

RPC USING PYTHON

xmlrpc

XML-RPC is a Remote Procedure Call method that uses XML passed via HTTP as a transport. With it, a client can call methods with parameters on a remote server (the server is named by a URI) and get back structured data.

SERVER SIDE

Imports

```
from xmlrpc.server import SimpleXMLRPCServer
```

Define remote function

```
def sum_of_two(x,y):  
    return x + y
```

Initialize server @ ip:port

```
# initialize the server at localhost and port 8888  
server = SimpleXMLRPCServer(('localhost', 8888))
```

Register a function

```
server.register_function(sum_of_two, "sum")
```

Wait for calls

```
server.serve_forever()
```


CLIENT SIDE

Imports

```
from xmlrpc.client import ServerProxy
```

Initialize server

```
server = ServerProxy("http://127.0.0.1:8888")
```

Call method from server

```
server_output = server.sum(x,y)
```

Use our results

```
print(f'The sum of {x} and {y} is {server_output}')
```

DEMO

Output

```
> python3 rpc_server.py
Listening for Client
127.0.0.1 - - [11/Dec/2022 18:35:09] "POST /RPC2 HTTP/
1.1" 200 -
```

```
> python3 rpc_client.py
Enter first number: 2
Enter second number: 10
The sum of 2 and 10 is 12
```

  ~/Doc/t/T/0/1/1/c/S/4-DS

Code for this presentation can be found at

<https://github.com/ahmad1284/rpccodez>

For more resources on xmlrpc

<https://docs.python.org/3/library/xmlrpc.html>