

# Using IRAF in the VO

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# Design Goals

- Build upon VO Client
- Demonstrate power of integration with legacy code
- Implement higher-level applications to provide new functionality (e.g. Registry search)
- Provide a mix of compiled tasks (SPP language) and new builtin functions (CL)

# Registry Access – CL Language

```
Str = regResolver (id [, svc [, attr [,index]]])
```

```
N = nresolved ()
```

```
res = regSearch (term [, orValues])
```

```
res = regSearch (keywords, orValues)
```

```
res = regSearch (sql, keywords, orValues)
```

```
res = regSvcService (type, term, orValues)
```

```
count = regResCount (res)
```

```
str = regValue (res, attr_list, index)
```

# Registry Access – Task Browser

- REGISTRY Task
  - Keyword search
  - Service Type
  - Bandpass
  - Arbitrary SQL constraint
  - Interactive browsing of results to further constrain output
- Very helpful when developing to find a set of related resources you might want to offer in a task (e.g. Alternate access to a data service)

# Data Access – CL Language

- `res = dalConeSvc (url,ra,dec,sr)`
- `res = dalSiapSvc (url,ra,dec,sz,sz,fmt)`
- `count = dalRecordCount (res)`
- `name = dalGetData (res, index, fname)`
  
- `rec = dalGetRecord (res, index)`
- `val = dalGet<type> (rec, attrname, index)`

# Data Access – CL Language

```
fname = getData (acref, [, filename])
```

- Provides general access to a URI
  - Returns a filename and so can be used as an argument to a task
  - Uses default filename for opaque access to temporary data
  - When accessing images, filename must be specified with the file extension

# Data Access – Task Level Access

**CONECALLER – Cone Search**

**SIAPCALLER – SIAP Search**

Any coord sys input, user's image, etc

Return table in variety of formats

**SESAME – Name resolver**

**DATASCOPE – Commandline toy version**

**VIZIER – Download Vizier Tables**

**SKYBOT – Find minor planets**

**IMSKYBOT – Mark minor planets in an image**

# DEMO

