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Open Exchange

A practical example on using Python with ObjectScript

I'd like to share an example on how the new Embedded Python feature in IRIS helped me in my daily routines.

While I ' m participating in the <u>ris-kaggle-socrata-generator</u> project with <u>Henrique Dias</u>, I got to unzip datasets from Kaggle in order to import them.

Such a task was easily achieved by using the zipfile lib in Python (this code was copied from this stackoverflow):

```
Method UnZip(pZipFileName As %String, pExtractToDir As %String) As %DynamicArray [ La
nguage = python ]
{
    import zipfile
    import iris
    with zipfile.ZipFile(pZipFileName, 'r') as zip_ref:
        zip_ref.extractall(pExtractToDir)
        fileList = zip_ref.namelist()
    dynarray = iris.cls("%DynamicArray")._New()
    for file in fileList:
        dynarray._Push(file)
    return dynarray
}
```

Note the method modifier [Language = python]. This feature was tested in IRIS image intersystemsdc/iris-mlcommunity:2021.2.0.617.0-zpm. Check out the related OEX application for a working example.

You can see that is a Python code embedded in an ObjectScript method. So you can use it in every ObjectScript code. For example:

```
Method HttpDownloadZIP(pHttpParams As %DynamicObject) As %DynamicObject
{
    Set retorno = {
        "warnings": []
    }
    ...
    Set fileName = ..SaveRequestToFile(request)
    ...
    Set fileList = ..UnZip(fileName, zipTempDir)
    If (fileList.%Size() > 1) {
        Do retorno.warnings.%Push("There is more than 1 file in the zip file. Using t
    he first one.")
    }
    ...
    Return retorno
}
```

You can also access the full code here.

Note that the embedded Python method uses the zipfile Python lib and returns the method outcomes in a %DynamicArray, used in ObjectScript methods. This means that an object created in a Python context can be accessed by an ObjectScript context seamlessly.

You can check out more on how to use Embedded Python here.

And that is it! I hope this can be useful for your projects. See you!

<u>#Embedded Python #Python #InterSystems IRIS</u> <u>Check the related application on InterSystems Open Exchange</u>

Source URL: https://community.intersystems.com/post/practical-example-using-python-objectscript