Describing Science Platforms

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- What is a Science Platform ?

- Who are we describing it to ?

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- What is a Science Platform ?

  - A service that enables users to run their code in a *data centre environment*[(*)].

  - A service that enables users to run their code in *close proximity*[(*)] to the data in a data centre.

  - A service that provides an environment with *high bandwidth*[(*)] access to the data in a data centre.

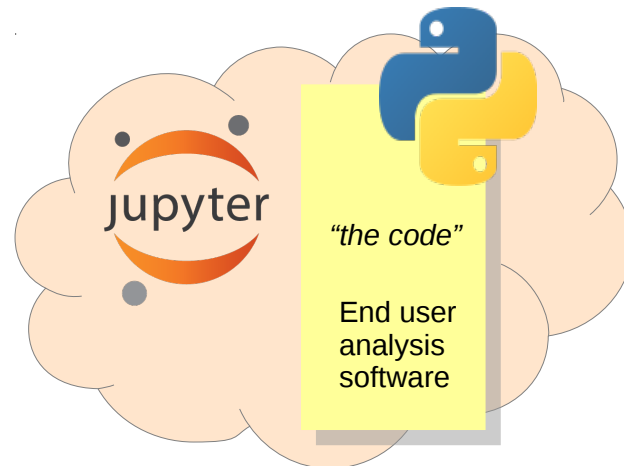 - A service that provides an environment with *bulk access*[(*)] to the data in a data centre.

(*) Whatever that means ..

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- For example JupyterHub

  - A service that enables users to run their Python code on a *server*[*] in a data centre..

  - Often in *close proximity* (located in the same data centre) as the data being analysed.

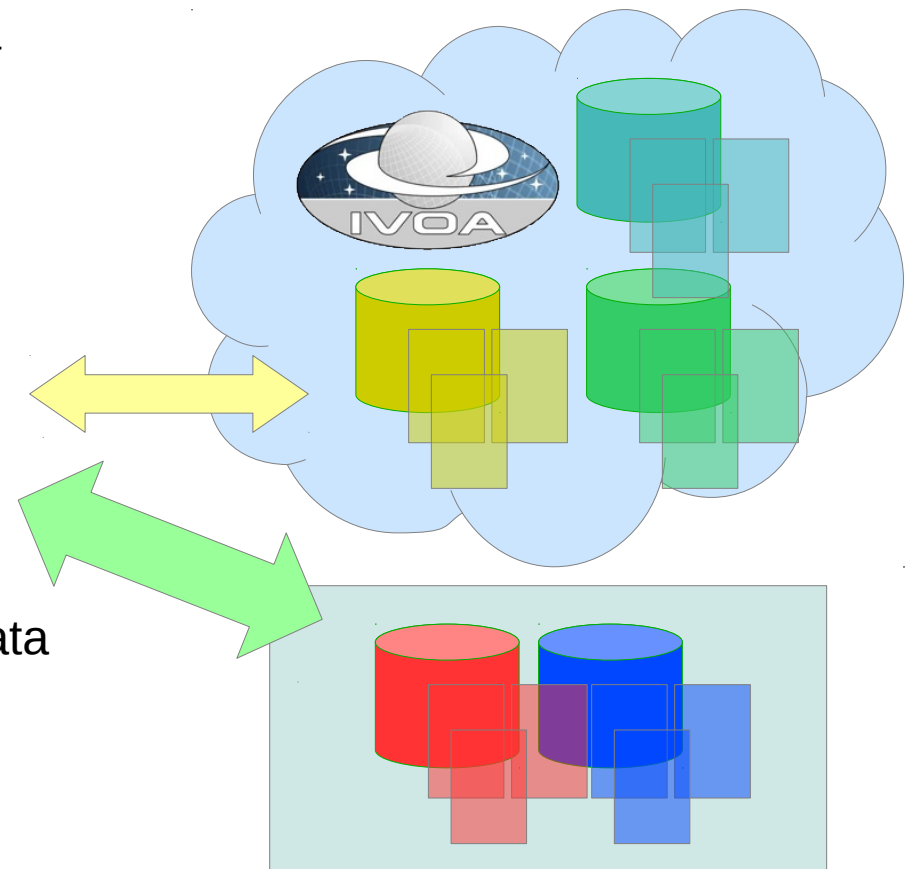 - Local network (LAN) connection may provide *high bandwidth*[*] *bulk access*[*] to the data in a data centre.

"the code"

End user
analysis
software

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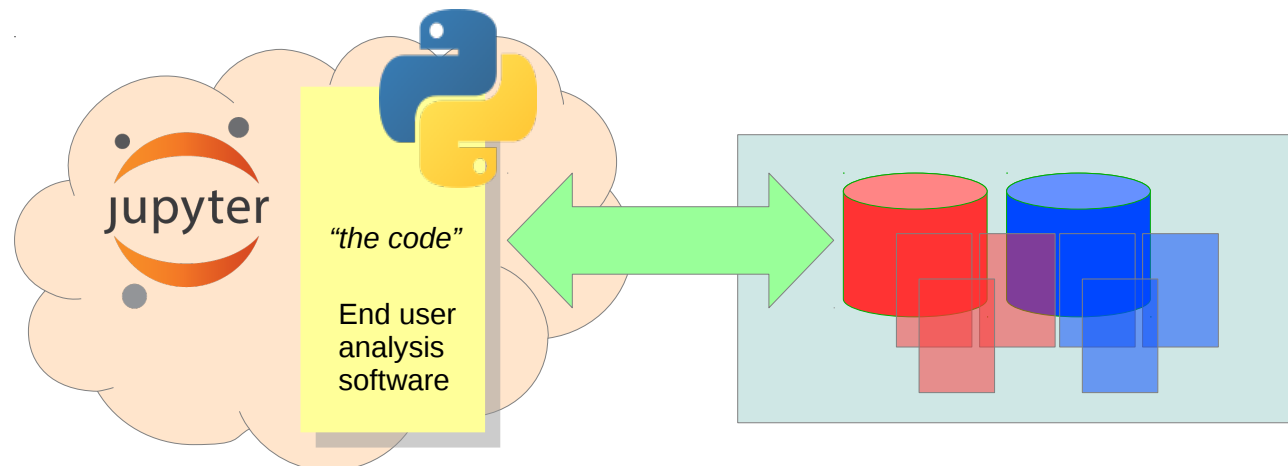
But .. if code in JupyterHub can import Astropy and PyVO

- The notebook can access data from anywhere in the VO.

"the code"

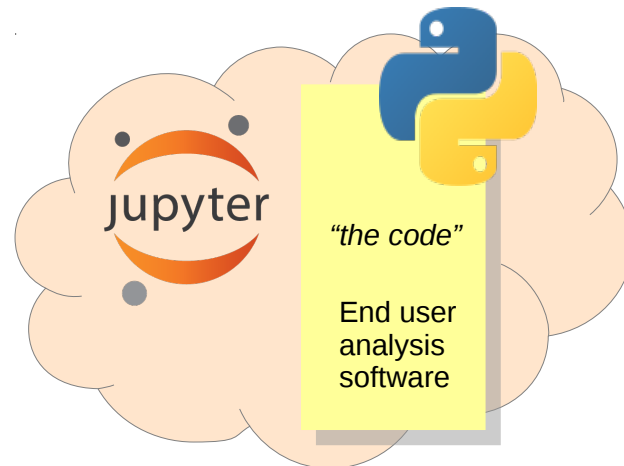End user analysis software

- The notebook can access data in the local data centre.
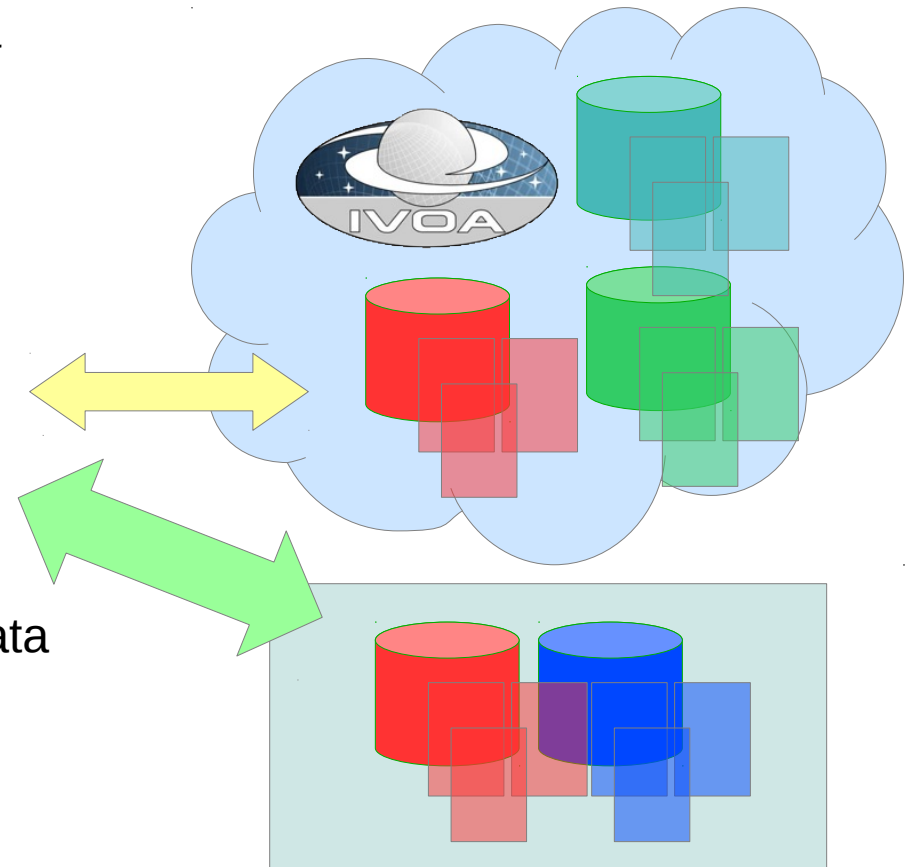
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Can be confusing if the same data is available locally, and via the VO.

- The notebook can access data from anywhere in the VO.

"the code"

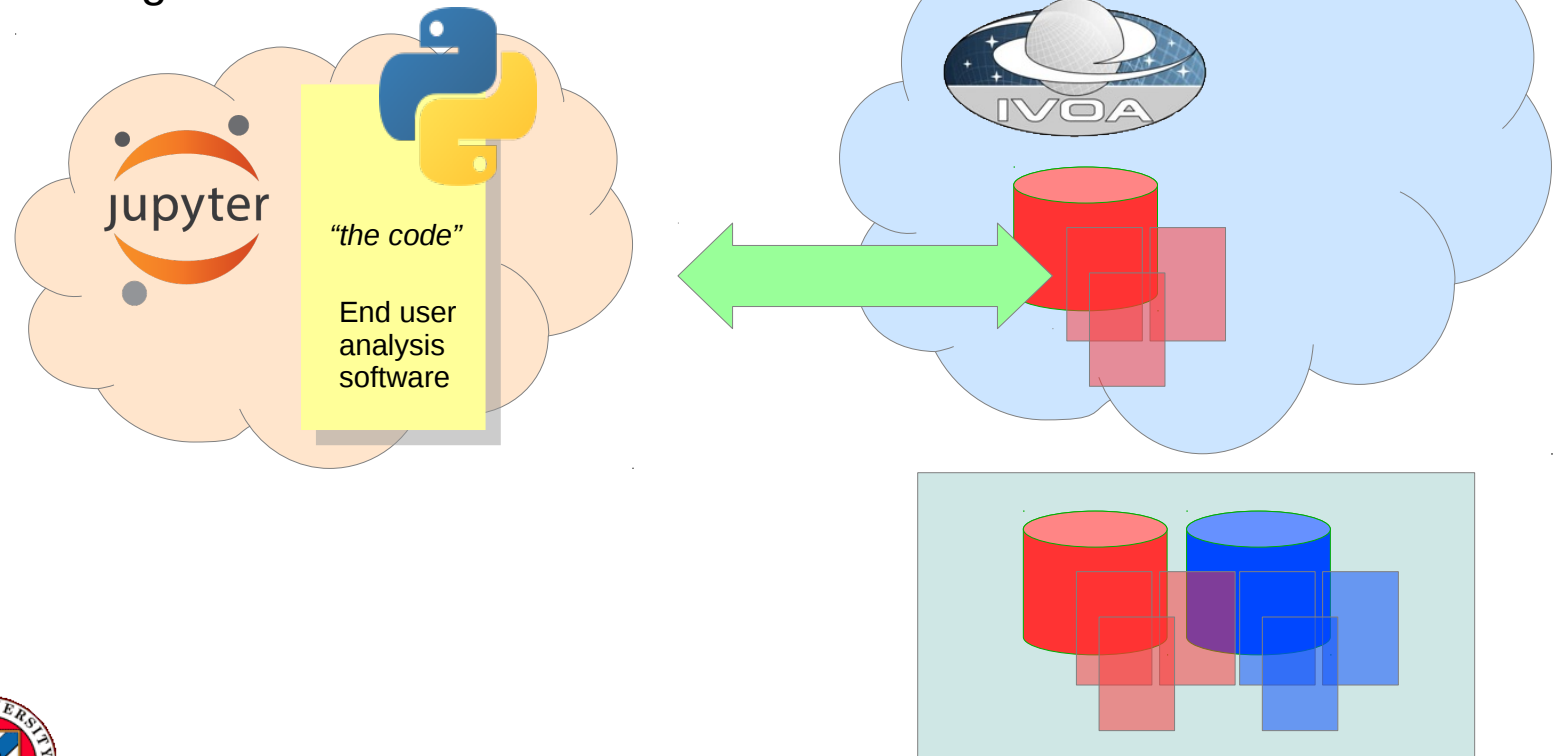End user analysis software

- The notebook can access data in the local data centre.

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A *local*[(*)] VO interface may provide higher bandwidth access to local data purely due to the physical proximity or capabilities of the network.

A *local*[(*)] VO interface may apply fewer data limits or quotas on requests coming from the local network.

"the code"

End user analysis software

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How do we describe (advertise) all this to the user ?

How do we describe (advertise) all this to the software ?

- You software will be able to access data from anywhere in the VO.

"the code"

End user analysis software
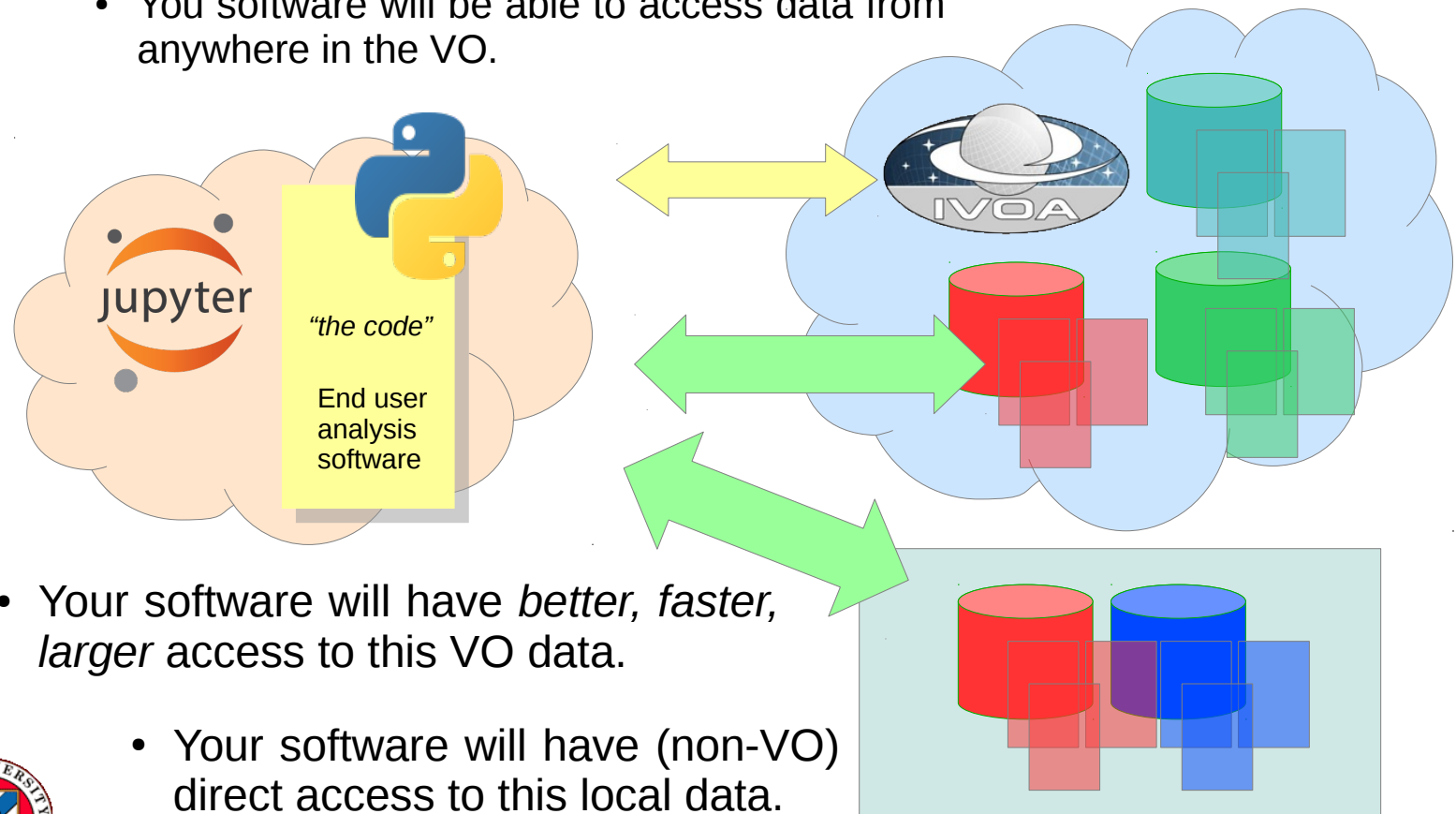
- Your software will have *better, faster, larger* access to this VO data.

- Your software will have (non-VO) direct access to this local data.

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What happens when we have lots of these ?

Some have special compute capabilities.

Some have lots of local data.

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