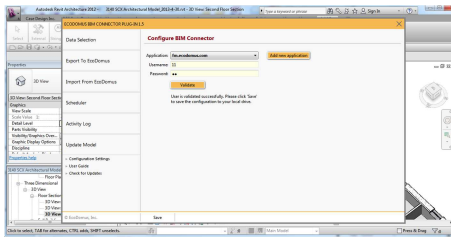## Step 1: Preparing ARCH Revit Model for Synchronization with EcoDomus PM
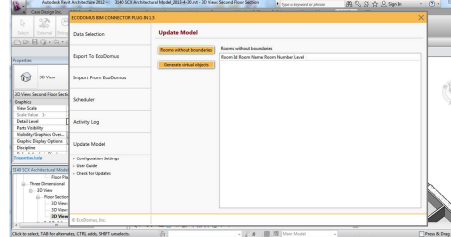
1

Revit Arch EcoDomus BIM Connector: **Configuration Settings**
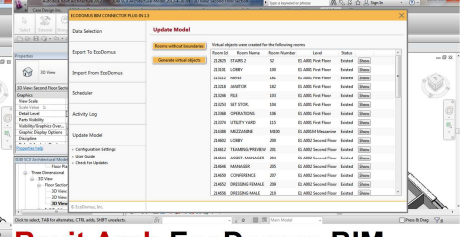
Login and Save

2

Revit Arch Update Model / Rooms without Boundaries / Fix Unbounded Rooms / Run Report and fix until Rooms are not shown here. Refer to Revit Warnings.
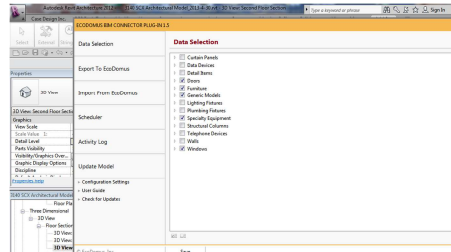
3

Revit Arch EcoDomus BIM Connector: Update Model / Generate Virtual Objects / Virtual Transparent Floors are created and lifted ¼ " above modeled floor. Save the Revit Model.
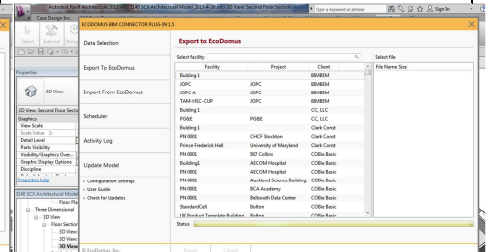
4

Revit Arch : Update Model / Generate Virtual Objects / Check to see if Virtual Floors, Stairs & Elevators Cut through. If not, Modify Virtual Floor Boundary.
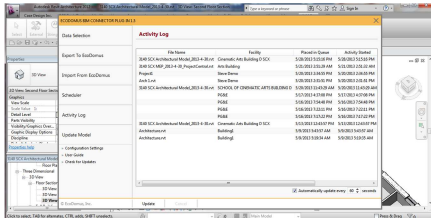
5

Revit Arch : Data Selection / Select Items In Revit Arch that will not be duplicated in Revit MEP / Save.
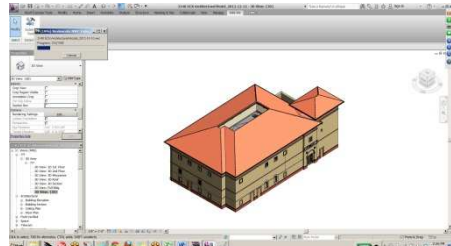
6

Revit Arch EcoDomus BIM Connector / Export to EcoDomus
Note: this step occurs ONLY after the Navis nwd Model is Uploaded to the BIM server.
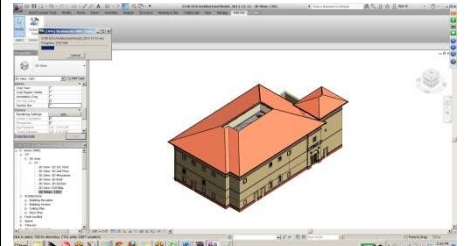
7

Revit Arch: Activity Log / check Auto Update for large models to track progress. *Note:* this step occurs ONLY after the Navis nwd Model is Uploaded to the BIM server.
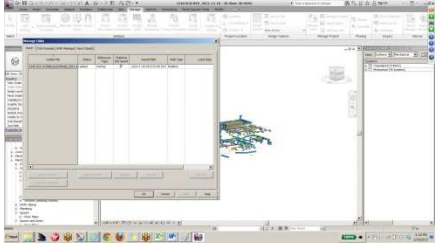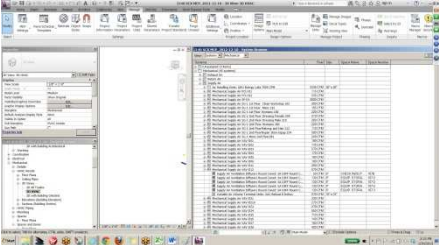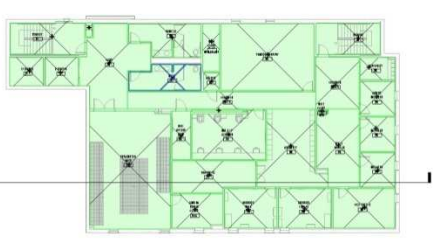
8
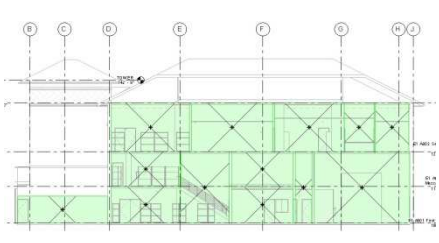
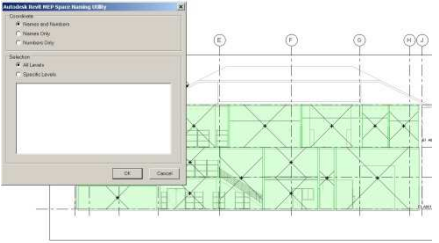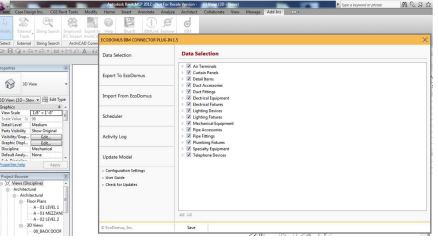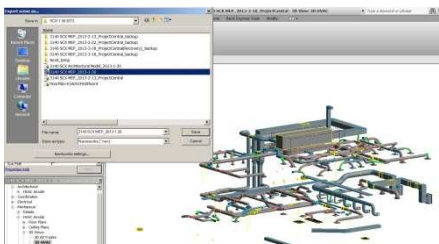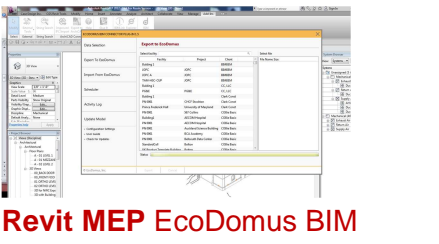**Revit Arch Set Detail Level to Coarse and Visual Style to Shaded in the Default 3D Home View**

9

Revit Arch: Unbind all Ceilings / VG OFF MEP, Lines, DWGS and any elements that are not needed in the Navis model. **Add-Ins External Tools / Export to Navisworks .nwc** (use shared coordinates in NavisWorks Settings)

Step 2: Preparing MEP Revit Model for Synchronization with EcoDomus PM

1 **Revit MEP** Link In Revit Arch File Manage > Links> Link Architectural File in. Use Origin to Origin	**2** **Revit MEP** Check Spaces System Browser> Check for Space Names showing up in the System Browser	**3** **Revit MEP** Fix Spaces Ensure that Revit MEP Space Entities are fully inserted in the model on all floors in Plan Views. Use Inquiry to check for Duplicates and errors.
4 **Revit MEP** Fix Spaces Check Revit MEP Space Entities in Section View. Ensure that spaces extend from Floor Slab to the Floor Slab above. MEP must be enclosed by spaces, nudge if needed	**5** **Revit MEP** Fix Space Names/Nums Use the Autodesk Revit Space Naming Utility to synchronize Revit Arch Room Names/Numbers to Revit MEP Space Names/Numbers	**6** **Revit MEP** EcoDomus BIM Connector - Data Selection. Check all elements[1] to be tracked. EcoDomus parameters are inserted as a shared parameter.
7 **Revit MEP** Export to NavisWorks .nwc	**8** **Revit MEP** EcoDomus BIM Connector - Export to EcoDomus Select Facility, select File, Export	**9**

[1] Revit MEP FM Item Selection: Check Mechanical Equipment, Electrical Equipment, Air Terminals, Electrical Fixtures, Telephone Devices, Lighting Fixtures, Lighting Devices, Duct Accessories, Plumbing Fixtures, Pipe Accessories and Specialty Equipment
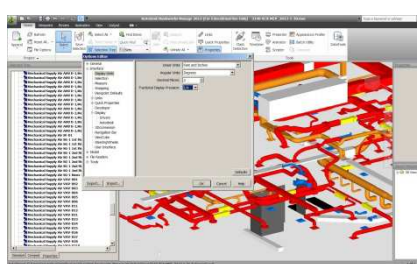
Step 3: Preparing the NavisWorks Models for Upload to EcoDomus

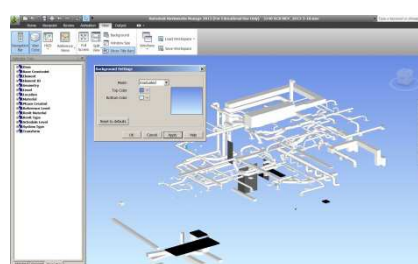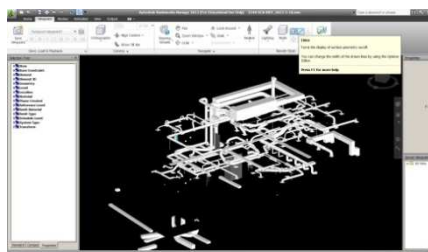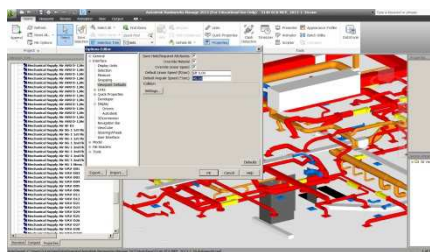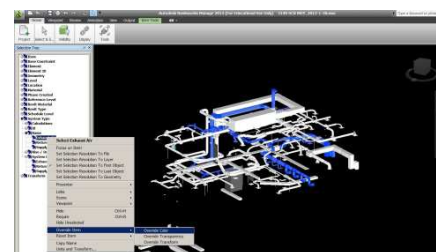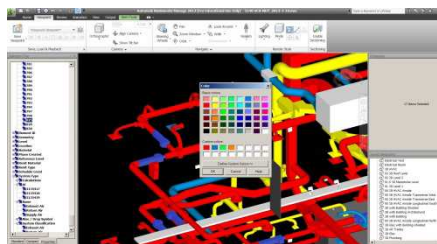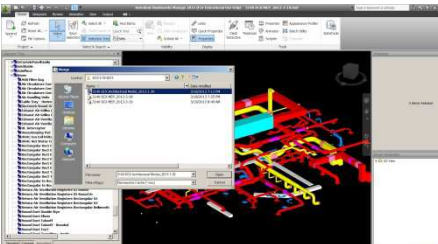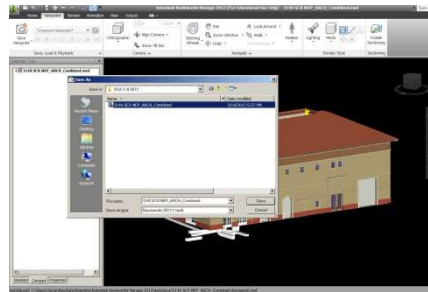|		
1 **NavisWorks** Open MEP NWC	**2** **NavisWorks** Change Display Units Options> Interface> Display Units> Linear Units: Feet and Inches, Angular Units: Degrees, Decimal Places: 2, Fractional Display Precision: ¼"	**3** **NavisWorks** Change Background Properties to "Graduated" View > Background > Graduated Hit "Ok"
4 **NavisWorks** Turn off all Lines View> Click the "Lines" Button	**5** **NavisWorks** Viewpoint Default Options Options> Interface> Viewport Defaults> Check all 3 boxes, change Default Linear Speed to 6ft/sec	**6** **NavisWorks** Coloring Systems **MEP.nwc** Color MEP systems individually, isolate via the Selection Tree> System Type> either by Id, Name or System Classification
7 **NavisWorks** Coloring VAV Boxes, Dampers, Filters Differently Select an shade close to each System's color	**8** **NavisWorks** Merge Arch.nwc file Merge the Arch NavisWorks NWC files into the current session	**9** Make DWG's with only Room tags on. Merge into Navis Model and lift ¼ inch above floor levels for Room ID. When creating views, using the Room Schedule can aid as a checkoff guide.

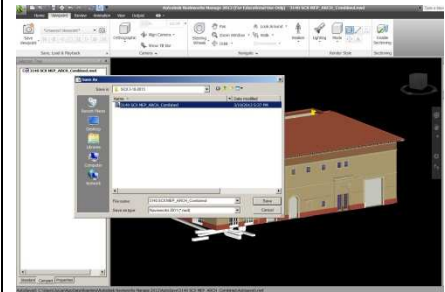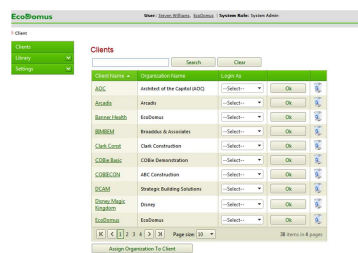| 10	11	12
NavisWorks Make Viewpoints for each room, and above their ceilings Name views according to official USC Room Names and Numbers	**NavisWorks** Save to .NWD Publish merged Revit Arch and MEP .nwc cache files into .nwd	**NavisWorks** Save to .NWF Save merged Revit Arch and MEP .nwc cache files into .nwf

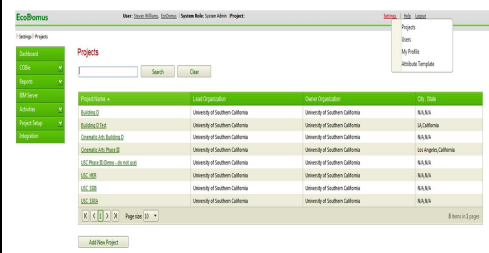## Step 4: Uploading the NavisWorks Model to EcoDomus

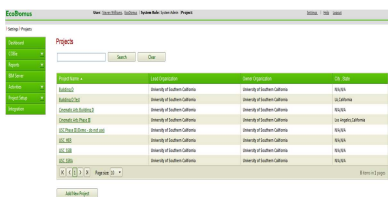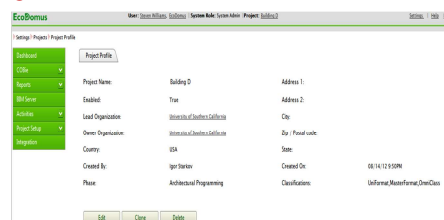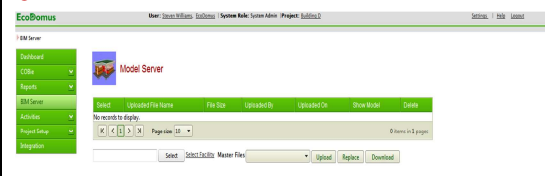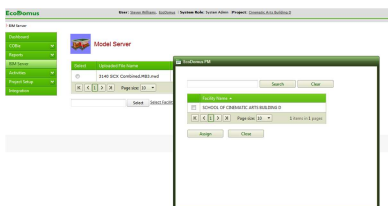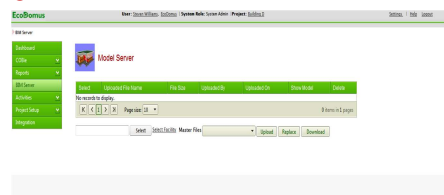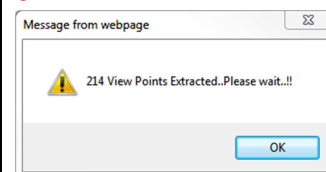| 1	2	3
 Log In to EcoDomus PM	 **Select USC Client / Select OA**	 **Select Settings/Projects**
4	**5**	**6**
 Search for your Project if it's not visible and Select.	 **Select BIM Server**	 **Select and open the NWD from your HD**
7	**8**	**9**
 Select Facility and Assign	 **Upload NWD**	 **Wait till View Points are Extracted/Select OK (**Don't use parenthesis or apostrophes in ViewsNames.)