
Portal vs. Tools

Is there still a future for in-house portals or
ready-tools?

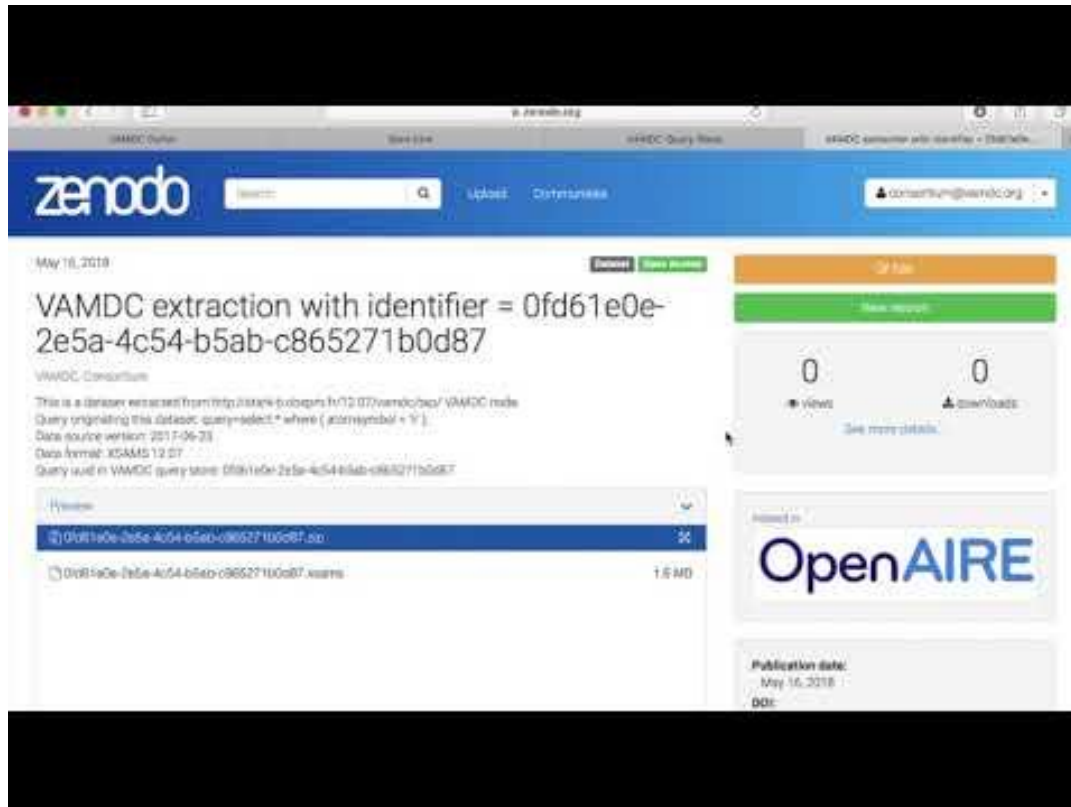
Other options such as Jupyter and Libraries

Overview of the today portal

Web application at : https://portal.vamdc.eu/vamdc_portal/home.seam

- Based on a Java heavy 15-y.o. framework
- The web-application is maintained by the VAMDC LERMA-team (mainly N. Moreau)
- The server hosting the portal
 - is on the Paris Campus
 - is operated by the VAMDC LERMA-team with LERMA IT support

Overview of the today portal



Main functionalities:

- Compose a Query
- Submit it to federated databases
- Get the results
 - download it
 - apply processor(s) to transform data
- Get data-citation link
 - Query Store integration

From Portals to Notebooks

- Some users asked for tailored functionalities (e.g. selection of nodes to query)
 - Time consuming to implement because of the Java Framework!
- During <https://astroinfo2021.sciencesconf.org> I discovered Google Colab and the potential of Notebooks for sharing data easily (thank you so much to all the organizers & teachers !!)
- **Idea : Try to embed the functionalities of the portal into a Colab-notebook.**

Summary and conclusions

		Classic Portal	Notebooks
Service provider perspective	Easy to operate (hardware)		
	Easy to evolve (software)		
	Easy to ensure continuity of services		
	Work as a major showcase		
Final-user perspective	Non-expert easy of usage		
	Easy to adapt existing to specific needs		

Summary and conclusions

		Classic Portal	Notebooks
Service provider perspective	Easy to operate (hardware)	★	★★★
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- Colab requires no effort to be operated, just some Google-account basic tuning. Nice!!
- It's a Google service. There are some inherent risks
- Alternative solution may be locally hosted instances of Jupyter Lab
 - Maintenance/operation effort will depend on the Institute IT service

Summary and conclusions

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- Python code is easy to maintain, package and adapt.
- Users may share their notebooks with new and improved functionalities

Summary and conclusions

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- Colab relies on Google infrastructure.
 - Always available
 - but not everywhere: Should we include geopolitical aspects on technical choices?
- In case of Jupyter Labs locally hosted
 - Quality of service will depend on the Institute IT service.

Summary and conclusions

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	Easy to evolve (software)	★	★★★★
	Easy to ensure continuity of services	★	★★★★
	Work as a major showcase	★★★★	★
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	Work as a major showcase	★★★★	★
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- The portal offer immediate visibility to all the VAMDC databases and features.
- Notebooks are not so straightforward and require some Python abilities.

Summary and conclusions

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	Work as a major showcase	★★★★	★
Final-user perspective	Non-expert easy of usage	★★★★	★★
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Summary and conclusions

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	Work as a major showcase	★★★★	★
Final-user perspective	Non-expert easy of usage	★★★★	★★
	Easy to adapt existing to specific needs		

- On the portal one just need to click and follow instruction on the “Guided Query” section
- Need to know Python and read basic example on the VAMDC library
 - The Library may be simplified in further version to hide complexity

Summary and conclusions

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Final-user perspective	Non-expert easy of usage	★★★★	★★
	Easy to adapt existing to specific needs	★	★★★★

Summary and conclusions

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	Easy to adapt existing to specific needs	★	★★★★

- This is indeed the main strength of Notebooks