

# Search into multiple valued elements with TAP/ADQL

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- **Use case:**

- We need multi-valued elements in EPN-TAP:
  - multiple named targets in field of view (multiple values in target\_name and target\_class)  
target\_name = “Jupiter#Europa”  
target\_class = “planet#satellite”
  - multiple instrument\_host\_name or instrument\_names, for derived products
  - multiple UCDs in “epn\_core:measurement\_type” (similar to “obscore:o\_ucd”).  
measurement\_type = “phys.density;phys.electron#phys.temperature;phys.electron”
- We need then a syntax and a function search.  
SQL/ADQL LIKE is not enough

- **Proposal:**

- RegTAP is using #-separated list, and requires a “user-defined function” called “ivo\_hashlist\_has” [Demleitner et al. A&C 2015]
- Promote the “search into #-separated list” capability in ADQL?

- **Next steps?**

- Probably not an ADQL standard evolution (unless DAL working group wants to proceed in this direction).
- Might be easier and more efficient with an Endorsed Note, if TCG agrees.
- As the use-case was raised by SSIG, SSIG members are ok to start writing up a document, with help of any other contributors. Contribution from ObsCore would be nice, as similar use case might appear.

