

Chapter 27

Design Import and Export

This chapter covers a topic much different than other chapters. Rather than discussing features in HCA that you can use in your own automation solution, this chapter covers a feature that will help you and others exchange parts of automation designs.

Using *Export Design Elements* you select parts of your design to extract and create a new file with. Using *Import Design Elements* you can add to your design a piece of a design created by someone else. This is also helpful if you are taking something from one of the sample files for incorporation into your design.

Design Import and Export Overview

Suppose your design contains a thermostat and you want to have an icon on a display show the thermostat picture and below it the current temperature. This isn't too hard. You need to have in your design a thermostat device and a program that triggers on current temperature reports. Also that program needs to manage its own icon and use the change icon to select the thermostat icon and change the text below it to show the temperature using an embedded expression.

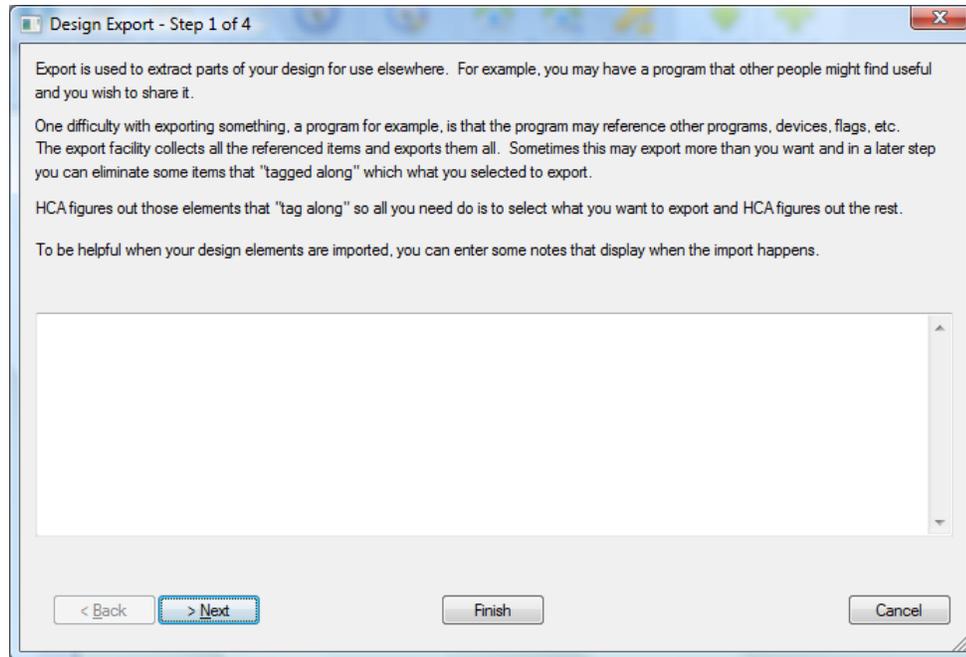
Not hard but it takes a bit of work. Suppose you want to share it with other HCA users. This is what Export Design Elements is for.

The export process is not quite as simple as it would be for exporting some data from a spreadsheet or database program. This is because so many things in HCA are connected. For example, a schedule could reference a program and that program references another program, and those programs reference some devices, etc. To export the schedule requires assembling a list of all the items referenced by the schedule, any things they reference, etc. This is what the Export Design Elements wizard does.

Importing, on the other hand, is not very complex. All things imported go into an Import folder.

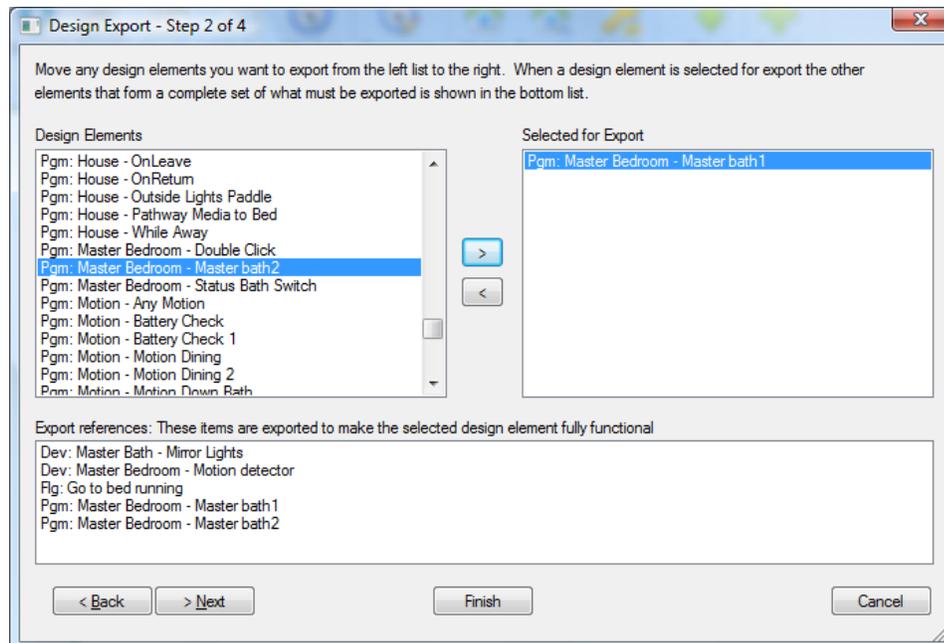
Export Wizard

The export wizard is a simple three step wizard. To start the wizard, press the *Export* button in the ribbon *Design* category. The first step of the wizard appears as:



In this first step, you can enter any notes you have about what this export is all about. This can be very helpful for other HCA users when they import. When the import occurs, these notes display and the user is given the option to save them in a file – so your notes can be as descriptive as needed.

The second step of the wizard is where the action is: you select what you want to export:

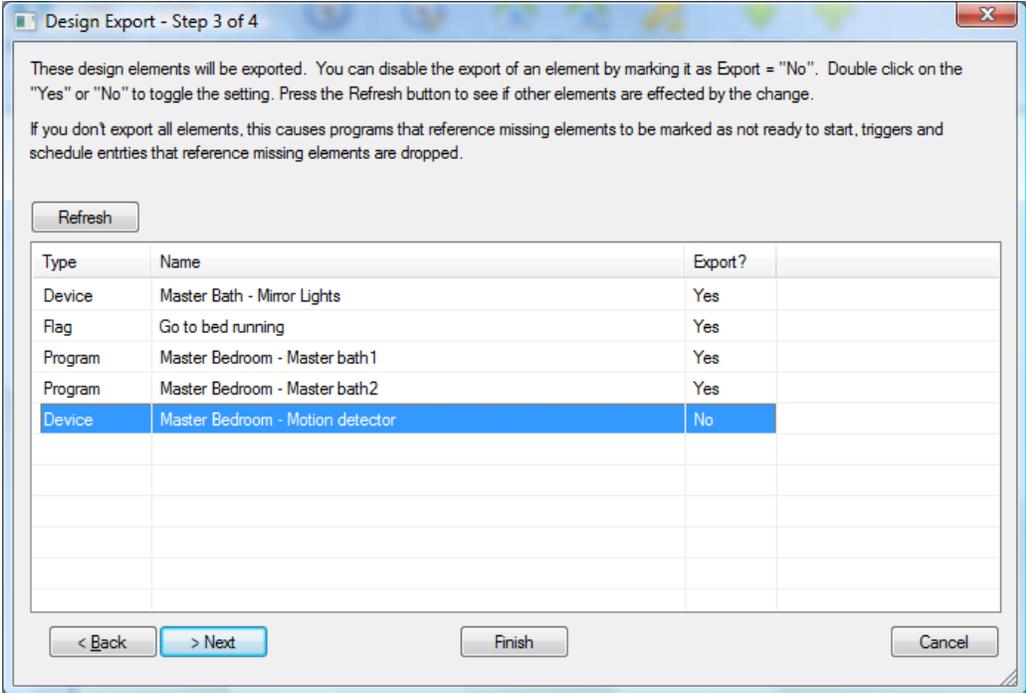


In the top left list are all objects in your design that can be exported. Move the ones that you want to export to the left hand list using the → button.

In the lower list are all the referenced objects that have to be exported. In this example, the one program to be exported *Master Bath1* references two devices and one flag, and two other programs, all of which will be exported to make it all work.

As described above, doing an export of one object – a program for example – also “brings along” lots of other pieces of your design. Sometimes that’s ok and sometimes it can result in an unwieldy mess. Too many objects being exported renders it practically useless for someone to import.

In the next wizard step you have control over what is exported.



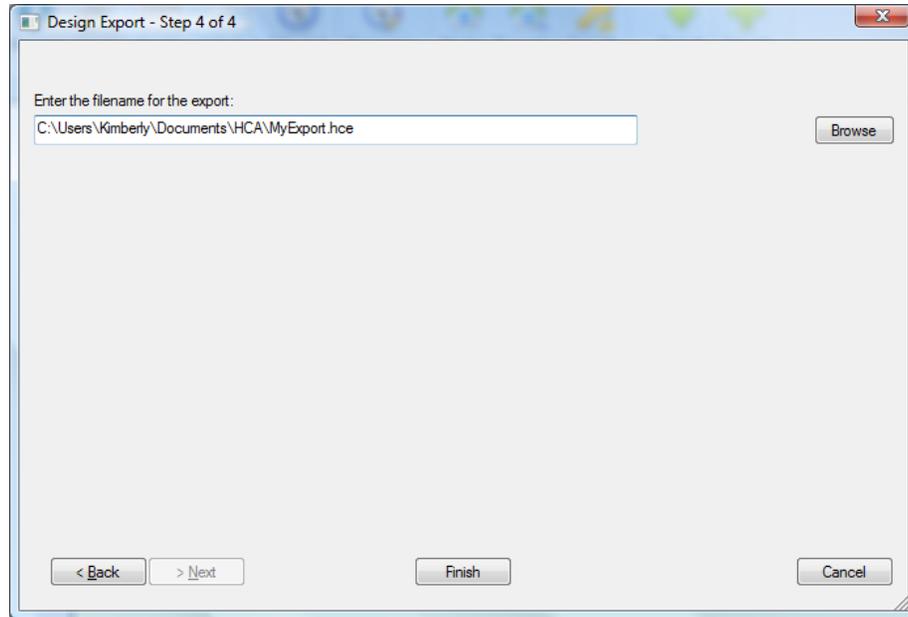
When this step first appears, everything that the wizard has marked for export is listed. As the dialog says, you can double click on a row in the list to toggle the export from Yes to No and from No to Yes.

Sometimes when you disable one item from being exported then the entire list of what to export changes. For example, suppose you wanted to export program A. Program A references programs B and C. Program C references practically every device in your design. Even though program A uses program C, if you don’t export program C then all those devices it references are also not exported.

After you make changes to the export list, the Update button reexamines what to export. In the above example after you disable export of program C then all the rows for the devices that are referenced by program C disappear.

But what happens when you take things away from export that are needed? The simple answer is that what is imported is not 100% operational. In the above example, program A had a *Start-Program* element fro program C. When program C not exported the *Start-Program* element in program A is not correctly configured and so program A is marked “Not ready to start”. It is up to whoever imports the file to “fix things up”. But that is often ok since the major work or concept of the export is preserved.

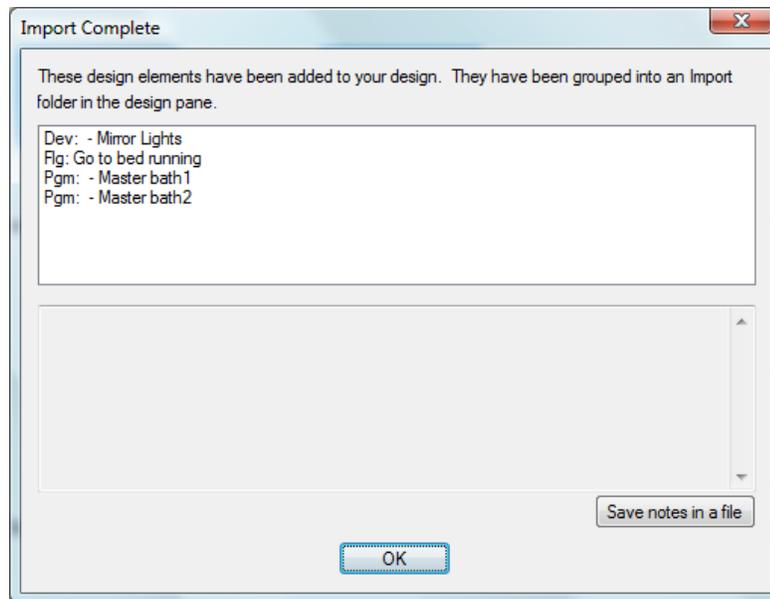
In the final step of the wizard you select the filename to write to:



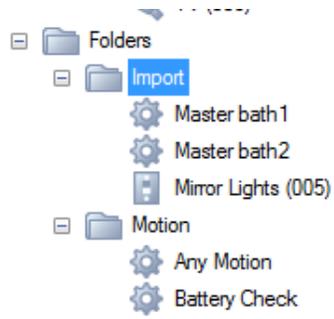
The expected file type for HCA exports is .HCE

Importing

Importing is much simpler than exporting. To import design elements into your design, press the *Import* button in the ribbon *Design* category. Then browse to the file you want. When the import is complete this popup displays:



As explained in the dialog text, everything imported goes into an Import folder:



Once it's in the import folder you can look at all the parts and see what you want to keep, delete, modify or whatever.