

Article

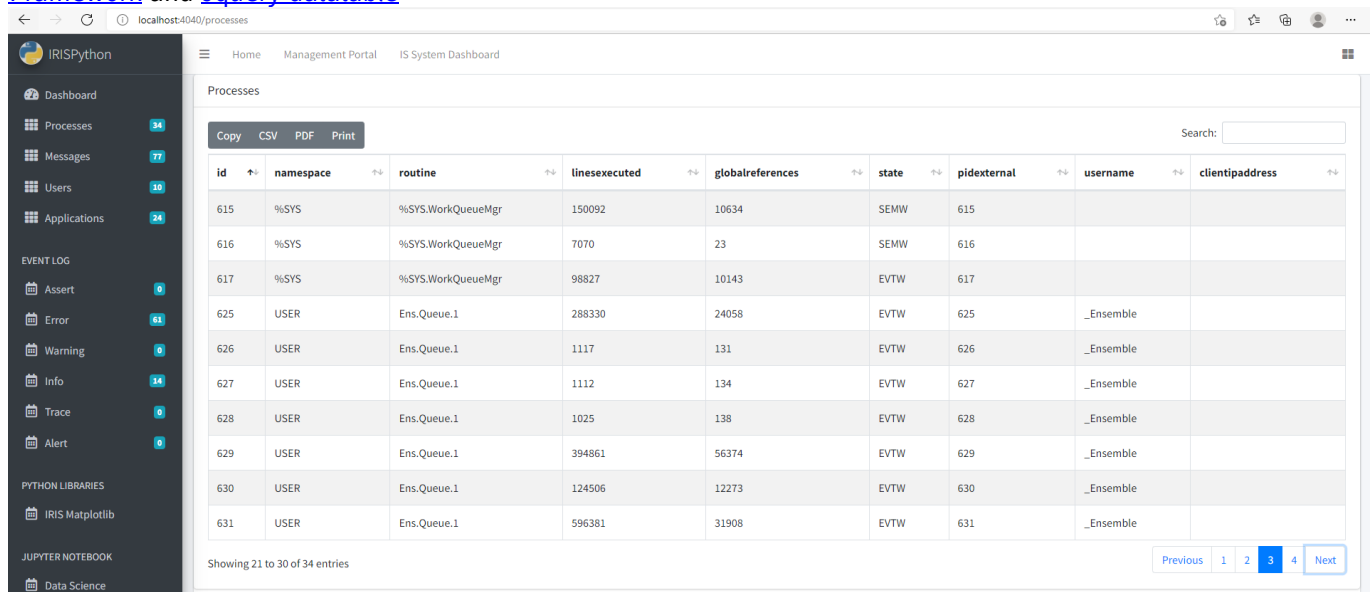
[Muhammad Waseem](#) · Feb 24, 2022 2m read

[Open Exchange](#)

2 steps to display cache tables data on the web by using jquery datatable and embedded python

Hi, Community,

This post will demonstrate how to display data on the web by using [Embedded Python](#) , [Python Flask Web Framework](#) and [Jquery datatable](#)



The screenshot shows the IRISPython web interface. On the left is a sidebar with navigation links: Dashboard, Processes (34), Messages (77), Users (10), Applications (24), EVENT LOG, Assert (6), Error (6), Warning (6), Info (14), Trace (6), Alert (6), PYTHON LIBRARIES, IRIS Matplotlib, JUPYTER NOTEBOOK, and Data Science. The main content area is titled 'Processes' and contains a table with columns: id, namespace, routine, linesexecuted, globalreferences, state, pidexternal, username, and clientaddress. The table displays 11 rows of process data. At the bottom of the table, it says 'Showing 21 to 30 of 34 entries' and has pagination controls for 'Previous', '1', '2', '3' (selected), '4', and 'Next'.

id	namespace	routine	linesexecuted	globalreferences	state	pidexternal	username	clientaddress
615	%SYS	%SYS.WorkQueueMgr	150092	10634	SEMW	615		
616	%SYS	%SYS.WorkQueueMgr	7070	23	SEMW	616		
617	%SYS	%SYS.WorkQueueMgr	98827	10143	EVTW	617		
625	USER	Ens.Queue.1	288330	24058	EVTW	625	_Ensemble	
626	USER	Ens.Queue.1	1117	131	EVTW	626	_Ensemble	
627	USER	Ens.Queue.1	1112	134	EVTW	627	_Ensemble	
628	USER	Ens.Queue.1	1025	138	EVTW	628	_Ensemble	
629	USER	Ens.Queue.1	394861	56374	EVTW	629	_Ensemble	
630	USER	Ens.Queue.1	124506	12273	EVTW	630	_Ensemble	
631	USER	Ens.Queue.1	596381	31908	EVTW	631	_Ensemble	

We will display processes from %SYS.ProcessQuery table.

Step 1: Add table to HTML page and write below javascript code to display passed data from app.py :

HTML

```
<table id="myTable" class="table table-bordered table-striped">
</table>
```

Javascript

```
<script>
```

```
$(document).ready(function() {
    // parse the data to local variable passed from app.py file
    let my_data = JSON.parse('{{ my_data | tojson }}');
    let my_cols = JSON.parse('{{ my_cols | tojson }}');

    $('#myTable').DataTable( {
```

```
        "data": my_data,  
        "columns": my_cols,"} ");  
    } );
```

Step 2: Create python function in app.py file and define the route as defined below e.g we are creating processes function and defining /processes in the route:

App.py

```
from flask import Flask, jsonify, render_template  
import iris  
  
app = Flask(__name__)  
  
@app.route("/")  
def index():  
    #to render main index page  
    return render_template('index.html')  
  
@app.route("/processes")  
def processes():  
    #Define sql statement  
    mySql = '''  
        SELECT ID, NameSpace, Routine, LinesExecuted, GlobalReferences,  
        state, PidExternal, UserName, ClientIPAddress FROM %SYS.ProcessQuery ORDER BY  
        NameSpace desc  
        '''  
  
    #Calling embedded python iris.sql.exec class to get result set  
    resultSet = iris.sql.exec(mySql)  
    #Get dataframe by calling resultset dataframe function  
    dataframe = resultSet.dataframe()  
    #Convert and data to Json by using to_json dataframe method and json loads function  
    my_data=json.loads(dataframe.to_json(orient="split"))["data"]  
    #Get columns details  
    my_cols=[{"title": str(col)} for col in json.loads(df.to_json(orient="split"))["columns"]]  
    #render html by passing my_data and my_cols variables which will be used to generate datatable  
    return render_template('tablesdata.html', my_data = my_data, my_cols = my_cols)
```

That's it. By using these 2 steps cache table data can be display on the web.

Read related documentations [Embedded Python Overview](#).

For more details please review my openexchange [iris-python-apps](#) application

Thanks

[#Dashboards](#) [#Databases](#) [#Embedded Python](#) [#JavaScript](#) [#SQL](#) [#InterSystems IRIS for Health](#)

2 steps to display cache tables data on the web by using jquery datatable and embedded python

Published on InterSystems Developer Community (<https://community.intersystems.com>)

[Check the related application on InterSystems Open Exchange](#)

Source

URL:<https://community.intersystems.com/post/2-steps-display-cache-tables-data-web-using-jquery-datatable-and-embedded-python>