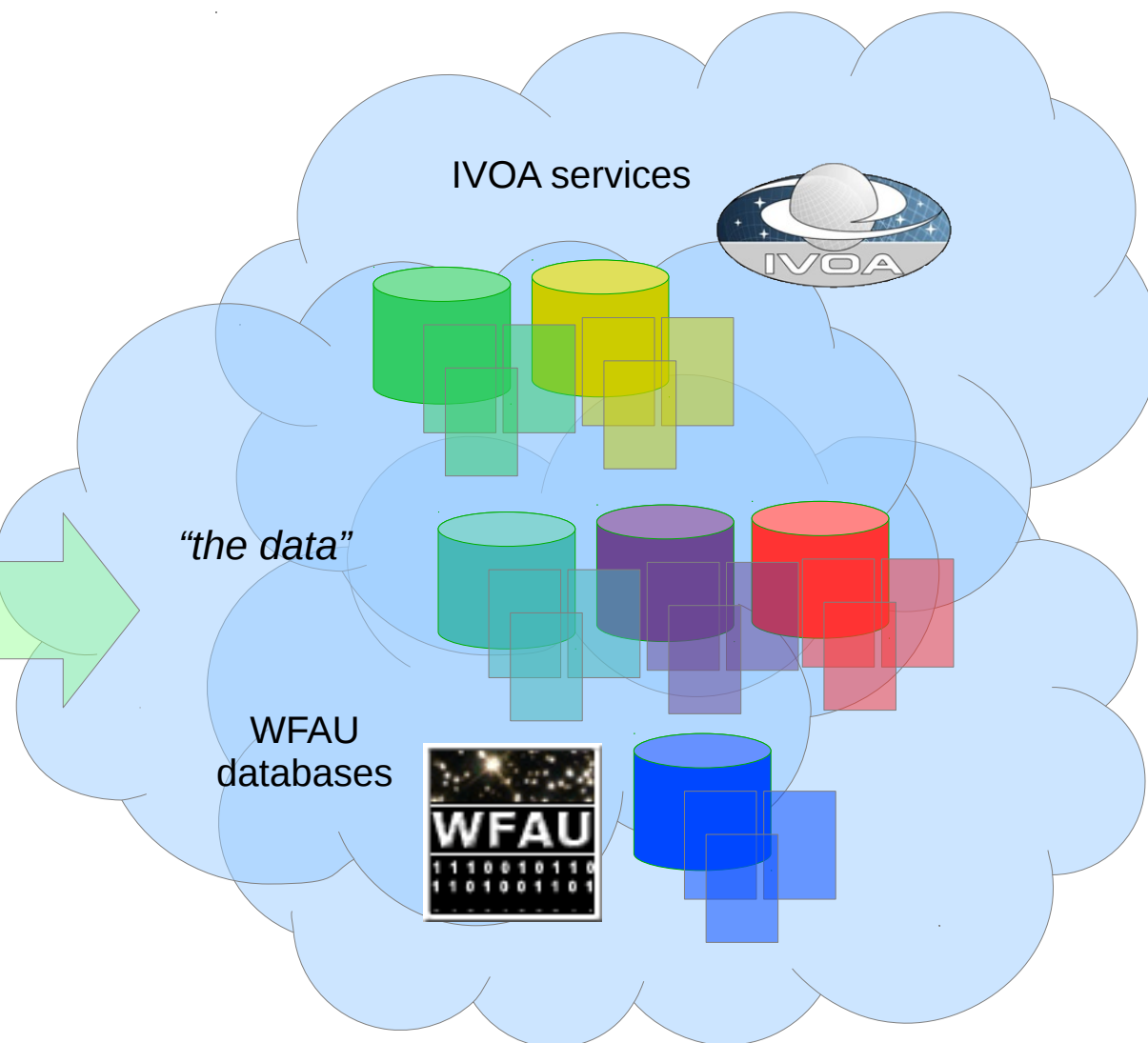
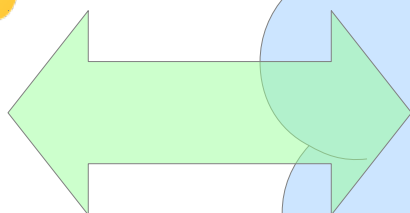
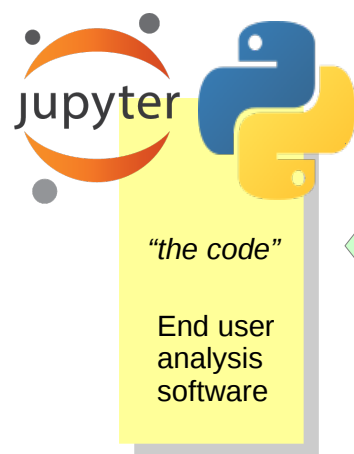
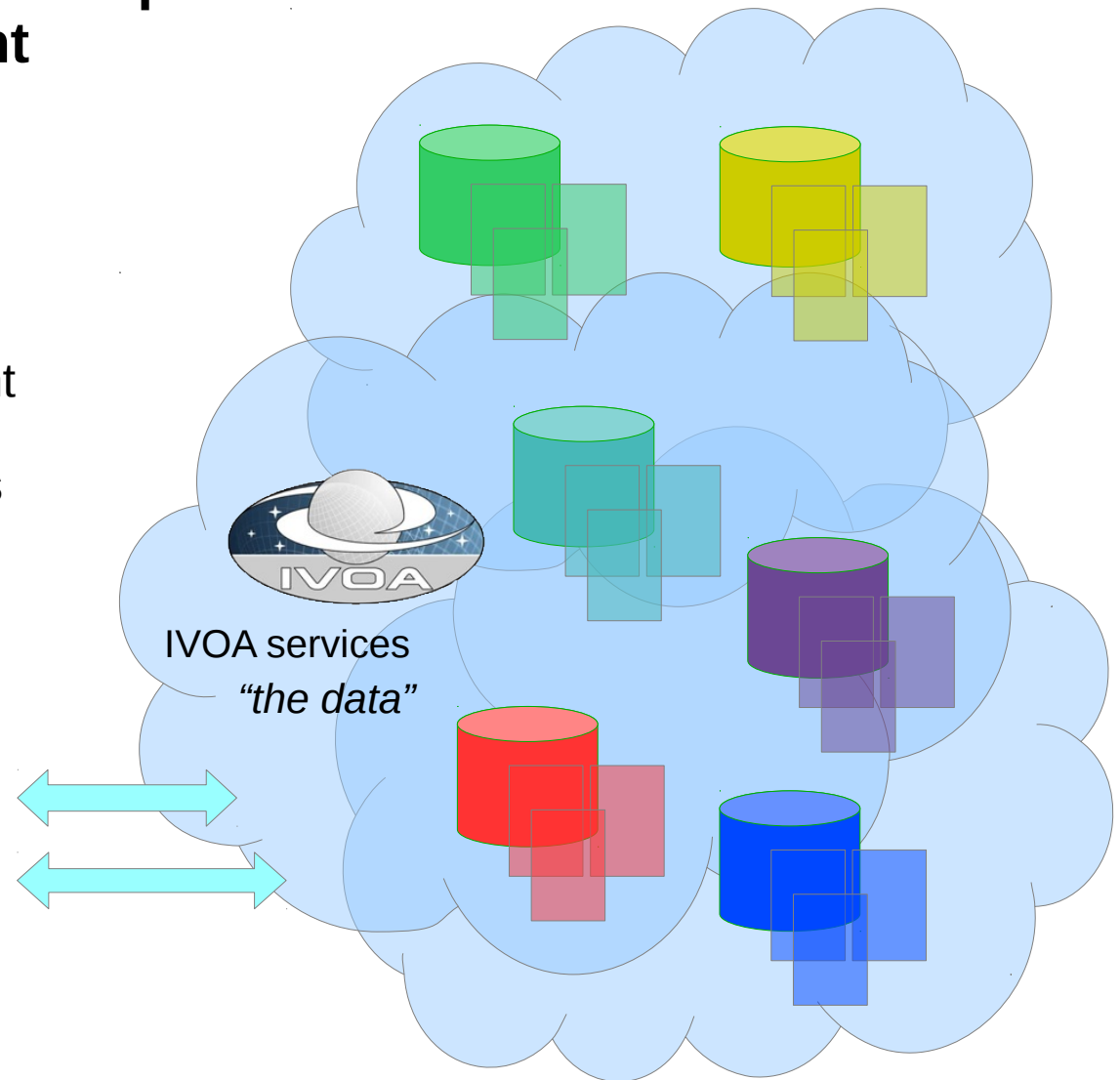
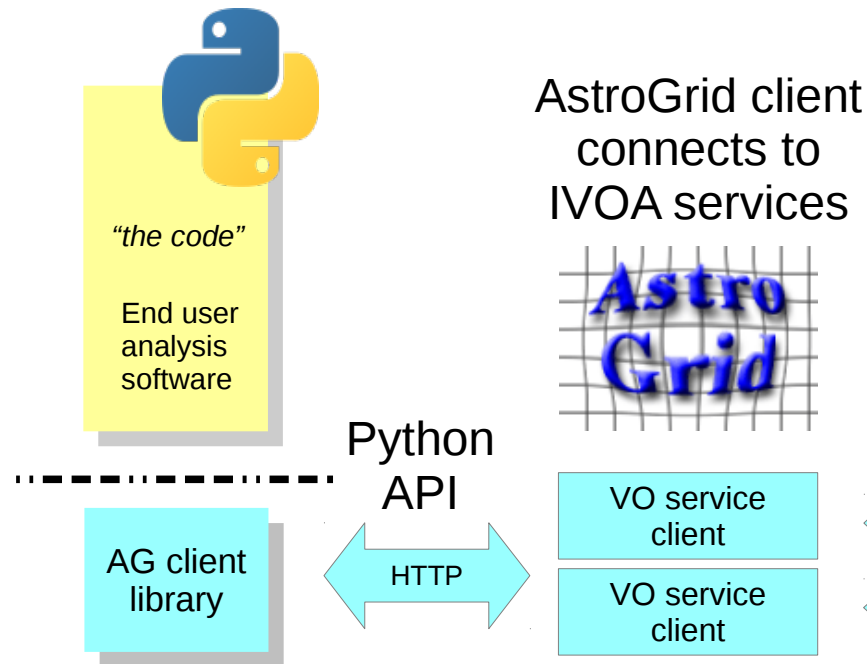


## Bringing analysis code to the data

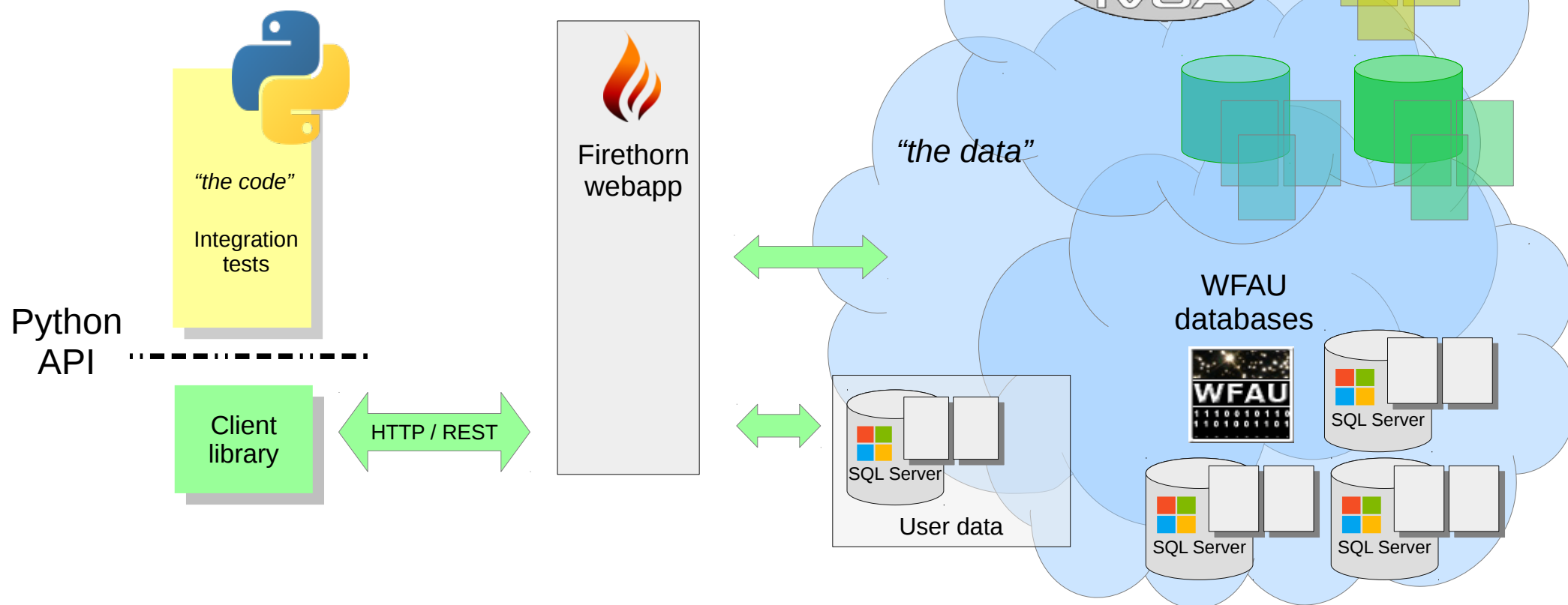


# AstroGrid desktop Python client

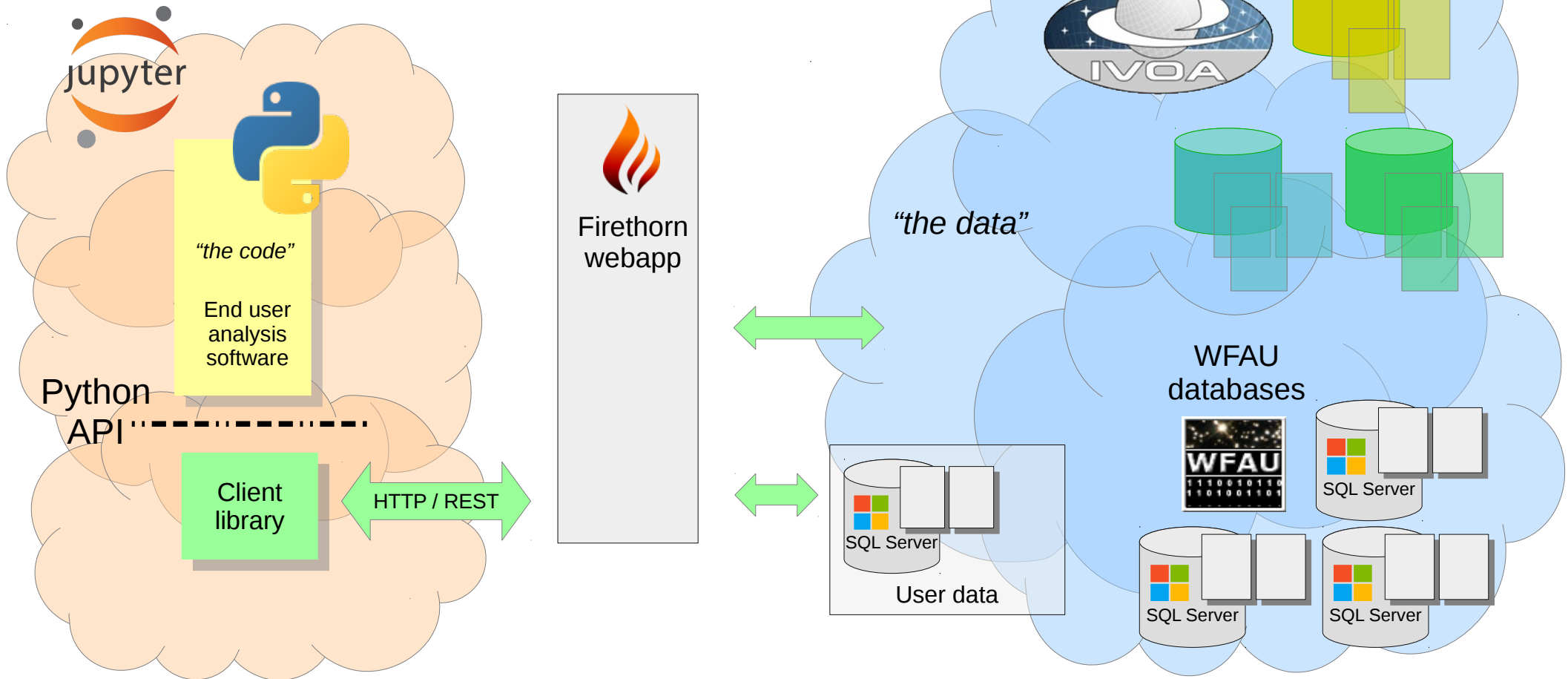
User code executed  
on the desktop



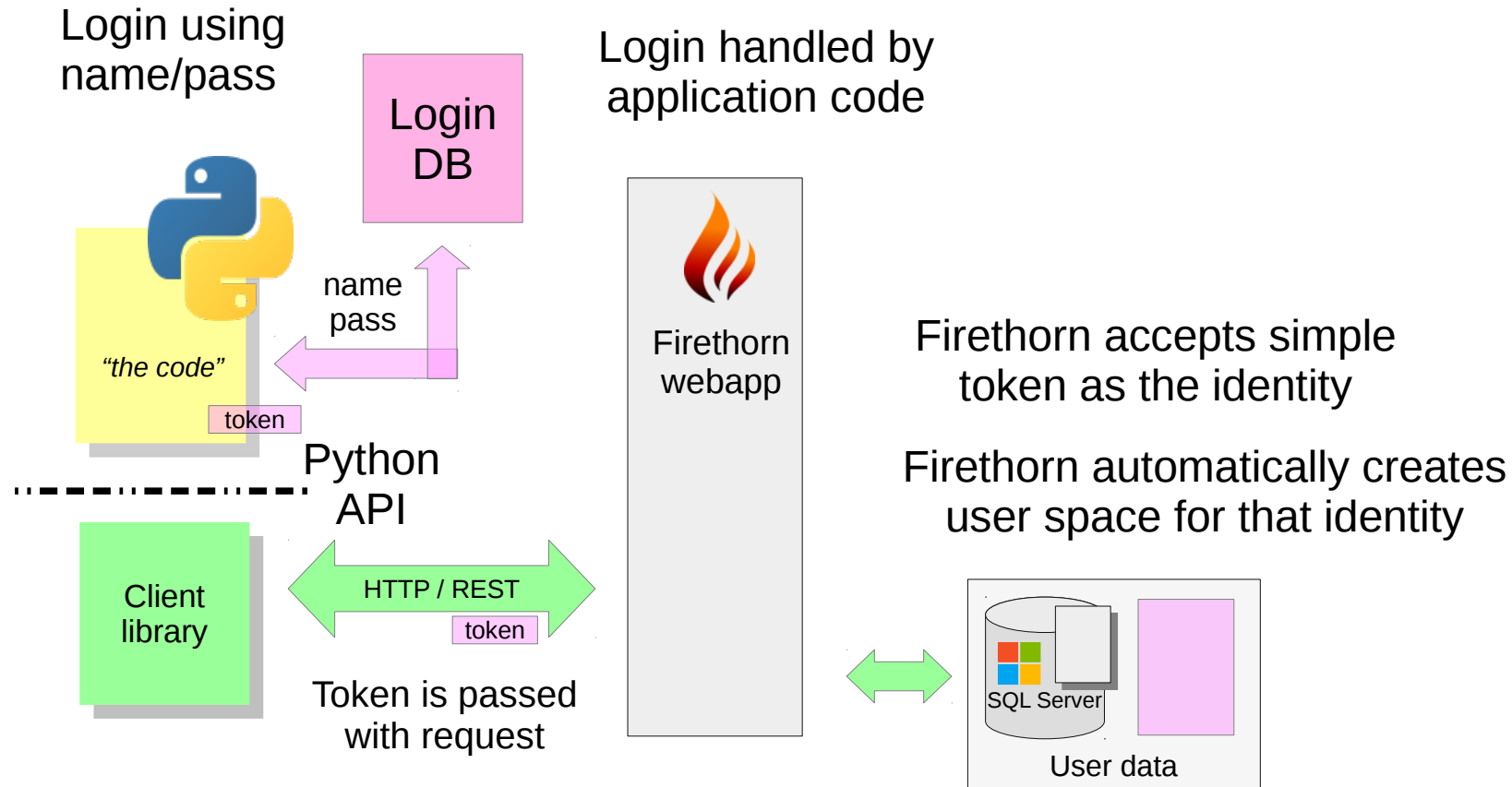
# Integration tests in Python



## User code deployed in Jupyter



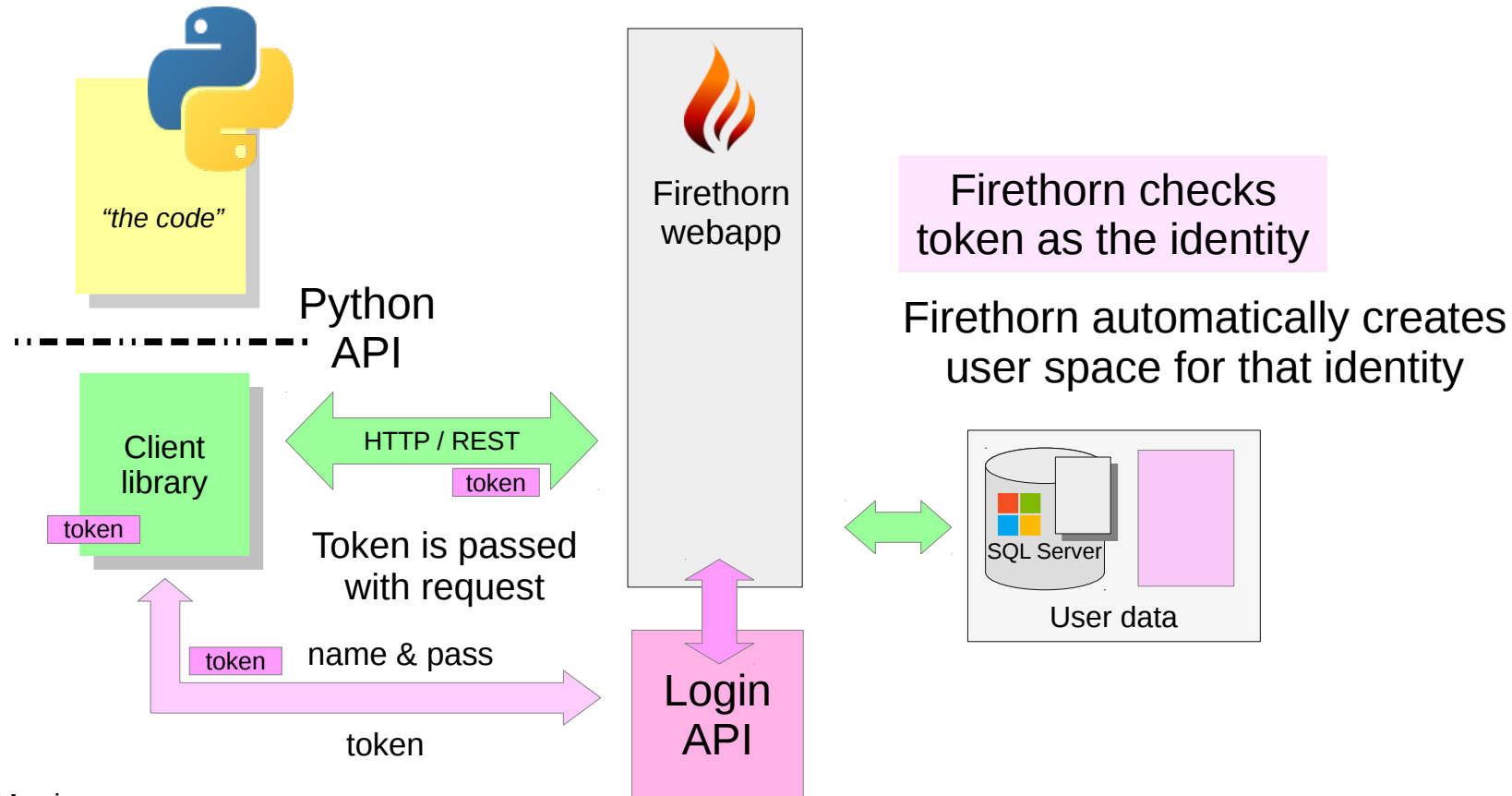
## Existing login mechanism simple name/pass



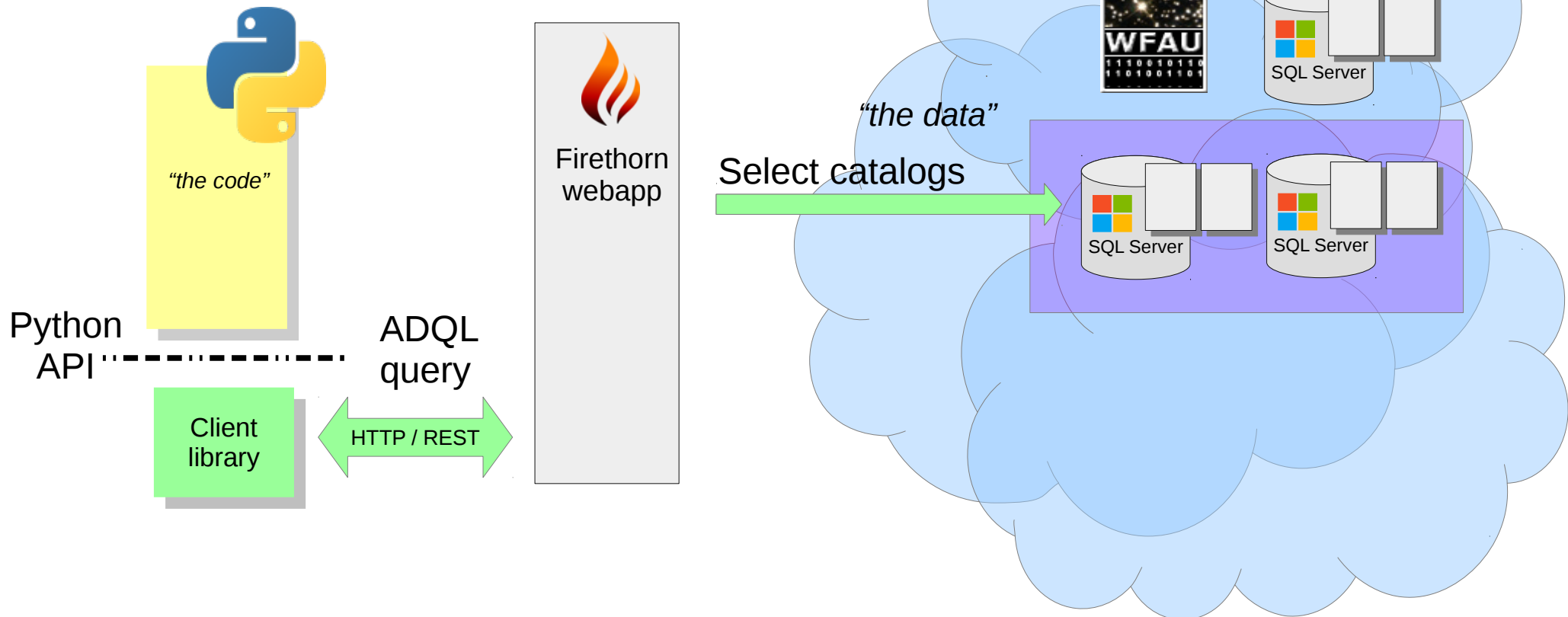
## Updated login mechanism name/pass validated token

Login using  
name/pass

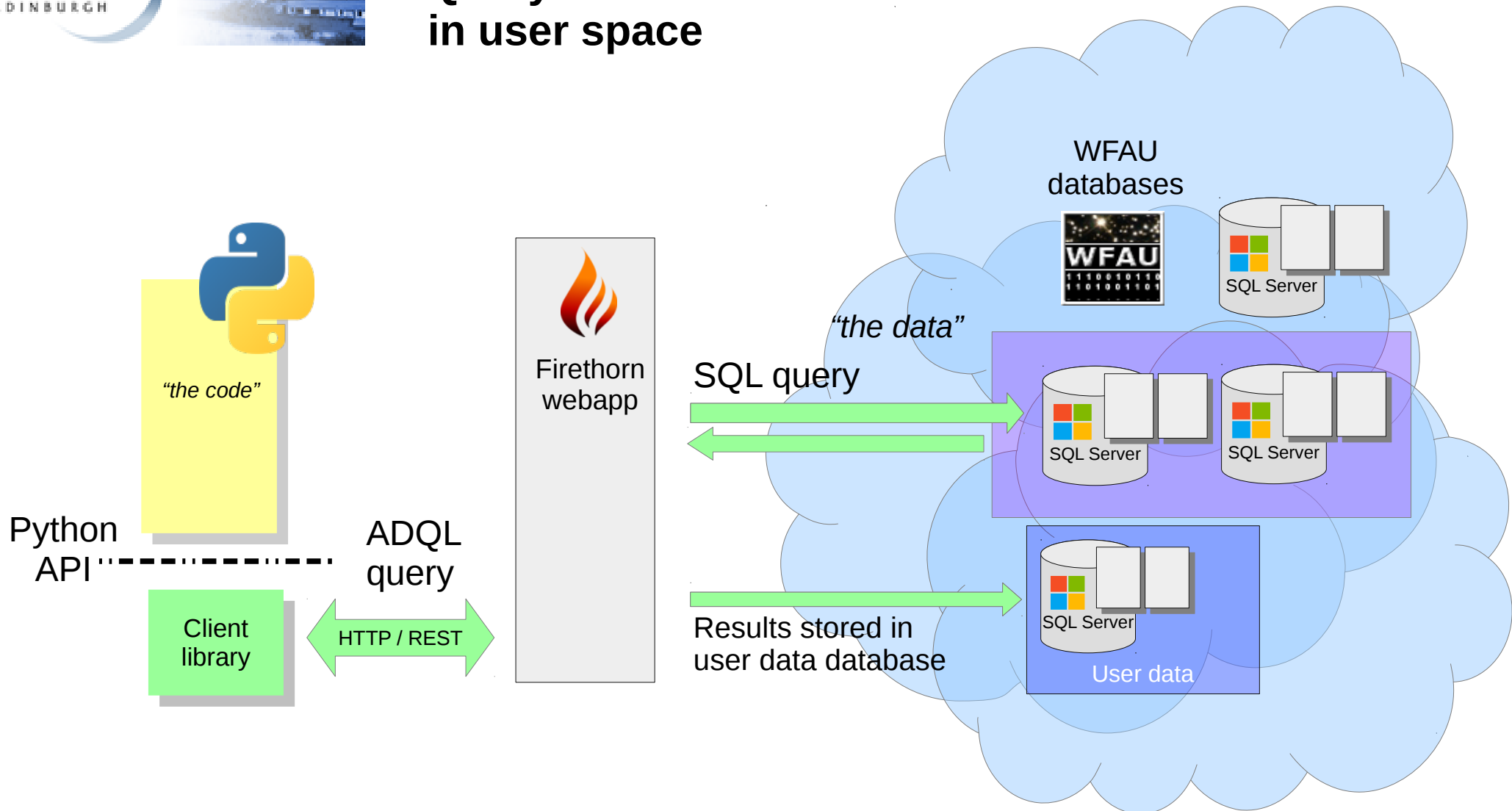
Login handled by  
client library



## User selects set of databases to query

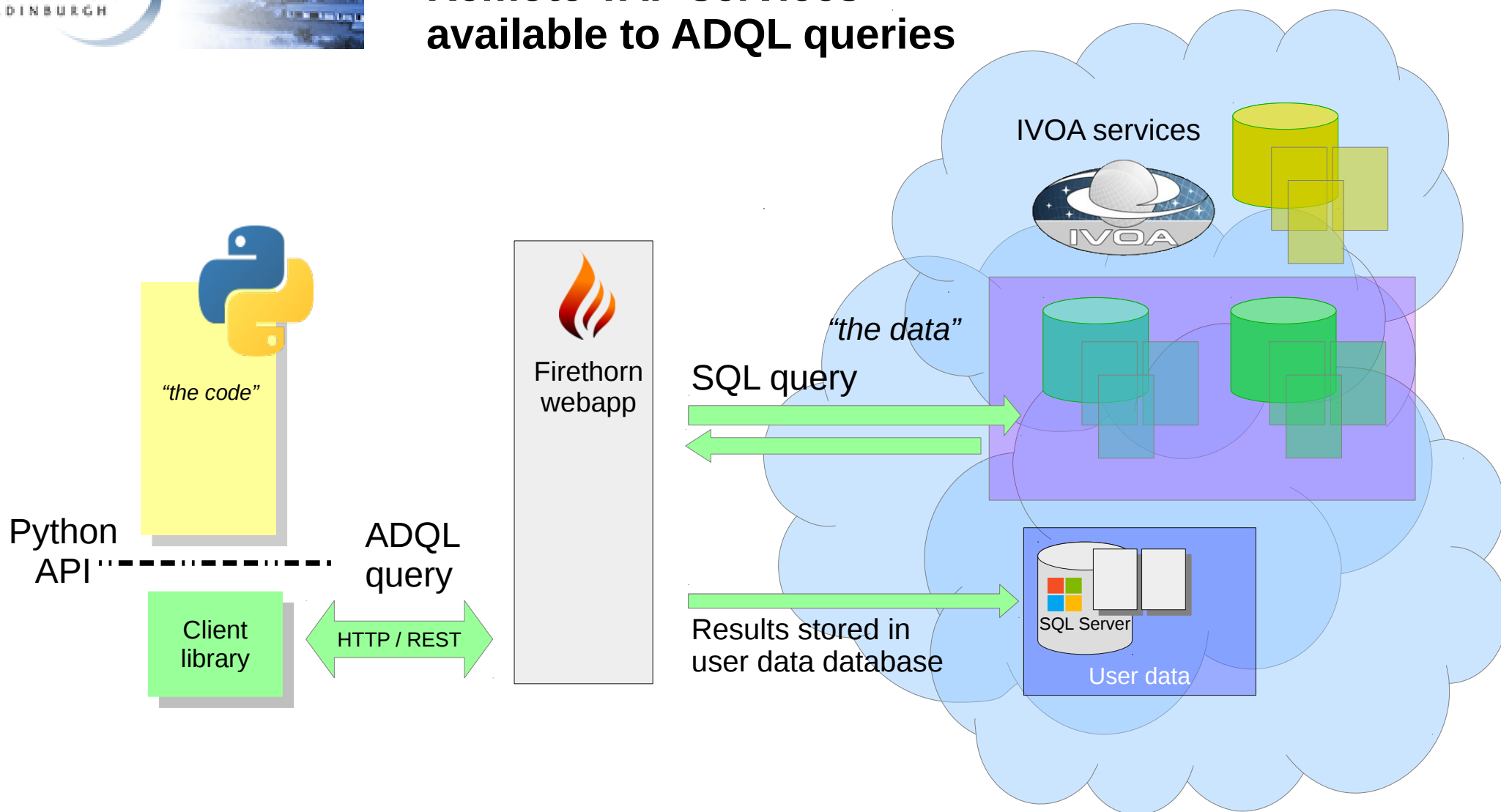


## Query results stored in user space

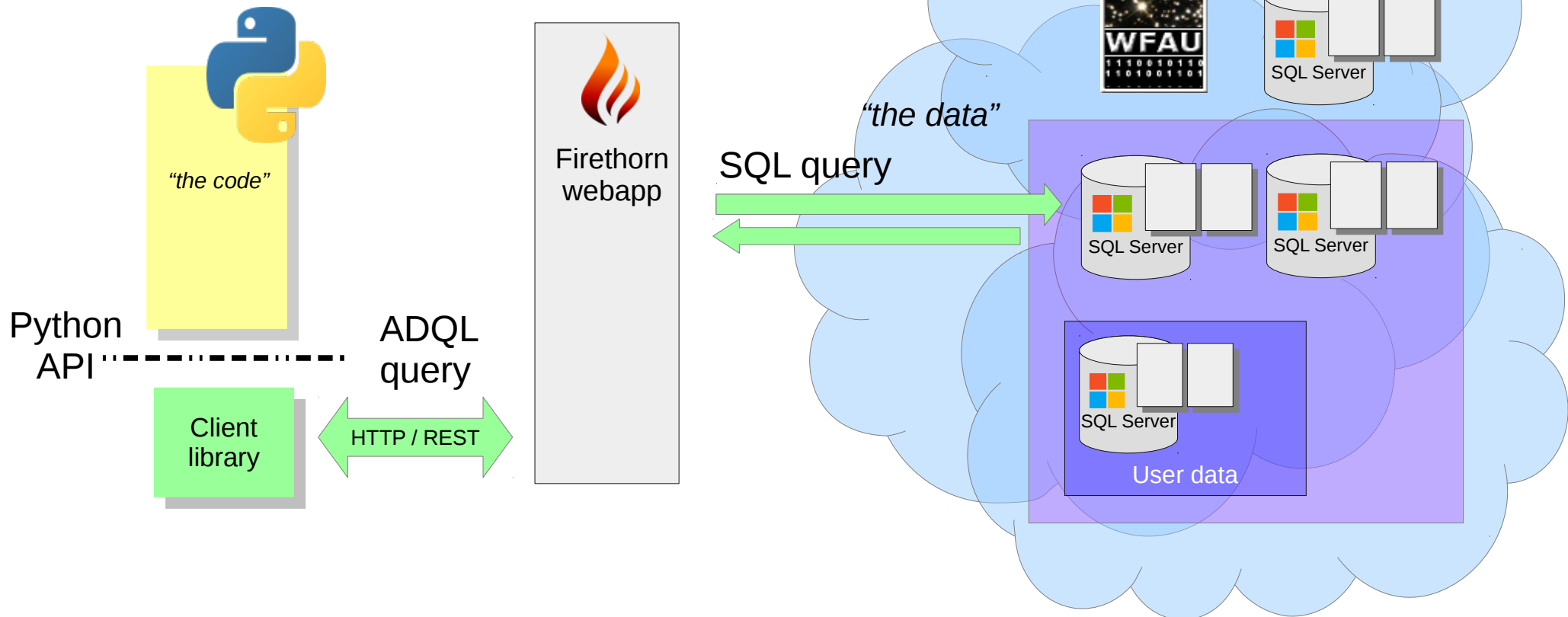




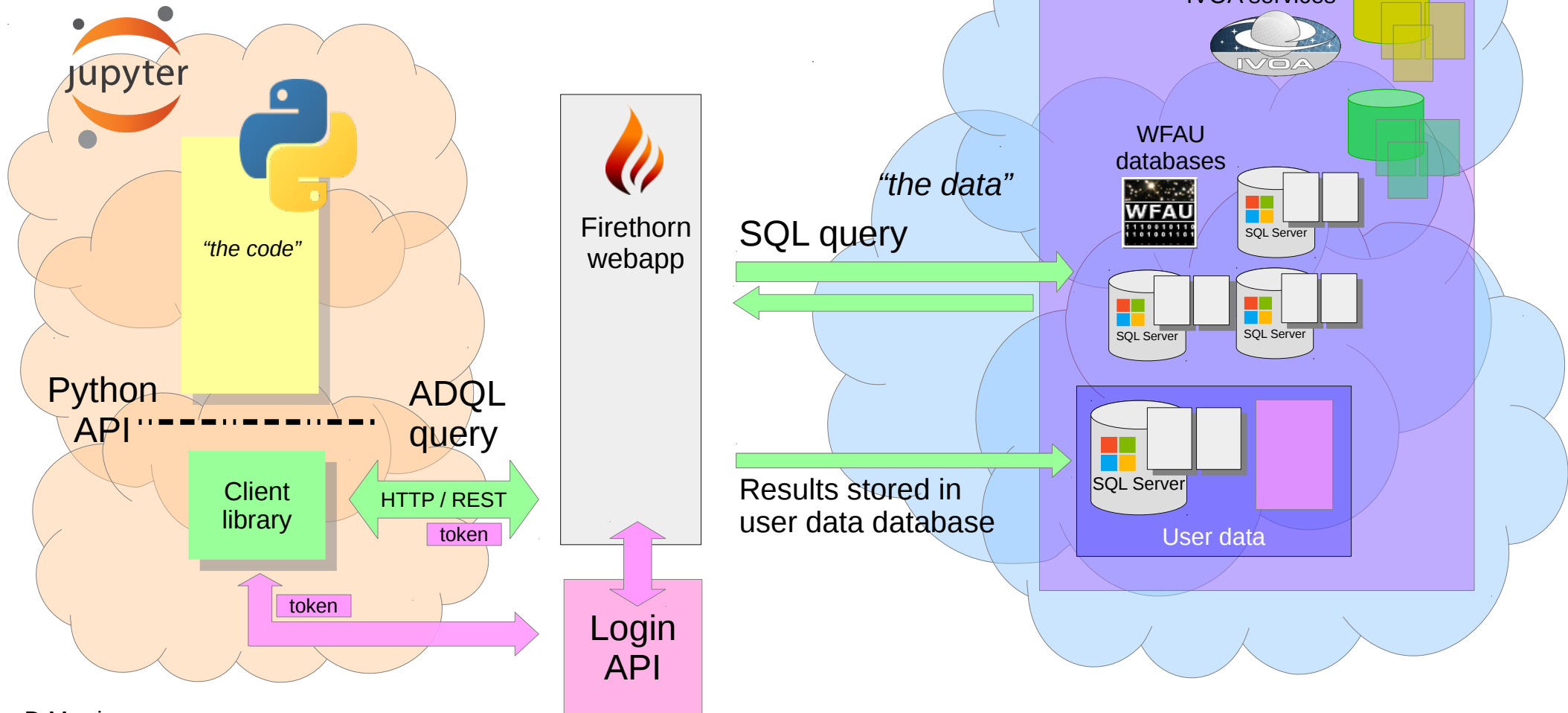
## Remote TAP services available to ADQL queries



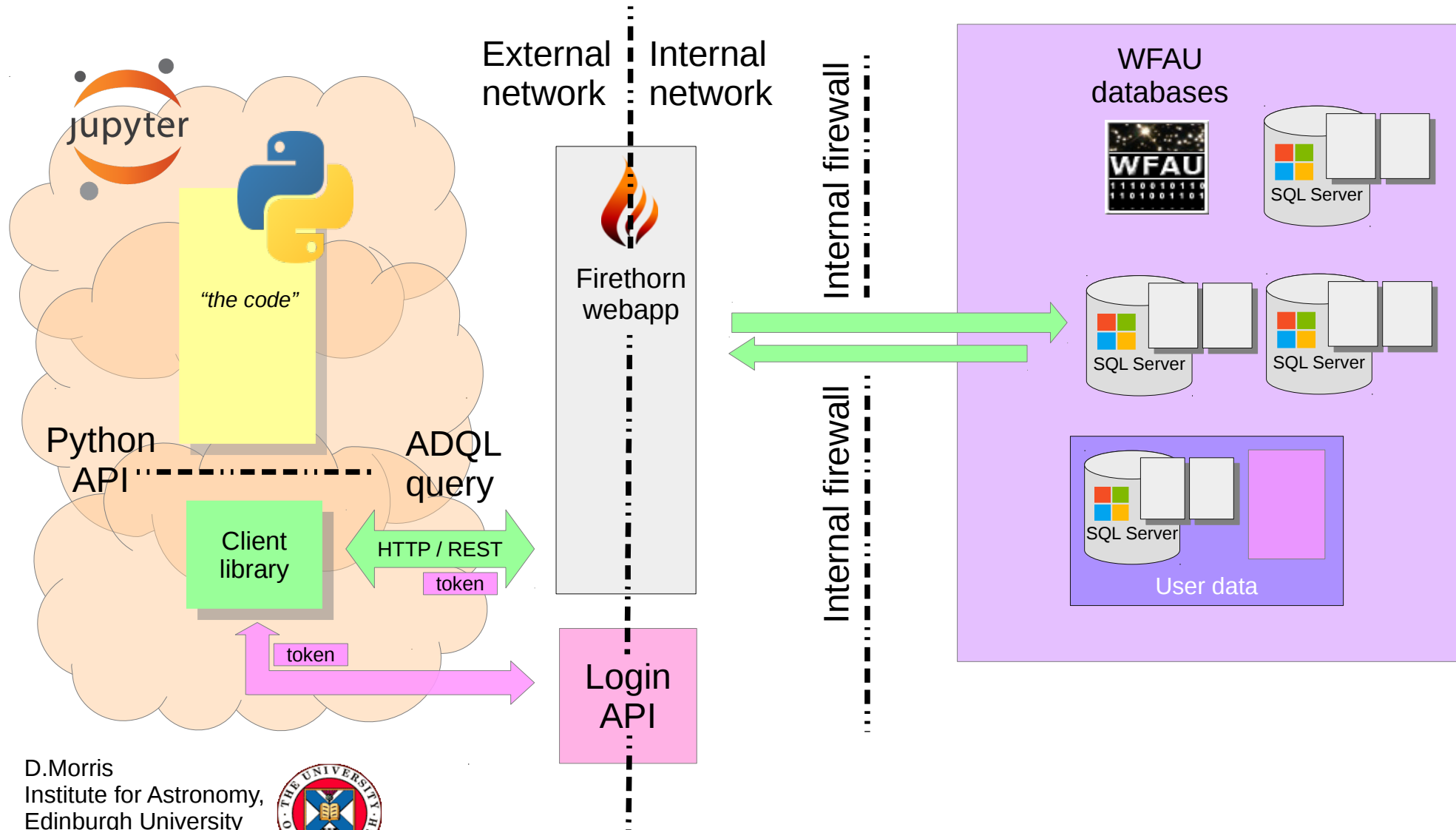
## Query results available to ADQL queries



# Python code deployed in Jupyter Hub



## User submitted code isolated from the WFAU network



## Putting it all together ...

