

DSA - CEA

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CEA, UWS I

- CEC (Common Execution Connector) - interface to CEA like UWS.
- UWS=CEC and CEC=UWS (almost).
- UWS (Universal Worker Service) - A pattern for controlling a async stateful jobs. Being pushed in the IVOA standard, REST style.
- CEA (Common Execution Architecture)- The Architecture incorporates several areas such as connecting to registries, connecting to security and community, VOSI, CEC, UWS, and it's own pattern for controlling a async stateful jobs and this pattern has often been referred to as CEC. This pattern is similar to UWS and was the basis of UWS creation.
*Note the pattern is slightly different and is SOAP based.

CEA, UWS II

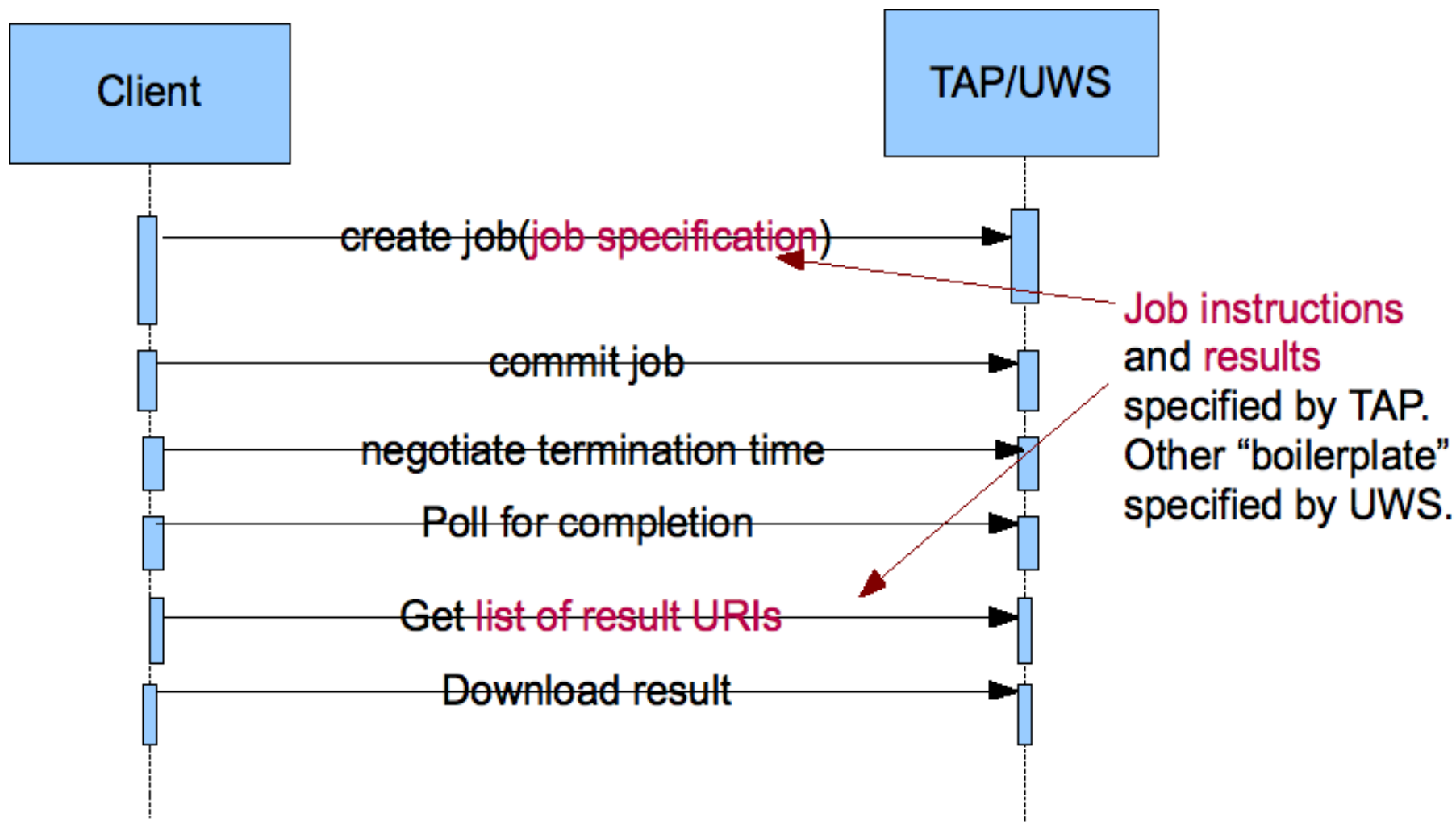
- In a Nutshell CEA can be configured to run Java apps and HTTP Web Form Apps, but primarily when installing the CEA your target is ‘CommandLine’ Apps.
- CEA is ran in Async. Allowing for long running jobs.
- CEA has it’s ‘Job Description’ that all clients conform to for calling the CEA.
- UWS going through IVOA.



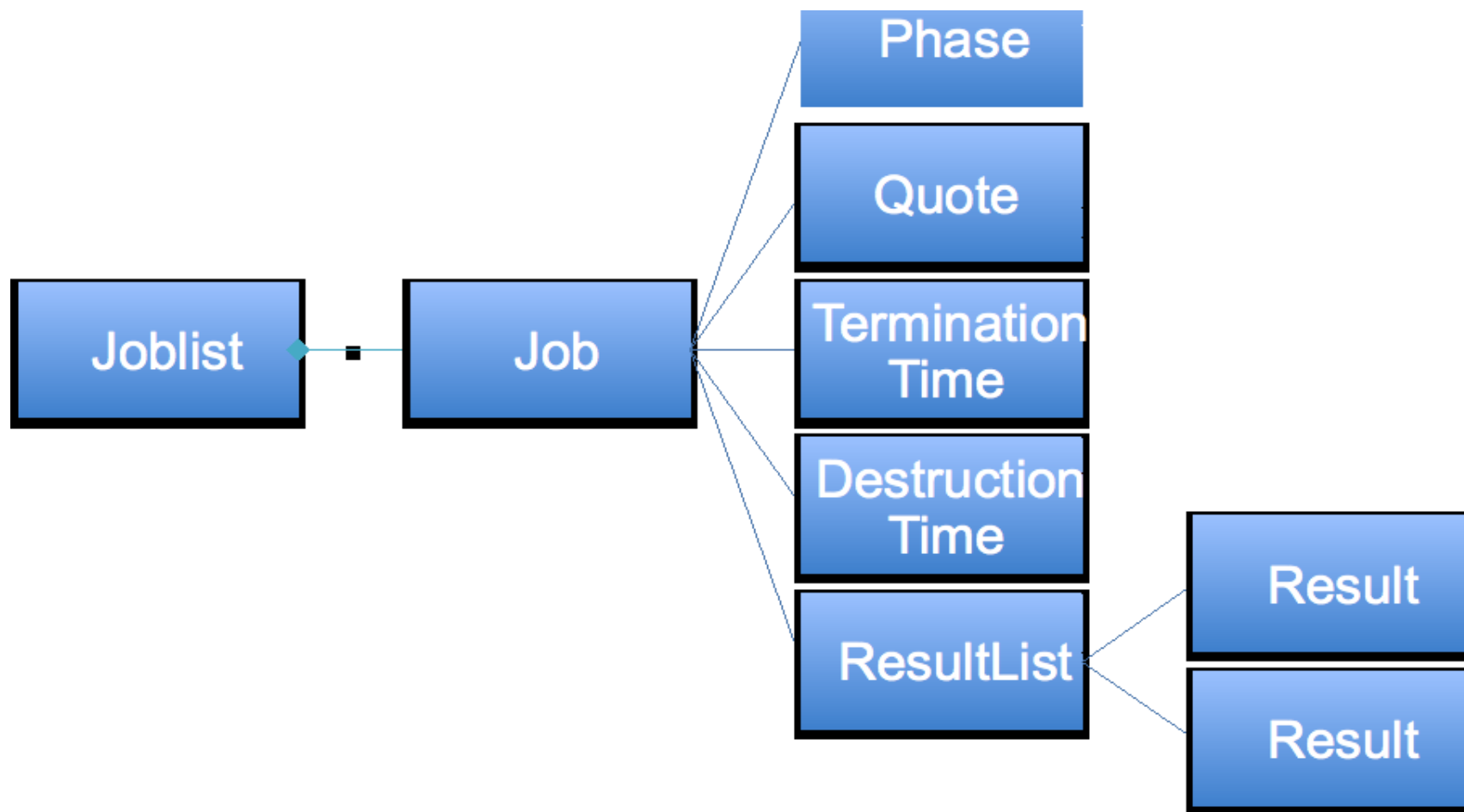
CEA, UWS III

- The Job Description just about allows for any kind of input and output including File References (url or vospace), ADQL, hard-coded values.
- Two main constraints:
 - *have no graphical interface.
 - need no user interaction once launched.
- *Not entirely true, some apps have launched been in contact with graphics (or graphic buffers) to do plotting then exit.

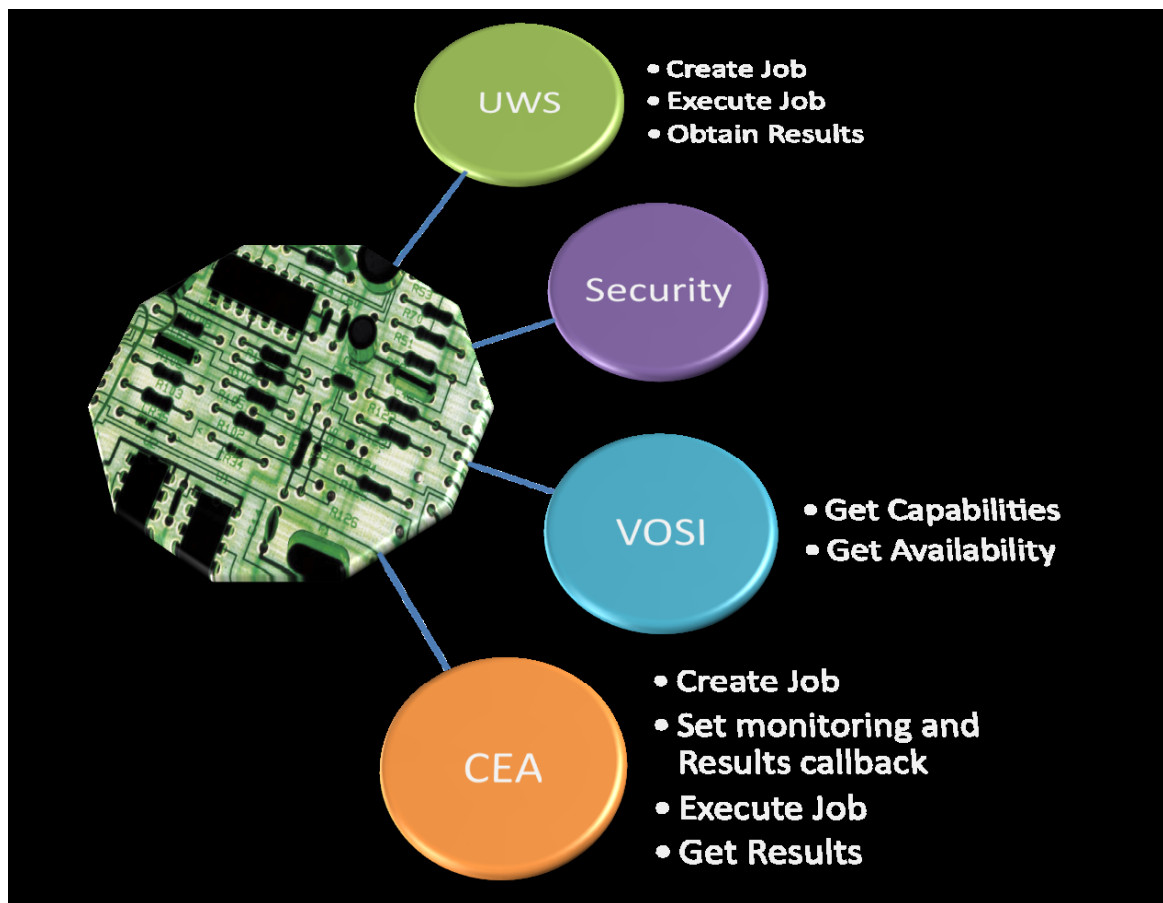




CEA, UWS IV



CEA, UWS V



DSA and TAP I

- DSA (Data Set Access) - A component of Astrogrid to allow the querying of major relational databases that is based on SQL.
- TAP (Table Access Protocol) - A Standard Protocol from IVOA, based on REST style. This protocol defines the interface.
- ADQL - In short XML version of SQL plus a few Astronomical extensions. This is the input to the TAP protocol. VOTable is the output.

DSA and TAP II

- DSA has the CEA bundled as part of its component.
- This allows for long running queries on databases to happen.
- Because we already know the interface (inputs and outputs) setup of CEA/UWS is automatic.

Future and possible work

- VODesktop speaks only CEA at the moment. (slightly different than UWS).
- TAP protocol has a few other interface requirements. That might need to be investigated for VAMDC. First thought is 'NOT' needed.
- Automatic Xforms for defining apps in CEA, started but not completed.
- Staging -- VOSpace? but after discussions keep it local with the UWS or send it to another URL.

References

- <http://voparis-twiki.obspm.fr/twiki/bin/view/VAMDC/CodingResources>
- <http://voparis-twiki.obspm.fr/twiki/bin/view/VAMDC/AstrogridDSACatalog>
- <http://deploy.astrogrid.org/RELEASE/>
- Movies - to be uploaded soon.
 - CEA configuration
 - DSA Installation and Configuration
 - Registry Installatin and Configuration

~~3D Movie~~
Live **LIVE**
Demo



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