RIAI BIM Pack

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Mark Stephens RIBA MRIAI

BIM is not a software platform

And BIM is not just Revit

Level 2 BIM proposed in 2013 as a standard for BIM

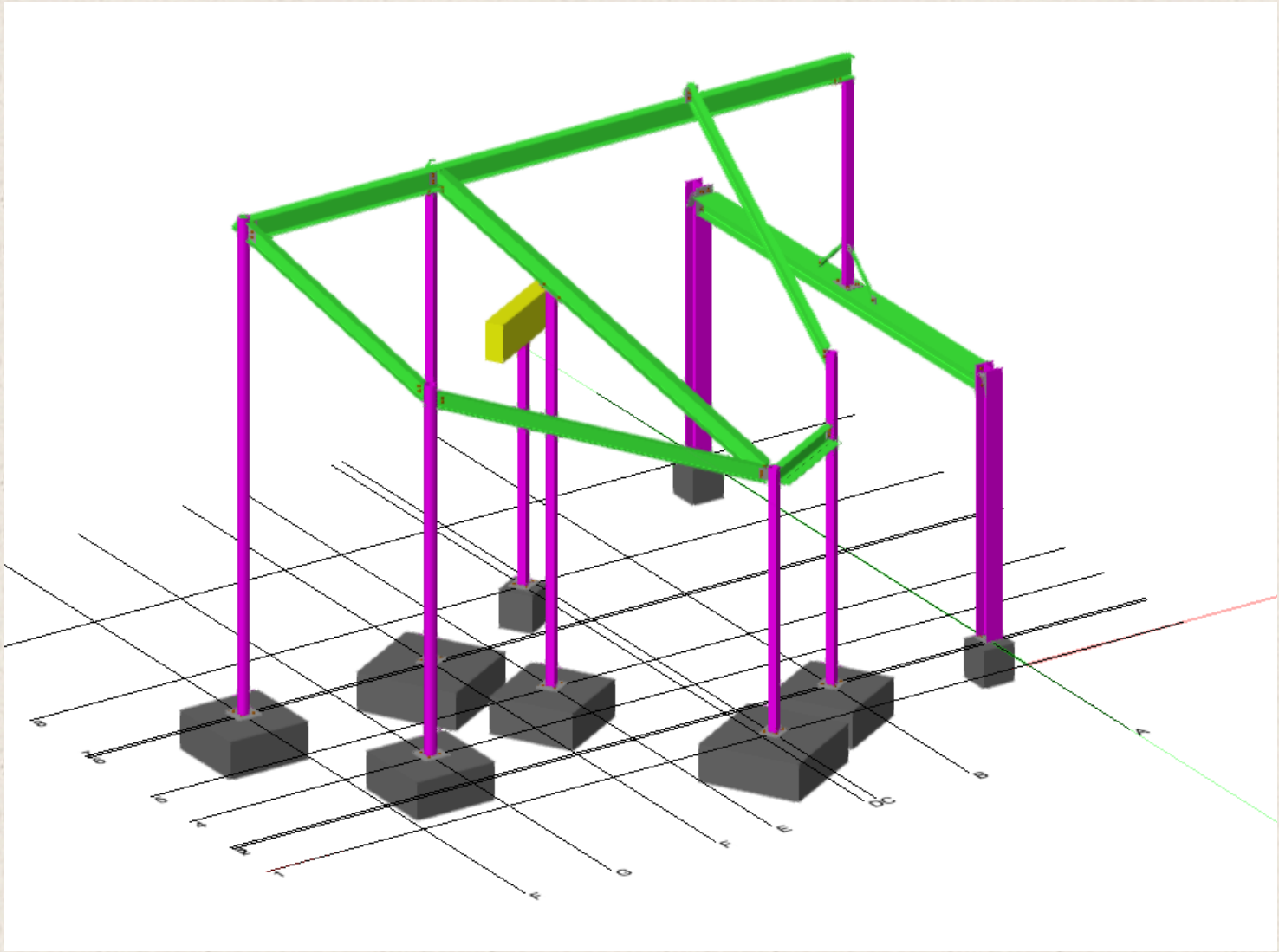
Mandated by the UK government for publicly funded projects in 2016

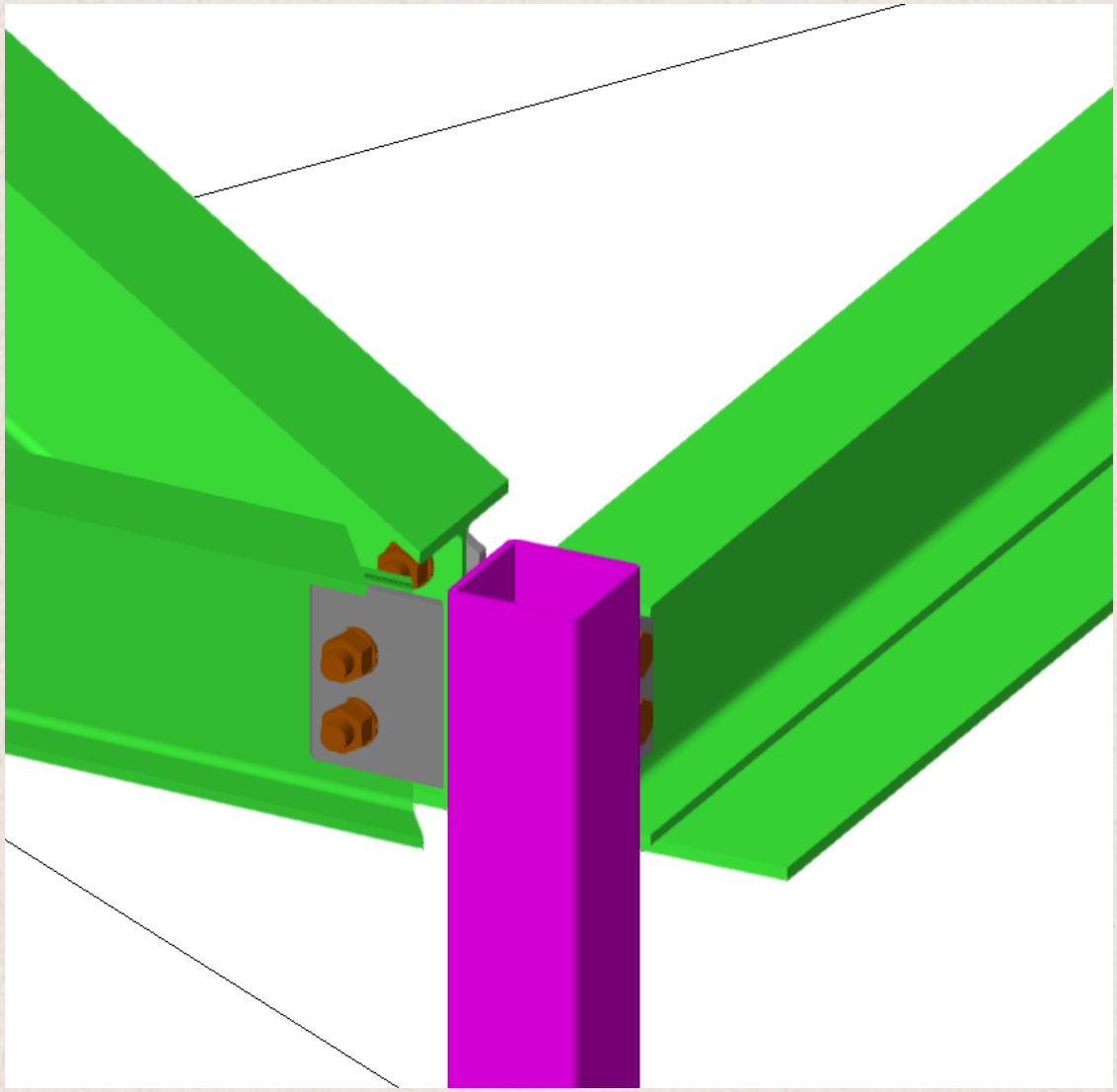
In January 2019, ISO published new standards for BIM which are available from BSI. The standard is in two parts:

1. **ISO 19650-1** Organization of information about construction works - Information management using building information modelling. Part 1: Concepts and principles
2. **ISO 19650-2** Organization of information about construction works - Information management using building information modelling. Part 2: Delivery phase of assets

While UK standards are currently being incorporated in appointments and contracts

Irish Government BIM Mandate started 2019, with BIM required on complex public sector projects
(introduction of ISO 19650 standards)





BIM goes well beyond using 3D CAD models

BS1192:2007 describes the Common Data Environments (CDE) as a shared/central project data repository for ALL project information (graphical, non-graphical, documents)

The purpose is to have the latest information centralized in one place).

You should never have to email documents, you should simply notify people that the CDE has been updated

The CDE contains:

- **Graphical Data** (models, drawings, IFC, photographs, video, etc)

- **Non-graphical Data** (schedules, databases,

(contracts, minutes, RFI's, brief, specifications, reports, BOQ, inspection plans, commissioning certificates, product data sheets, user manuals etc)

This information is called the **Project Information Model** (PIM) during design / construction phase,

Once handed over, the **Asset Information Model** (AIM) for operations phase

The word “model” in these terms should not to be confused with only the 3D model – it is ALL information as described before)

PAS1192-2:2013 provides flexibility on the type of CDE that may be used. System types include:

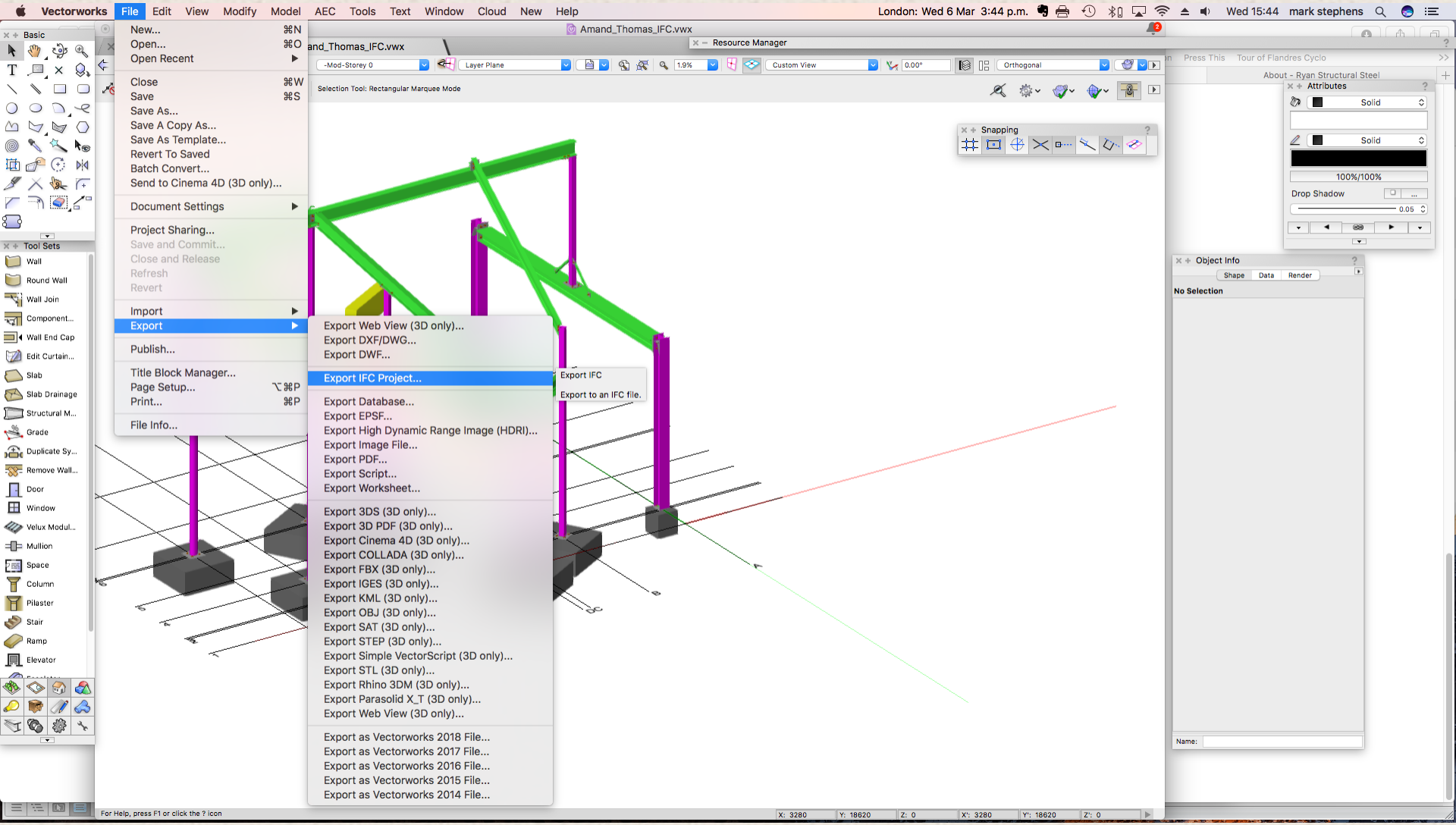
- A network / project server may be suitable if one organisation is responsible for all disciplines. The network may be within a single location or connected to multiple locations via a WAN.

- A file based system is one in which the metadata about the file is stored only in the file itself. Examples are ftp, Dropbox, Google Drive, etc. (although the “approval” workflows and historical audit trail in some of the free/cheap online systems, may need to be manually handled).

- A database system is one in which additional metadata is stored about files. Revision and Status are examples of such metadata. More sophisticated systems automate the enforcement of file naming and management of file approvals.

buildingSMART
International home of openBIM

Industry Foundation Classes [IFC] are the buildingSMART data model standard. IFC is the only truly open standard for BIM - it makes the difference between BIM and open BIM.


Vectorworks
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Tools
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New... ⌘N
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Save As...
Save A Copy As...
Save As Template...
Revert To Saved
Batch Convert...
Send to Cinema 4D (3D only)...
Document Settings
Project Sharing...
Save and Commit...
Close and Release
Refresh
Revert
Import
Export
Publish...
Title Block Manager...
Page Setup... ⌥⌘P
Print... ⌘P
File Info...
Export Web View (3D only)...
Export DXF/DWG...
Export DWF...
Export IFC Project...
Export IFC
Export to an IFC file.
Export Database...
Export EPSF...
Export High Dynamic Range Image (HDRI)...
Export Image File...
Export PDF...
Export Script...
Export Worksheet...
Export 3DS (3D only)...
Export 3D PDF (3D only)...
Export Cinema 4D (3D only)...
Export COLLADA (3D only)...
Export FBX (3D only)...
Export IGES (3D only)...
Export KML (3D only)...
Export OBJ (3D only)...
Export SAT (3D only)...
Export STEP (3D only)...
Export Simple VectorScript (3D only)...
Export STL (3D only)...
Export Rhino 3DM (3D only)...
Export Parasolid X_T (3D only)...
Export Web View (3D only)...
Export as Vectorworks 2018 File...
Export as Vectorworks 2017 File...
Export as Vectorworks 2016 File...
Export as Vectorworks 2015 File...
Export as Vectorworks 2014 File...
Amand_Thomas_IFC.vwx
Resource Manager
Selection Tool: Rectangular Marquee Mode
Snapping
Attributes
Object Info
No Selection
Tool Sets
Wall
Round Wall
Wall Join
Component...
Wall End Cap
Edit Curtain...
Slab
Slab Drainage
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Space
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Stair
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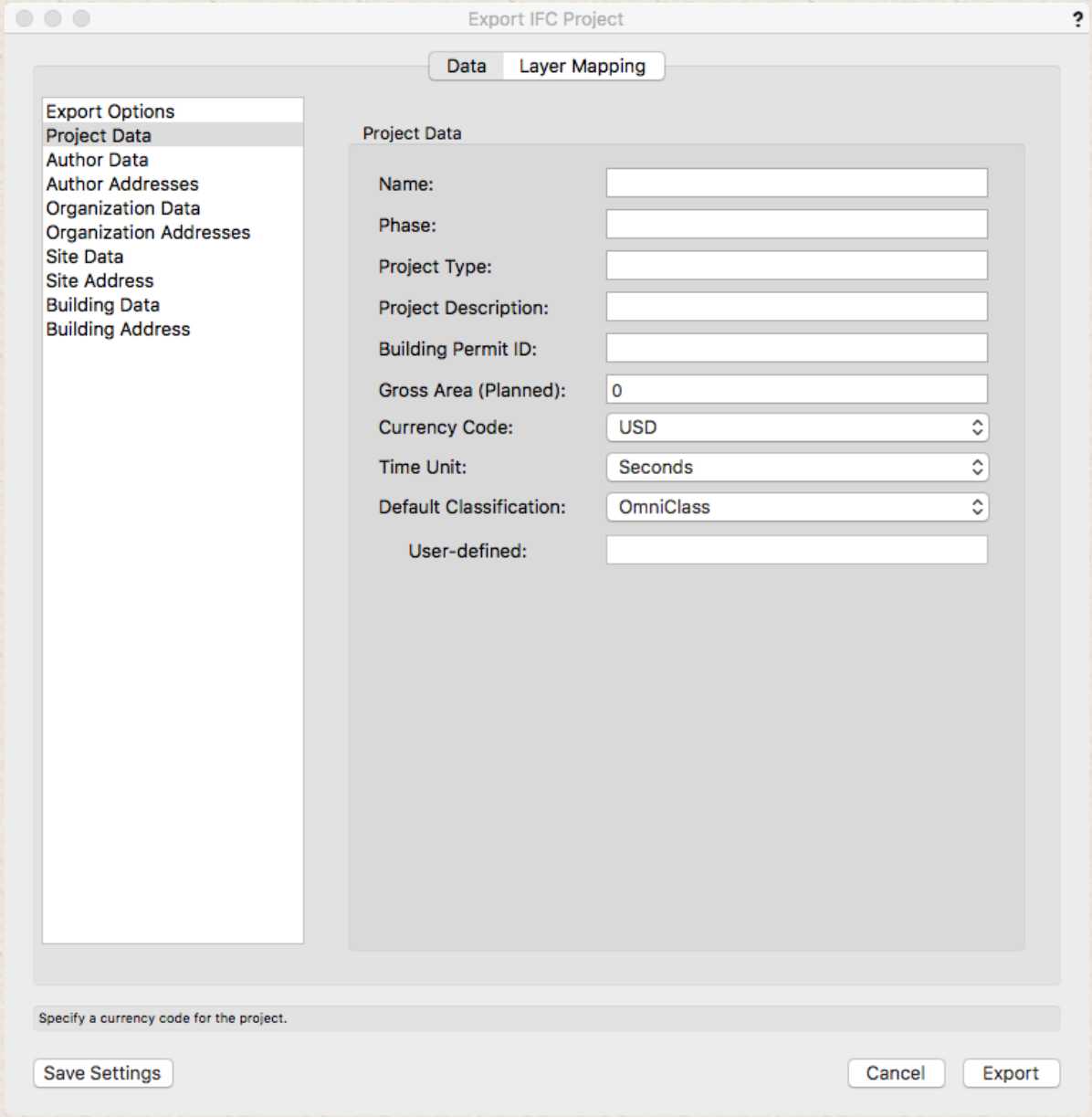
Elevator
For Help, press F1 or click the ? icon


Export IFC Project
?
Data
Layer Mapping
Export Options
Project Data
Author Data
Author Addresses
Organization Data
Organization Addresses
Site Data
Site Address
Building Data
Building Address
Project Data
Name:
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Project Type:
Project Description:
Building Permit ID:
Gross Area (Planned):
0
Currency Code:
USD
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Seconds
Default Classification:
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Specify a currency code for the project.
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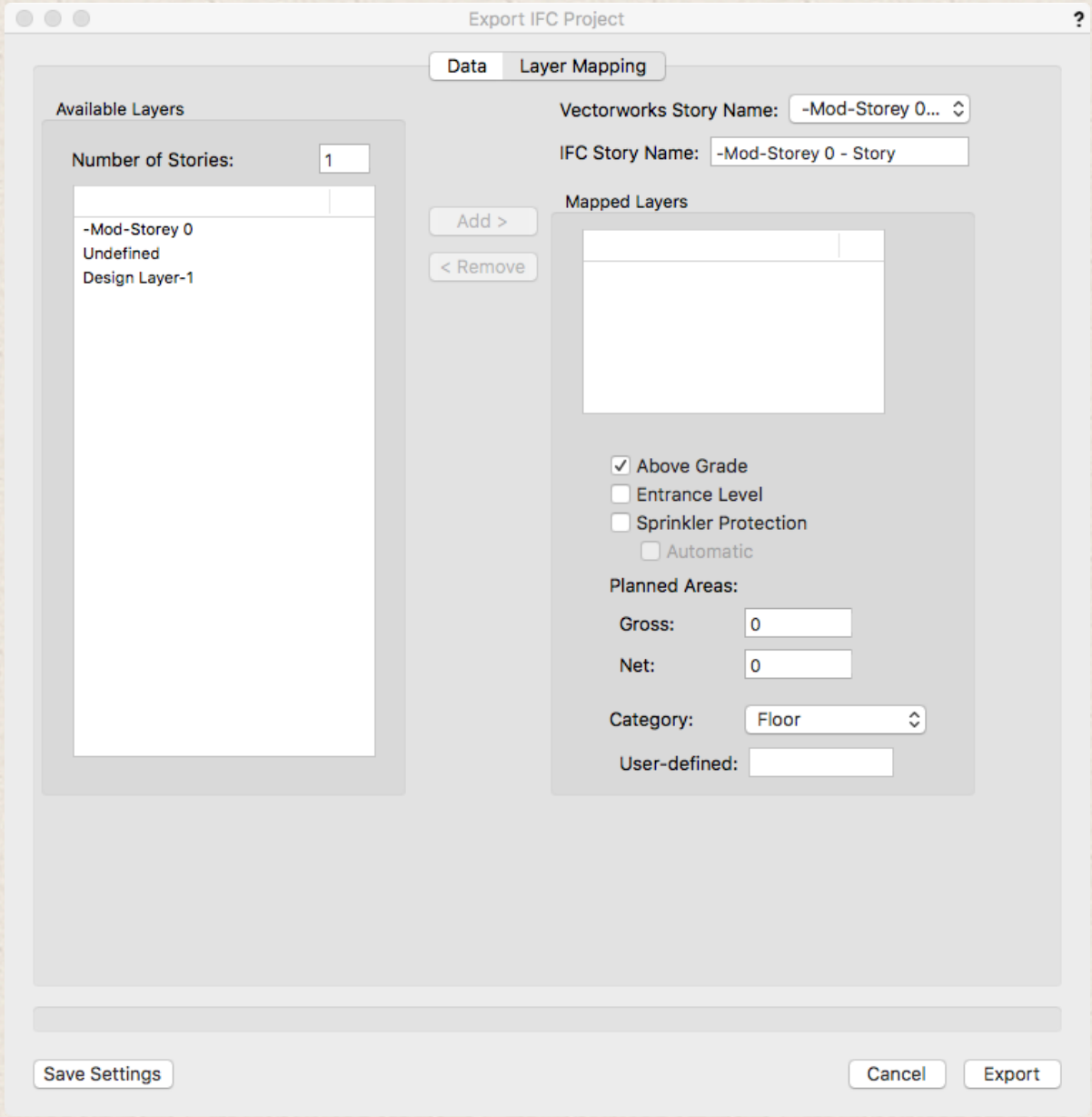
Export IFC Project
Data
Layer Mapping
Available Layers
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-Mod-Storey 0
Undefined
Design Layer-1
Add >
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Vectorworks Story Name:
-Mod-Storey 0...
IFC Story Name:
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Mapped Layers
Above Grade
Entrance Level
Sprinkler Protection
Automatic
Planned Areas:
Gross:
0
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Category:
Floor
User-defined:
Save Settings
Cancel
Export

Project for next half hour:

1. Research into how many architecturally based software are BIM compliant
2. What level of BIM do they have?