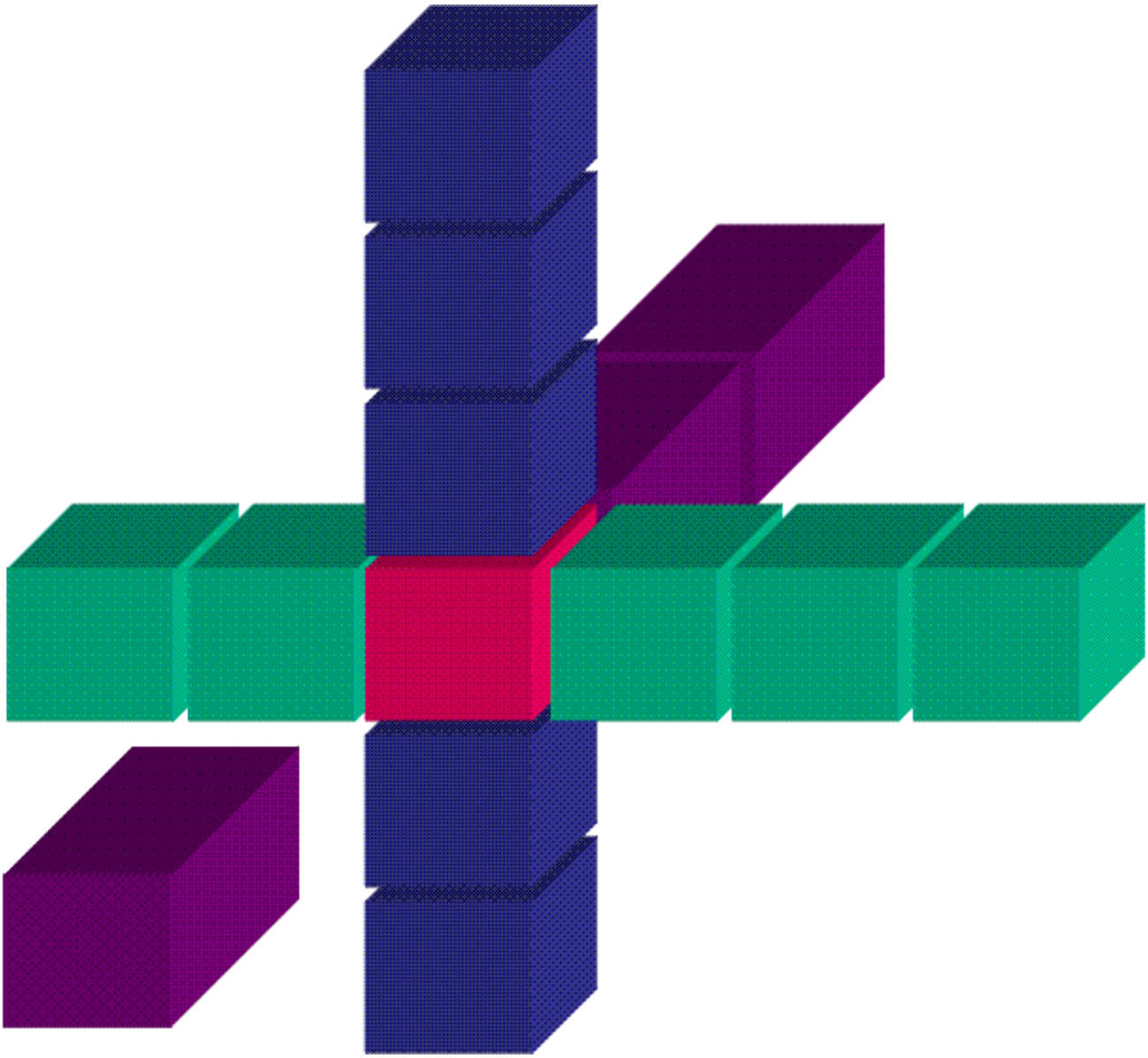

Information Delivery Manual (IDM)

(COBIE-ER-03) Exchange Project Handover - Space Layout

Added by Bill East, last edited by Bill East on May 02, 2007 (view change)
Labels: (None)

(COBIE-ER-03) Exchange Project Handover - Space Layout

NBIMS Development Stage

Stage	Name	Status
0	Draft, not yet approved as NBIMS project	
1	Part of a 'pilot' project	
3	Part of a project out for 'consensus' review	✔

4	Part of an operational standard	
5	Superseded by:	
6	Retired	

Note: For information on the specific stages of NBIMS project development, please visit www.nbims.org.

Project Stage

Stage	Name	Valid
0	Portfolio requirements	
1	Conception of need	
2	Outline feasibility	
3	Substantive feasibility	
4	Outline conceptual design	
5	Full conceptual design	
6	Coordinated design and procurement	
7	Production information	
8	Construction	✓
9	Operation and maintenance	✓
10	Disposal	

Note: While the information exchange described in the COBIE project occurs following construction during building handover, as noted in the table above, the data contained in this particular exchange requirements is generally applicable throughout the facility life-cycle.

Overview

COBIE contains information information describing the operations, maintenance, and assets in capital facilities. The authoritative sources for this information include designers, builders, installers, and manufacturers. On the design side of the exchange, BIM-based design tools may be used to capture COBIE data. From construction, information about approved submittals are included in COBIE exchanges. Builders identify products to be installed. Manufacturers provide operating and maintenance information. Installers provide serial and tag numbers. Quality Control/Assurance staff provide test and certification reports. All these parties can capture building handover data through the COBIE standard, tying their diverse set of software together for the purpose of providing a consistent data set of operations, maintenance, and asset management to building staff.

This exchange requirement defines interior and exterior spaces at the level needed for construction-operation information handover. An example scenario for this stage is shown in the table below:

Task	Scenario
Space Name	Provide the name and floor for each space.
Space Function	Identify the primary function of the space using the OmniClass or locally specified spatial function classification scheme.
Space Volume (Coordinates)	Identify the space X and Y coordinate. Floor height and elevation define the Z coordinates needed to form the bounding box. Coordinates are provided using an internal frame of reference only.
Space Area	Provide one or more values required to manage the space asset. These values are defined by

(Asset)	ANSI/ASTM or other authoritative source that is explicitly identified in the exchange
Space Nesting	Identify one or more super-spaces may contain the space. The name of these spaces will typically refer to various conceptual zones within the building that have a similar or grouped pattern of use. For example, zones my refer to mechanical heating zones, alarm systems zones, or groups of spaces to be used for specific clients.

The information provided through this information exchange should be a subset of information that already exists in the design building information model, as appended/changed during construction. Information related to the facility that may be exchanged include:

- All spaces must link to a single floor. if the space spans multiple floors, such as an atrium, the space is defined by the bottom most elevation for that space.
- Spaces may be organized into "super spaces."
- There may be multiple "super spaces" that refer to the same space.
- Asset management information may be included, based on specific contract requirements.
- Spatial layout information may be included, based on specific contract requirements.

The following information auditing is also required for all COBIE file exchanges that occur in a batch file transfer mode. Software that mediates that transmission of COBIE data may capture this data automatically based on process model implementations:

- The party who created the data provided. This is required for individual record.
- The full history of all changes to the data must be included in the data file.

The authoritative source for this information is the design building information model. Ideally the information in this project wrapper will have been created during early design and "handed down" with the project as work progressed from design through to construction.

Information Requirements

Context	Information Needed	MAN	REC	OPT	Actor Supplying	Functional Part
Precursor	The provisions of the exchange requirement COBIE-ER-01 must be provided as a wrapper that identifies the facility to which these floors and spaces belong.	✓			Designer or Constructor	fp_model_project
Precursor	Site (General) information must be provided to identify the site upon which the the facility is placed.	✓			Designer or Constructor	fp_model_site
Precursor	Facility (General) information must be provided to identify the facilities in which floors and spaces may be found.	✓			Designer or Constructor	fp_model_building
Precursor	Provide the name of each conceptual/physical vertical level of each of the facilities identified in the project wrapper.	✓			Designer or Constructor	fp_building_storey
Space Name	Provide the name and floor for each space.	✓			Designer or Constructor	fp_model_space
Space Function	Identify the primary function of the space using the OmniClass or locally specified spatial function classification scheme.	✓			Designer or Constructor	fp_model_space

Space Volume (Coordinates)	Identify the space X and Y coordinate. Floor height and elevation define the Z coordinates needed to form the bounding box. Coordinates are provided using an internal frame of reference only.	✓			Designer or Constructor	fp_model_space
Space Area (Asset)	Provide one or more values required to manage the space asset. These values are defined by ANSI/ASTM or other authoritative source that is explicitly identified in the exchange			✓	Designer or Constructor	fp_model_space
Space Nesting	Identify one or more super-spaces that contain the space. The name of these spaces will typically refer to various conceptual zones within the building that have a similar or grouped pattern of use. For example, zones my refer to mechanical heating zones, alarm systems zones, or groups of spaces to be used for specific clients.			✓	Designer or Constructor	fp_model_space
Authoritative Source	The user responsible for creating the project wrapper data set.	✓			Designer or Constructor	fp_apply_owner_history
History	All versions of information captured during the project will be provided in the file. Superseding data is explicitly identified.	✓			Designer or Constructor	fp_apply_owner_history