	350	123456	http://cabinets.com
			LABORATORY		Cab Base-MultiDrawer	0	CB-7	160	350	123456	http://cabinets.com
			LABORATORY		Cab Base-MultiDrawer	0	CB-8	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-9	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-10	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-11	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-12	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-13	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-14	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-15	160	350	123456	
			LABORATORY		Cab Base-MultiDrawer	0	CB-16	160	350	123456	
447	2994	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-17	160	350		
448	2995	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-18	160	350		
449	3000	Floor 3	301 - LABORATORY		Cab Base-MultiDrawer	0	CB-19	160	350		
450	3003	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-20	160	350		
451	3004	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-21	160	350		
452	3005	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-22	160	350		
453	3010	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-23	160	350		
454	3011	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-24	160	350		
455	3012	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-25	160	350		
456	3013	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-26	160	350		
457	3014	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-27	160	350		
458	3019	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-28	160	350		
459	3020	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-29	160			
460	3021	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-30	160			
461	3027	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-31	160			
462	3056	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-32	160			
463	3060	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-33	160			
464	3065	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-34	160			
465	3069	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-35	160			
466	3071	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-36	160			
467	3074	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-37	160			
468	3077	Floor 3	302 - LABORATORY		Cab Base-MultiDrawer	0	CB-38	160			

N-Import Excel back to OPS

OPS Studio™ buildingSMART

Kimon Onuma is editing this teamwork scheme. powered by Onuma™

Project: USACE buildingSMART COBIE Demonstration
 Scheme: (S30_13) Step 3-bimSMART Lab Resolved
 (B30_4) Laboratory Building - Floor 1

Revert Edit Mode View Mode

ft 0 100 200

300

200

100

0

Hotkeys: R = Rotate | Shift + Click = Multiple Selection | Spacebar
 Z = Zoom In | Shift + Z = Zoom Out | X = Extent | Esc =

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http://www.onuma.com - Importer

Importer

ONUMA PLANNING SYSTEM

Import

USACE buildingSMART COBIE Demonstration

Sites
 Step 3-bimSMART Lab Resolved

Buildings
 1 Laboratory Building

Update Furniture Cost

Import Format: Update FFE

Import File: /Users/Kimon/Desktop/La Browse...

Fields in the CSV files are separated by commas "(Comma delimited)" - this is the default for most English versions of MS Excel

Fields in the CSV files are separated by semicolons (";") - this is the default for most non-English European versions of MS Excel

Import

Note: The layout of the table has to correspond exactly to the layout of the furniture export file exported earlier.

Laboratory test ifc out
 Step 0-bimSMART Lab POR on One Floor
 Step 2-bimSMART Lab Arrange Spaces

ID	Floor Name	Space Name	Furniture Name	Register ID	Component Name	Default Cost	Cost (user defined)	SKU Number	URL
431	2912 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-1	160	350	123456	http://
432	2913 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-2	160	350	123456	http://
433	2920 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-3	160	350	123456	http://
434	2931 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-4	160	350	123456	http://
435	2934 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-5	160	350	123456	http://
436	2936 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-6	160	350	123456	http://
437	2940 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-7	160	350	123456	http://
438	2945 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-8	160	350	123456	http://
439	2949 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-9	160	350	123456	http://
440	2978 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-10	160	350	123456	http://
441	2984 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-11	160	350	123456	http://
442	2985 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-12	160	350	123456	http://
443	2986 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-13	160	350	123456	http://
444	2991 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-14	160	350	123456	http://
445	2992 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-15	160	350	123456	http://
446	2993 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-16	160	350	123456	http://
447	2994 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-17	160	350	123456	http://
448	2995 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-18	160	350	123456	http://
449	3000 Floor 3	301	LABORATORY	Cab Base-MultiDrawer	0 CB-19	160	350	123456	http://
450	3003 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-20	160	350	123456	http://
451	3004 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-21	160	350	123456	http://
452	3005 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-22	160	350	123456	http://
453	3010 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-23	160	350	123456	http://
454	3011 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-24	160	350	123456	http://
455	3012 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-25	160	350	123456	http://
456	3013 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-26	160	350	123456	http://
457	3014 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-27	160	350	123456	http://
458	3019 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-28	160	350	123456	http://
459	3020 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-29	160	350	123456	http://
460	3021 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-30	160	350	123456	http://
461	3027 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-31	160	350	123456	http://
462	3050 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-32	160	350	123456	http://
463	3060 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-33	160	350	123456	http://
464	3065 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-34	160	350	123456	http://
465	3069 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-35	160	350	123456	http://
466	3071 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-36	160	350	123456	http://
467	3074 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-37	160	350	123456	http://
468	3077 Floor 3	302	LABORATORY	Cab Base-MultiDrawer	0 CB-38	160	350	123456	http://

P-Export to COBIE with New Data

The screenshot shows the OPS Studio interface. On the left, a 2D floor plan is visible with rooms numbered 3 through 21. A browser window titled 'http://www.onuma.com - Exporter' is open, displaying a menu with the following options: Google Earth, Google Earth - Extruded Site, Excel, OPS Data, Glazing Information (Beta feature), Create List of FFE, Space Relationships, IFC, Ecotect, CityModel GML, Onuma BIMXML, COBie Design XML, COBie SCie XML (highlighted), and COBie SCie XML. Below the menu is an 'Export' button. In the right sidebar, the 'Import / Export' section is highlighted with a red box, containing 'Import a site / building / space' and 'Export a site / building / space' buttons. A red arrow points from the 'COBie SCie XML' menu item to the 'Export' button in the sidebar.

My Building_COBieSCie.xml

F	G	H	I	J
OPS 2008, b	80.005	Computer Lab		9.84 f
OPS 2008, b	80.005	Cots		9.84 f
OPS 2008, b	80.005	MS Classroom 01		9.84 f
OPS 2008, b	80.005	MS Classroom 04		9.84 f
OPS 2008, b	80.005	MS Classroom 02		9.84 f
OPS 2008, b	80.005	MS Classroom 03		9.84 f
OPS 2008, b	80.090	Women		9.84 f
OPS 2008, b	80.005	HS Classroom 03		9.84 f
OPS 2008, b	80.005	HS Classroom 04		9.84 f
OPS 2008, b	80.005	Teachers Workroom		9.84 f
OPS 2008, b	80.005	HS Classroom 06		9.84 f
OPS 2008, b	80.005	Computer Lab		9.84 f
OPS 2008, b	80.005	Supplies		9.84 f
OPS 2008, b	80.005	Laboratory		9.84 f
OPS 2008, b	80.005	Laboratory		9.84 f
OPS 2008, b	80.005	MS Classroom 05		9.84 f
OPS 2008, b	80.005	MS Classroom 06		9.84 f
OPS 2008, b	80.005	Physician		9.84 f
OPS 2008, b	80.005	HS Classroom 02		9.84 f
OPS 2008, b	80.005	Stair		9.84 f
OPS 2008, b	80.005	Library		9.84 f
OPS 2008, b	80.055	Stair		9.84 f
OPS 2008, b	80.005	Nurse		9.84 f
OPS 2008, b	80.005	Nurse		9.84 f
OPS 2008, b	80.090	Mech		9.84 f
OPS 2008, b	80.090	Elevators		9.84 f
OPS 2008, b	80.090	Men		9.84 f
OPS 2008, b	80.100	Hallway		9.84 f
OPS 2008, b	80.101	Hallway		9.84 f
OPS 2008, b	80.102	Hallway		9.84 f
OPS 2008, b	80.103	Hallway		9.84 f
OPS 2008, b	80.104	Hallway		9.84 f
OPS 2008, b	80.005	Home Economics		15 f
OPS 2008, b	80.005	Arts Crafts		15 f
OPS 2008, b	80.005	Library		15 f
OPS 2008, b	80.070	Computer Lab		9.84 f
OPS 2008, b	80.085	HS Classroom 06		9.84 f
OPS 2008, b	80.020	HS Classroom 03		9.84 f
OPS 2008, b	80.080	HS Classroom 04		9.84 f
OPS 2008, b	80.075	Computer Lab		9.84 f
OPS 2008, b	80.065	MS Classroom 02		9.84 f
OPS 2008, b	80.060	MS Classroom 04		9.84 f
OPS 2008, b	80.055	MS Classroom 03		9.84 f
OPS 2008, b	80.045	MS Classroom 05		9.84 f
OPS 2008, b	80.040	Laboratory		9.84 f
OPS 2008, b	80.035	Laboratory		9.84 f
OPS 2008, b	80.030	MS Classroom 06		9.84 f
OPS 2008, b	80.025	HS Classroom 02		9.84 f
OPS 2008, b	80.015	Arts Crafts		9.84 f
OPS 2008, b	80.055	Stair		9.84 f

COBIE
Data

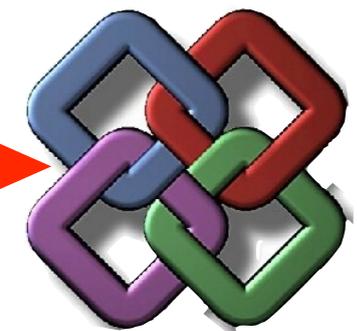
Q-Export to IFC

The screenshot displays the OPS Studio software interface. At the top, the user is logged in as Kimon Onuma. The main menu includes options like About, My Home, Attachment, Projects / Schemes, Sites, Buildings/Floors, Spaces, Report/Print, Settings, Bug, and Help. The current project is "My Project" with scheme "(S44_1020) Scheme 1" and building "(B44_2516) My Building - 000".

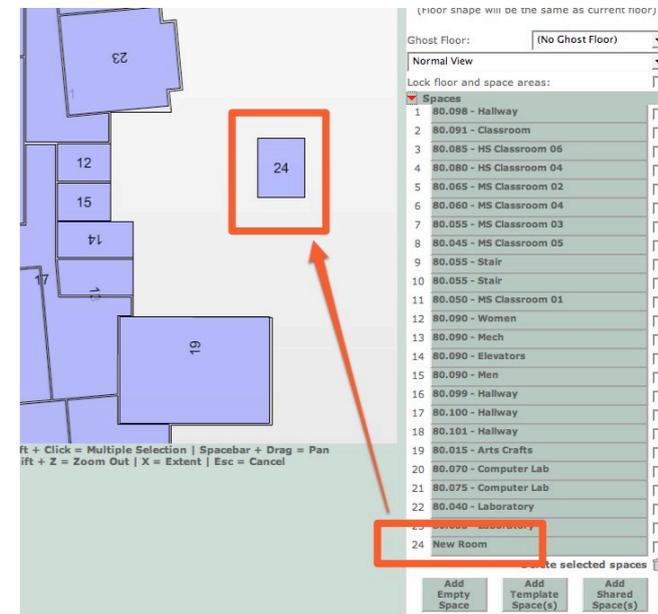
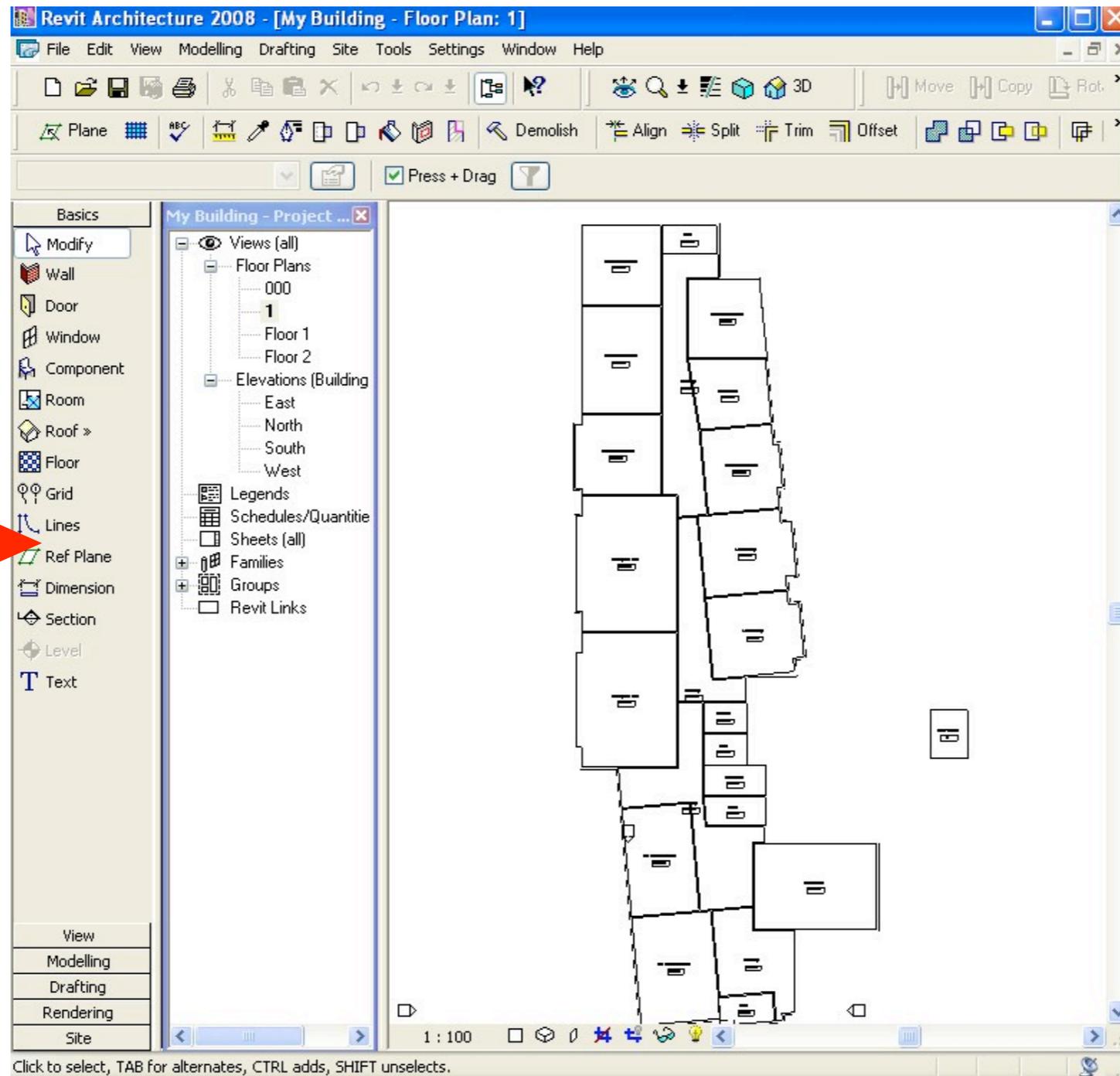
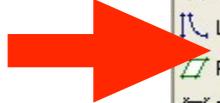
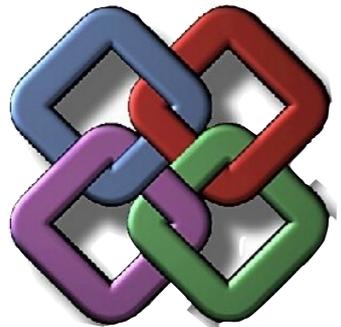
The interface is divided into several panels:

- Left Panel (Export):** Shows the "Export" menu with "My Project" and "Scheme 1" selected. Under "Buildings", "My Building" is highlighted. The "Format" dropdown is set to "Google Earth", and the "IFC" option is selected in the expanded list. Other options include Google Earth, Google Earth - Extruded Site, Excel, OPS Data, Glazing Information (Beta feature), Create List of FFE, Space Relationships, Ecotect, CityModel GML, Onuma BIMXML, COBie Design XML, and COBie SCie XML. The "Objects" section has checkboxes for Site, Storey Volume, Floor Slab, and Space. The "Moded View" section has a checkbox for "20 feet gap floors".
- Center Panel:** A 2D architectural floor plan of a building with numbered rooms (9, 11, 2, 8, 22, 23, 12, 15, 14, 1, 19, 18, 10, 24). A north arrow is present.
- Right Panel (Floors):** Lists floors 4 (000), 3 (000), 2 (Floor 2), and 1 (Floor 1). It includes an "Add Floor" button, a "As Top Floor" dropdown, and a checkbox for "(Including Spaces)". Below this are "Ghost Floor" (set to "No Ghost Floor"), "Normal View", and "Lock floor and space areas" (unchecked). A list of expandable sections follows: Spaces, Space Attributes, Space Relationships, Background Setting, and Copy Floor Coordinates.
- Bottom Right Panel (Import / Export):** Contains "Import a site / building / space" and "Export a site / building / space" options, each with a corresponding button. The "Export" button is highlighted with an orange box.

At the bottom, hotkeys are listed: R = Rotate | Shift + Click = Multiple Selection | Spacebar + Drag = Pan | Z = Zoom In | Shift + Z = Zoom Out | X = Extent | Esc = Cancel. The copyright notice "©ONUMA.com" is at the bottom left.



R-Import IFC to Revit, or Other IFC BIM



Same Plan in OPS

S-Export from OPS Model Server

Sys: Beta Version Logged in as Kimon Onuma

About My Home Attachment Projects / Schemes Sites Buildings/Floors Spaces Report/Print Settings Bug Help

BIMSTORM ADD New Project Logout Map View POWERED BY ONUMA™

View: All Favorites Recent 3 Key: I + Last Updated Scheme Owner

OPS Model Server with Hundreds of BIMs

NA - COBIE Laboratory

- Name of Scheme
- Import IFC from OPS
- Import XML from Archicad
- Step 2 - Add FEE
- Step 1 - Import IFC
- Add Empty Scheme/Site
- Add Template Scheme/Site

1234 - My Project

- Name of Scheme
- Scheme 1
- Add Empty Scheme/Site
- Add Template Scheme/Site

NA - LA Coliseum North University Park Master Plan

- Name of Scheme
- LA Coliseum North University Park Master Plan
- Add Empty Scheme/Site
- Add Template Scheme/Site

SHARED SCHEMES : 500.345 - Testing files

- Name of Scheme
- Cobie Development

SHARED SCHEMES : NA - Test Project \$1,499,999

TEAMWORK SCHEMES : NA - Hollywood and Vine

- Name of Scheme
- Hollywood and Vine

TEAMWORK SCHEMES : NA - Office/ Mixed Use Towers

TEAMWORK SCHEMES : NA - South Coast Plaza Mall

TEAMWORK SCHEMES : NA - USC North University Park Campus Master

TEAMWORK SCHEMES : NA - 30-06-2008 Testing

Exporter

ONUMA PLANNING SYSTEM

Export

Hollywood and Vine

Hollywood and Vine

Buildings

- Building 1
- Building 2
- Building 3
- Building 4

Format:

- IFC
- Google Earth
- Google Earth - Extruded Site
- Excel
- OPS Data
- Glazing Information (Beta feature)
- Create List of FFE
- Space Relationships
- IFC
- Ecotect
- CityModel GML
- Onuma BIMXML
- COBie Design XML
- COBie SCie XML

Objects:

- Site
- Storey Volume
- Floor Slab
- Space

Done

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Export directly without opening the scheme. Live data, as users edit their schemes, export data.

T - Web Services to Export COBIE



ONUMA WFS Catalog

OPEN ARCHITECTURE

SERVICES | SOLUTIONS

PRODUCTS

Products > ONUMA WFS™ > Web Services Catalog

- [Step 3-bimSMART Lab Resolved](#)
- [Step 2-bimSMART Lab Arrange Spaces](#)
- [Step 1-bimSMART Lab Import POR](#)
- [bimSMART Lab-Washington DC](#)
- [bimSMART Lab-Los Angeles](#)
- [bimSMART Lab-Austin](#)
- [bimSMART Lab-Vancouver](#)
- [bimSMART Lab-London](#)

Specify the User Group whose Projects need to be listed:
(Note: The Password-Field for the Default and the OGC User Groups are set automatically)

User Group: Password:

	A	B	C	D	E	F	G	H	I	J	K	L
	ComponentID	SpaceID	RegisterID	ExternalSyst	ExternalName	ComponentN	ComponentD	CreatedBy	CreatedDate	CreatedTime	ReplacesID	Withdrawn
1												
2	1	6,106	63,Diffusers	OPS 2008,	b44108	SD-1	SD-1	1,Onuma,Kin	05-Jul-2008	04:13		No
3	2	6,106	63,Diffusers	OPS 2008,	b44109	SD-2	SD-2	1,Onuma,Kin	05-Jul-2008	04:13		No
4	3	6,106	63,Diffusers	OPS 2008,	b44110	SD-3	SD-3	1,Onuma,Kin	05-Jul-2008	04:13		No
5	4	6,106	63,Diffusers	OPS 2008,	b44111	SD-4	SD-4	1,Onuma,Kin	05-Jul-2008	04:13		No
6	5	6,106	63,Diffusers	OPS 2008,	b44112	SD-5	SD-5	1,Onuma,Kin	05-Jul-2008	04:13		No
7	6	7,107	34,HVAC Sys	OPS 2008,	b44166	RH-1	RH-1	1,Onuma,Kin	05-Jul-2008	04:13		No
8	7	9,109	34,HVAC Sys	OPS 2008,	b44168	RH-3	RH-3	1,Onuma,Kin	05-Jul-2008	04:13		No
9	8	10,110	63,Diffusers	OPS 2008,	b44113	SD-6	SD-6	1,Onuma,Kin	05-Jul-2008	04:13		No
10	9	10,110	63,Diffusers	OPS 2008,	b44114	SD-7	SD-7	1,Onuma,Kin	05-Jul-2008	04:13		No
11	10	10,110	63,Diffusers	OPS 2008,	b44115	SD-8	SD-8	1,Onuma,Kin	05-Jul-2008	04:13		No
12	11	10,110	63,Diffusers	OPS 2008,	b44116	SD-9	SD-9	1,Onuma,Kin	05-Jul-2008	04:13		No
13	12	10,110	63,Diffusers	OPS 2008,	b44117	SD-10	SD-10	1,Onuma,Kin	05-Jul-2008	04:13		No
14	13	13,113	34,HVAC Sys	OPS 2008,	b44153	EF-2	EF-2	1,Onuma,Kin	05-Jul-2008	04:13		No
15	14	13,113	63,Diffusers	OPS 2008,	b44154	SD-16	SD-16	1,Onuma,Kin	05-Jul-2008	04:13		No
16	15	13,113	63,Diffusers	OPS 2008,	b44155	SD-17	SD-17	1,Onuma,Kin	05-Jul-2008	04:13		No
17	16	13,113	63,Diffusers	OPS 2008,	b44156	SD-18	SD-18	1,Onuma,Kin	05-Jul-2008	04:13		No
18	17	13,113	63,Diffusers	OPS 2008,	b44157	SD-19	SD-19	1,Onuma,Kin	05-Jul-2008	04:13		No
19	18	13,113	63,Diffusers	OPS 2008,	b44158	SD-20	SD-20	1,Onuma,Kin	05-Jul-2008	04:13		No
20	19	13,113	24,Plumbing	OPS 2008,	b44159	EEW-2	EEW-2	1,Onuma,Kin	05-Jul-2008	04:13		No
21	20	17,117	OPS 2008,	b1559				1,Onuma,Kin	05-Jul-2008	04:13		No

1

2

4

3

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buildingSMART alliance, USACE Demonstration

Washington DC - July 23, 2008