

# EDAPT FAQs

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## 1. After results are uploaded, EDAPT is showing either nothing or only a subset of my results, why?

This is by far the most common question. It stems from understanding the differences between models/design alternatives and measures in the PEA and FEA stages.

### PEA:

In the PEA stage, the intent is to see the impact of each Measure individually. EDAPT and the PEA Report word doc will only show design alternatives that include one Measure. For example, if you have a Measure called “Overhangs on S facing windows,” you should have a design alternative in PAT that contains only this Measure and has a similar name. Always-run Measures and reporting Measures do not count against this 1-Measure limit. If you decide for some reason to run a design alternative including multiple Measures, it will not show up in EDAPT or the PEA report word doc. This is intentional. If you want to identify groups of measures (design alternatives) in the PEA, you can manually add or highlight measures into the report.

### FEA:

In the FEA stage, the intent is to see the impact of combinations of Measures. EDAPT will only show design alternatives that include more than one Measure. These design alternatives that contain multiple Measures are the focus of the FEA report. The idea is that the EC is presenting the design team with a curated list of possible designs, and that the building owner needs to pick one of these design alternatives and commit to including all the Measures it contains in their actual design. Xcel also wants to see the impact of the included Measures individually in the appendix.

The best way to go from the PEA to the FEA is to open the PEA PAT project, save a copy as a new name, make any changes to the Measure inputs as necessary, and create new design alternatives that contain the combinations of Measures that the design team cares about. If after presenting the building owner with all combinations and he/she wants one that is a mash-up of two existing design alternatives, you will need to go back into PAT, create this design alternative, upload to EDAPT, and mark this design alternative as the owner-selected. You do not need to re-create the FEA report!

## 2. When I use File >Export XML Report in PAT, I get a bunch of warnings about data missing. What gives?

Most likely you forgot to include the “Xcel EDA Reporting and QAQC” measure in your PAT project.

1. On the right column of PAT tab 1, go to BCL Measures>Add Measures from Online BCL
2. Under Reporting>QAQC find “Xcel EDA Reporting and QAQC” and download it
3. Add this Measure as an “Always Run Measure”

4. Re-run the simulations
5. Re-try File>Export XML Report

**(See YouTube video on Resources page of EDAPT)**

### **3. Why don't I have any utility costs?**

Most likely you forgot to include the "Xcel EDA Tariff Selection and Model Setup" measure in your PAT project.

1. On the right column of PAT tab 1, go to BCL Measures>Add Measures from Online BCL
2. Under Economics>Life Cycle Cost Analysis find "Xcel EDA Tariff Selection and Model Setup" and download it
3. Add this Measure as an "Always Run Measure"
4. You should see utility costs in the PAT results tab

**(See YouTube video on Resources page of EDAPT)**

### **4. The formatting of my report looks wrong (missing axis labels, bad color scheme, etc.).**

You will need to run the VBA macro to format the report. In this "EDAPT FAQs.zip" see the documents called "Installing the VBA EDAPT Report Formatter in Microsoft Word.docx" and "EDA\_report\_vba.txt"

### **5. I am generating the XML report myself or have modified it by hand, but it won't upload to EDAPT.**

First, check to make sure that when you open the .zip file, all you see is "results.xml." This file should be at the top level of the .zip, not down a level inside another folder.

Second, check the validity of the XML. Search for "XML Validation" online for instructions. We use software called "Altova XML Spy" which has a free 30 day trial, to perform XML validation. Use the attached file called "results\_schema\_3.xsd" to validate against.

### **6. The incentives in EDAPT or the report are less than what I hand-calculate.**

Most likely, this project has fuel-switching and is hitting the fuel-switching penalty described in the EDA protocol. If the Measures causing this fuel-increase are excepted (interior lighting, building envelope, etc.), you'll need to hand-edit the XML to reduce the annual fuel consumption by the amount that can be attributed to these Measures.

## 7. After uploading results, my design alternatives don't show up in the right category in the reports, or doesn't show that it contains multiple measures.

Most likely you used the "Create From External File" feature in PAT to create the design alternative. Since PAT has no way to know how you hand-edited the model, it assumes you only have 1 measure in that design alternative. You'll need to go into the XML file and hand-edit the "category" field in the "measure" to the appropriate value.

1. Open the results.xml file
2. Search for: <category>WholeBuilding</category>
3. Replace "WholeBuilding" with a valid measure category (see list below)
4. The first and second category should be separated by a dot "HVAC.Cooling"
5. Capitalization matters!
6. Re-zip the xml file and upload.

```
'Envelope.Form' vDEF
'Envelope.Opaque' vDEF
'Envelope.Fenestration' vDEF
'Envelope.Construction Sets' vDEF
'Envelope.Daylighting' vDEF
'Envelope.Infiltration' vDEF
'Electric Lighting.Electric Lighting Controls' vDEF
'Electric Lighting.Lighting Equipment' vDEF
'Equipment.Equipment Controls' vDEF
'Equipment.Electric Equipment' vDEF
'Equipment.Gas Equipment' vDEF
'People.People Schedules' vDEF
'People.Characteristics' vDEF
'HVAC.HVAC Controls' vDEF
'HVAC.Heating' vDEF
'HVAC.Cooling' vDEF
'HVAC.Heat Rejection' vDEF
'HVAC.Energy Recovery' vDEF
'HVAC.Distribution' vDEF
'HVAC.Ventilation' vDEF
'HVAC.Whole System' vDEF
'Service Water Heating.Water Use' vDEF
'Service Water Heating.Water Heating' vDEF
'Service Water Heating.Distribution' vDEF
'Onsite Power Generation.Photovoltaic' vDEF
'Whole Building.Whole Building Schedules' vDEF
'Whole Building.Space Types' vDEF
'Economics.Life Cycle Cost Analysis' vDEF
'Reporting.QAQC' vDEF
'Reporting.Troubleshooting' vDEF
```

If you need to show that a "Create From External File" design alternative represents multiple Measures:

7. Duplicate the <measure> section of the XML as many times as necessary
8. Edit the <category> as described above
9. Change the <alternative\_type> from "single\_measure" to "design\_alternative"
10. Edit the name, description, etc. fields

## 8. I made IDF files directly in EnergyPlus instead of using OpenStudio, what do I do now?

The easiest thing (which we know from experience) is to back up and go into OpenStudio as soon as possible. (The workaround path is difficult and it would involve significant hand-editing of the XML.) Here is the recommended path:

1. Import your IDF into OpenStudio via the SketchUp plugin. This will bring in:
  - a. Geometry
  - b. Schedules
  - c. Internal loads
  - d. Constructions and materials.
  - e. IT WILL NOT IMPORT HVAC!
2. Rebuild your HVAC using the OpenStudio Application
3. Create your Measures (or download from BCL)
  - a. If OpenStudio does not yet expose a desired EnergyPlus capability, use an “EnergyPlus Measure” inside of OpenStudio. See the [OpenStudio measure writing guide](#) for more information.

## 9. I have OpenStudio questions...who do I email?

For EDA-specific support: [openstudio.eda@nrel.gov](mailto:openstudio.eda@nrel.gov)

For private-sector (paid) training:

- PSD Consulting - <http://psdconsulting.com/openstudio-training>
- CASE Inc. - <http://www.case-inc.com/>

## 10. When will feature “X” be in OpenStudio?

Here are links to the plans for OpenStudio:

Roadmap: <http://openstudio.nrel.gov/openstudio-roadmap>

HVAC Additions:

[https://docs.google.com/spreadsheet/ccc?key=0AhCALIzwiaGPdHhhaINfQktXUWtacjJwcHVoZ3Fsanc&usp=drive\\_web#gid=1](https://docs.google.com/spreadsheet/ccc?key=0AhCALIzwiaGPdHhhaINfQktXUWtacjJwcHVoZ3Fsanc&usp=drive_web#gid=1)

Measures:

[https://docs.google.com/spreadsheet/ccc?key=0AhCALIzwiaGPdE1BUjZDQ01iLVBnUFJpcHIEWU10ZEE&usp=drive\\_web#gid=0](https://docs.google.com/spreadsheet/ccc?key=0AhCALIzwiaGPdE1BUjZDQ01iLVBnUFJpcHIEWU10ZEE&usp=drive_web#gid=0)

If you have suggestions or know that you’ll need features for upcoming projects, please email [andrew.parker@nrel.gov](mailto:andrew.parker@nrel.gov).