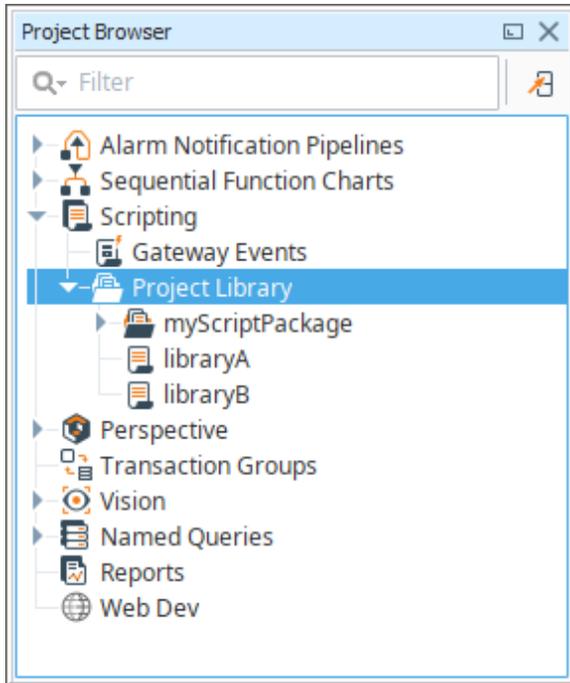


Project Library

Scripts under the Project Library (called "Project Scripts") are a project-based resource that allows user created Python scripts to be configured. Objects and functions created in a project script can be called from anywhere in the project. Project Scripts are accessible from the Project Browser, under the **Scripting** item.



On this page

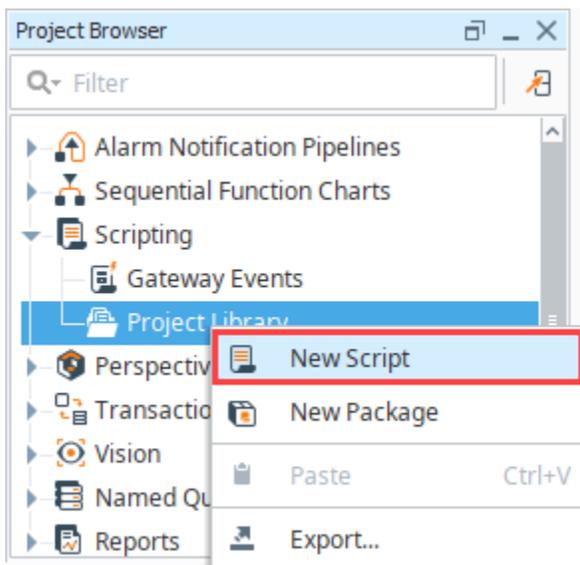
...

- Add a Script
 - Scripts and Packages
 - Usage Example
- Gateway Scripting Project

Additionally, a single project can be designated as the **Gateway Scripting Project**, meaning that scripts defined in the stated project can be called from the Gateway scope.

Add a Script

To add a project script, simply right click the **Project Library** item and click the **New Script** option.



Scripts and Packages

There are two main types of resources under the Project Library.

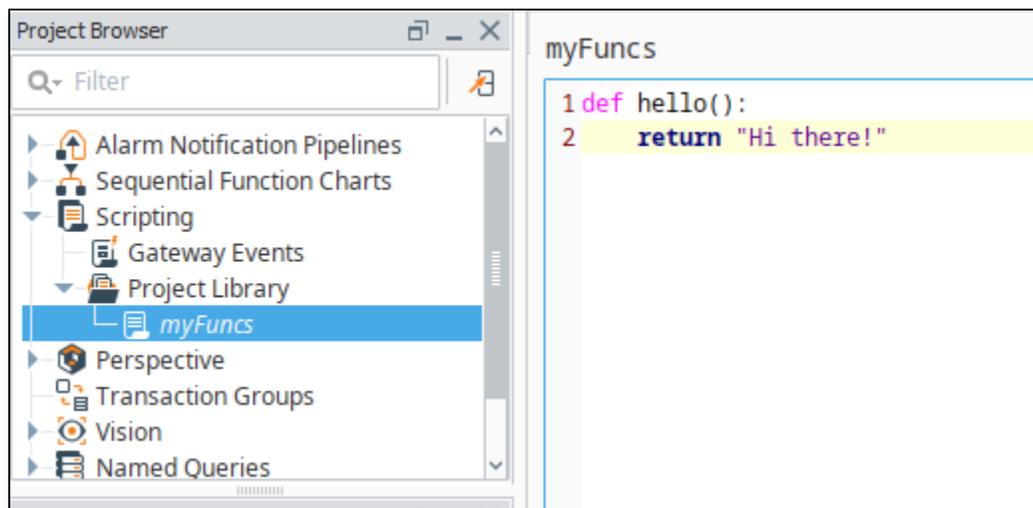
- **Scripts** - Each script resource can contain many functions and objects.
- **Packages** - Each Package effectively acts as a folder, allowing you to better organize each script resource.

Usage Example

For example, let's suppose you added the following script module named `myFuncs`, whose body is shown below.

```
Python

def hello():
    return "Hi there!"
```



Once we **save** our project, we can now call this function from anywhere within the project using the following syntax

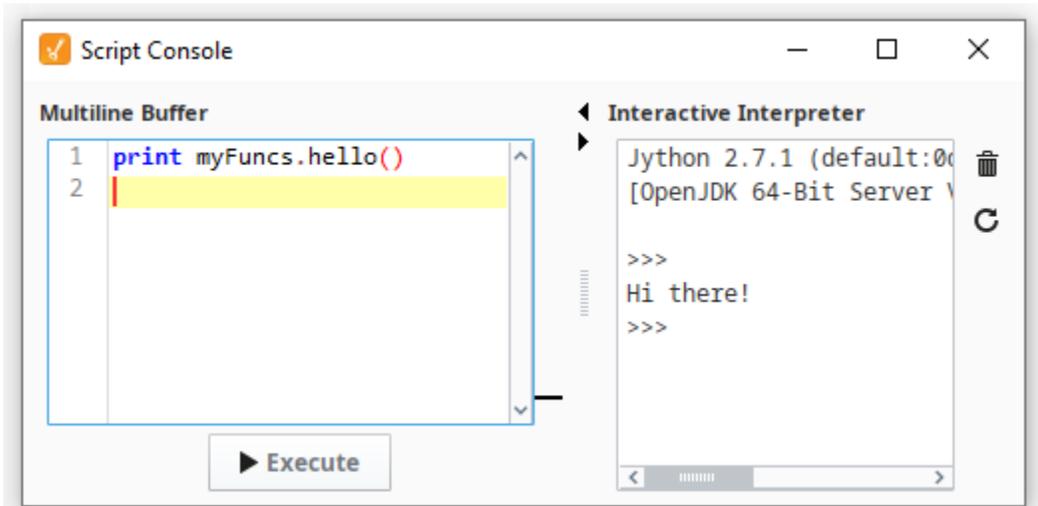
```
Python - Calling the Project Script

myFuncs.hello()
```

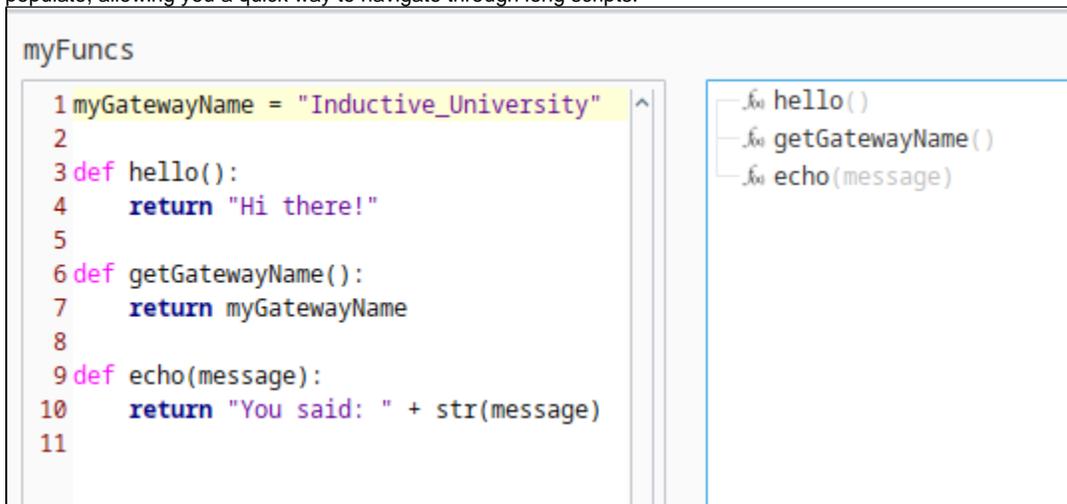
Don't Forget to Save

Project scripts are not accessible to the other resources until the project is saved.

For example, we could open the Script Console (Tools menu > Script Console), write the following, and execute the script.



Each script resource can contain multiple functions and objects. Note that as you add new function definitions, the list on the right will populate, allowing you a quick way to navigate through long scripts.



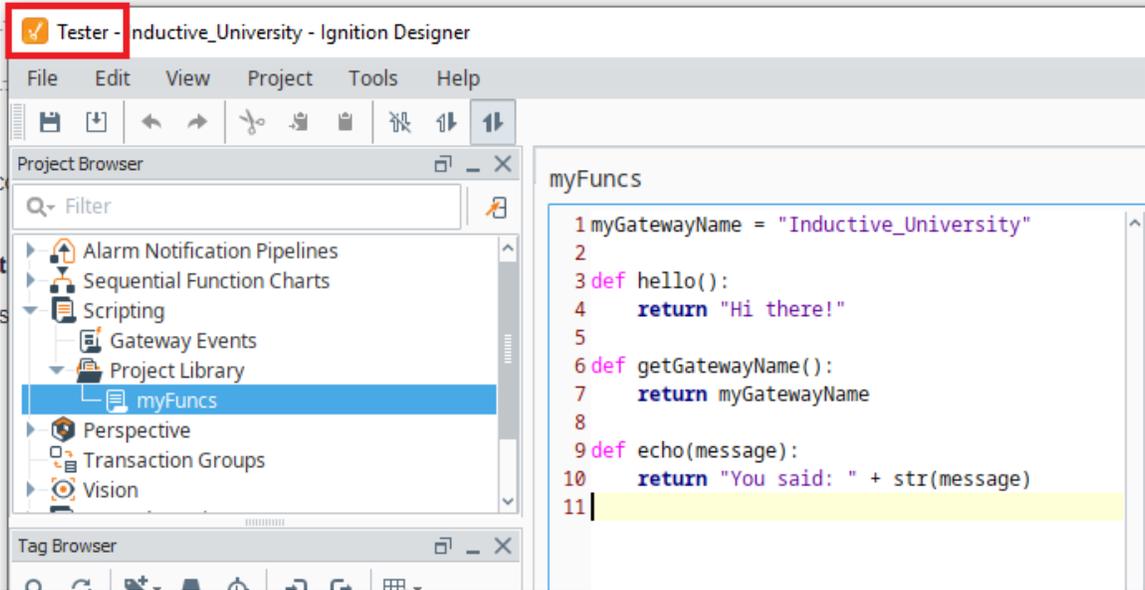
Gateway Scripting Project

Project scripts are normally only accessible from the project they were defined in. Thus objects that exist in other scopes, such as Tags that exist in the Gateway scope, are unable to call project scripts. Attempting to do so will result in Gateway log errors stating that "global name 'yourScript' is not defined".

The exception to this rule is the Gateway Scripting Project. This project is specified by the **Gateway Scripting Project** property, which is set in the Config section of the **Gateway** Webpage under **Gateway Settings**. Entering in the name of a project under this property allows the Gateway access to project scripts configured in the specified project.

Gateway Scripting	
Gateway Scripting Project	<input type="text"/> The name of the Project that gateway-scoped scripts with no project affiliation can access user script libraries in. (default:)

Thus, if the **myFuncs** library in the prior section was configured in a project named "Tester"



We could use that name in the Gateway Scripting Project.

Gateway Scripting	
Gateway Scripting Project	<input type="text" value="Tester"/> The name of the Project that gateway-scoped scripts with no project affiliation can access user script libraries in. (default:)

Save Changes

After we save, Tags and other Gateway-scoped resources can then start calling any of the scripts from our project library in the "Tester" project.

Related Topics ...

- User Defined Functions
- Scripting in Ignition

