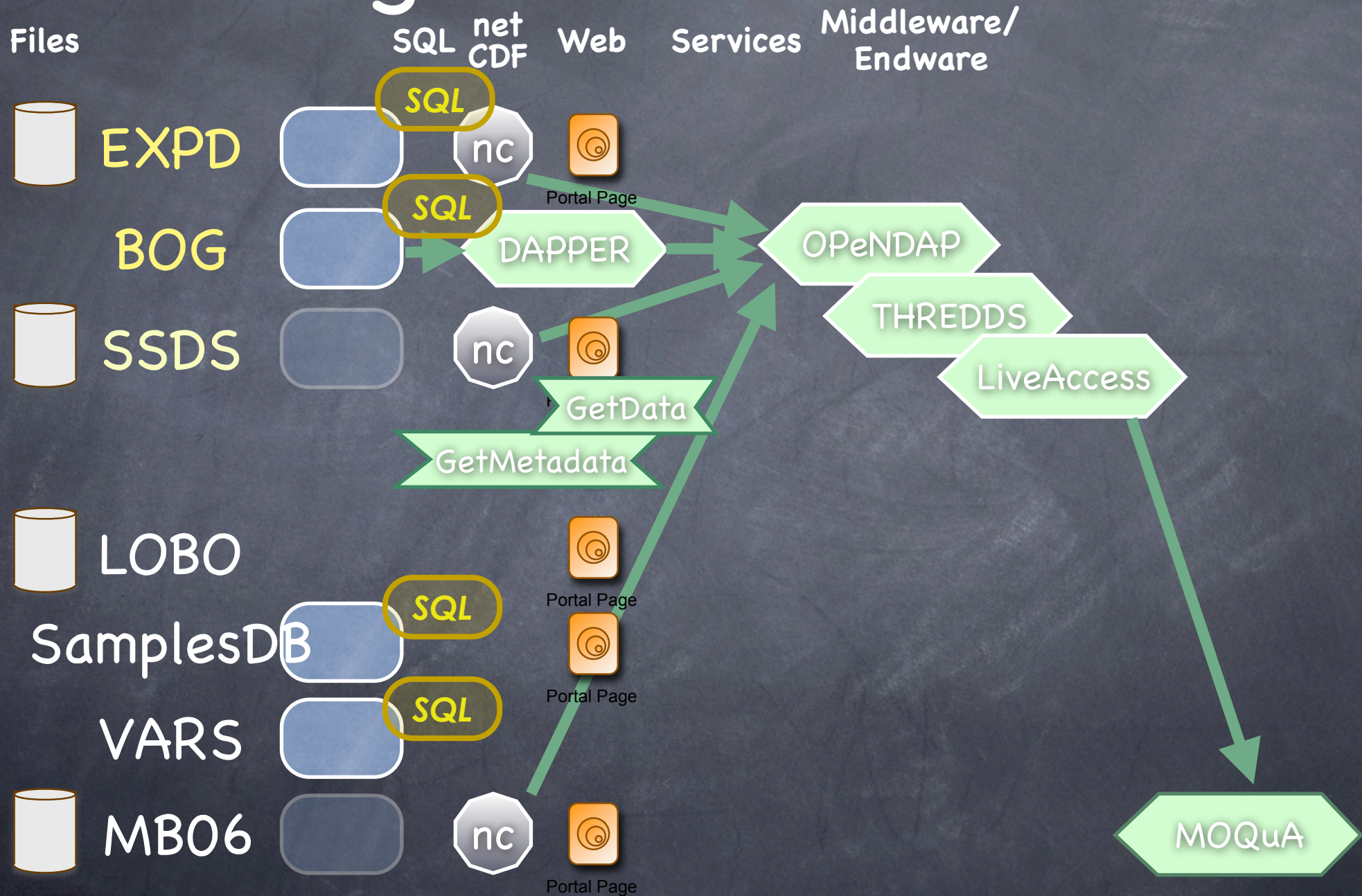


A Vision for Accessing MBARI Data Systems

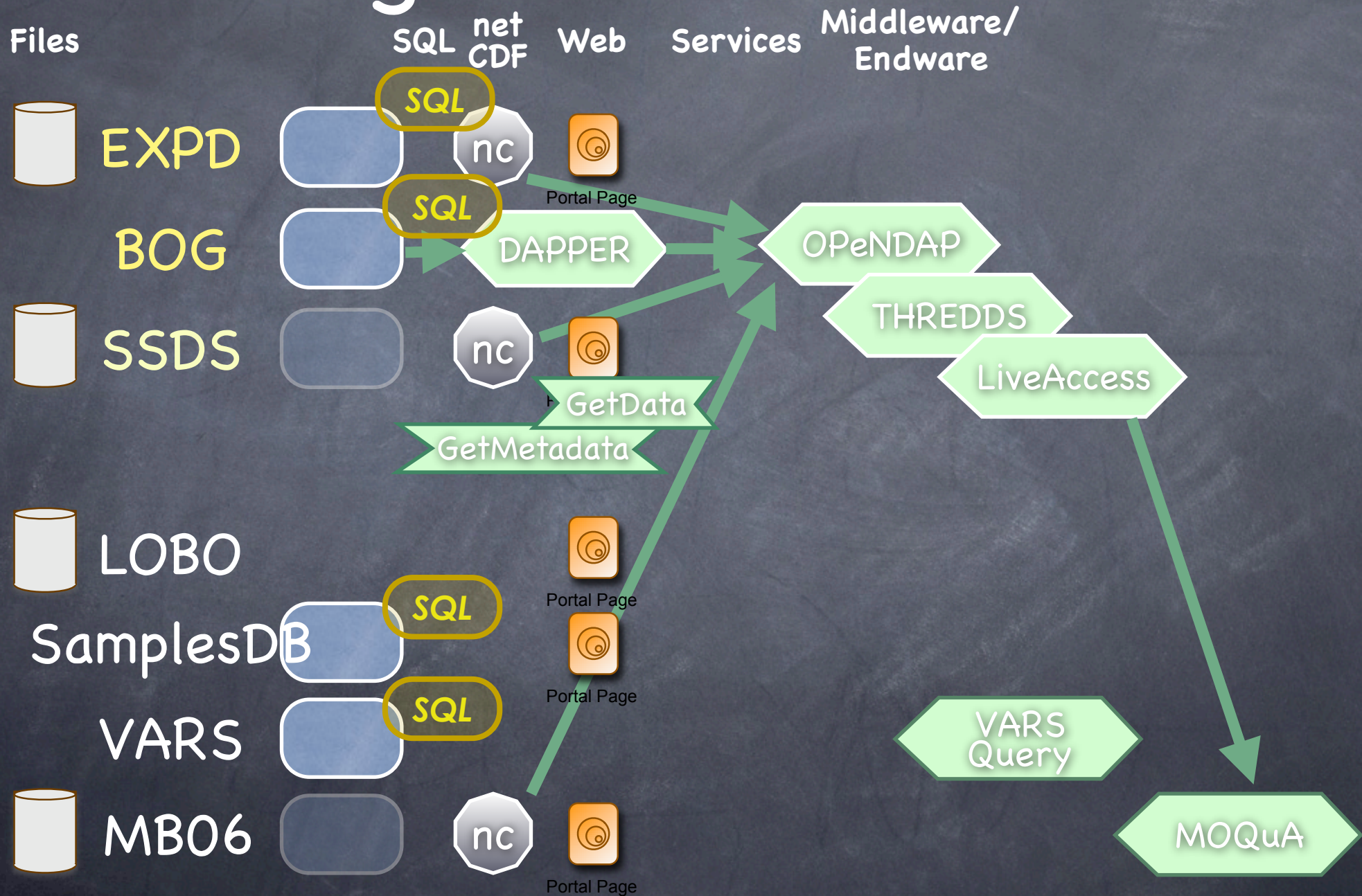
Existing Data Systems

Files	Core Data	DB	net CDF
	EXPD		
	BOG		
	SSDS		
	LOBO		
	SamplesDB		
	VARs		
	MB06		

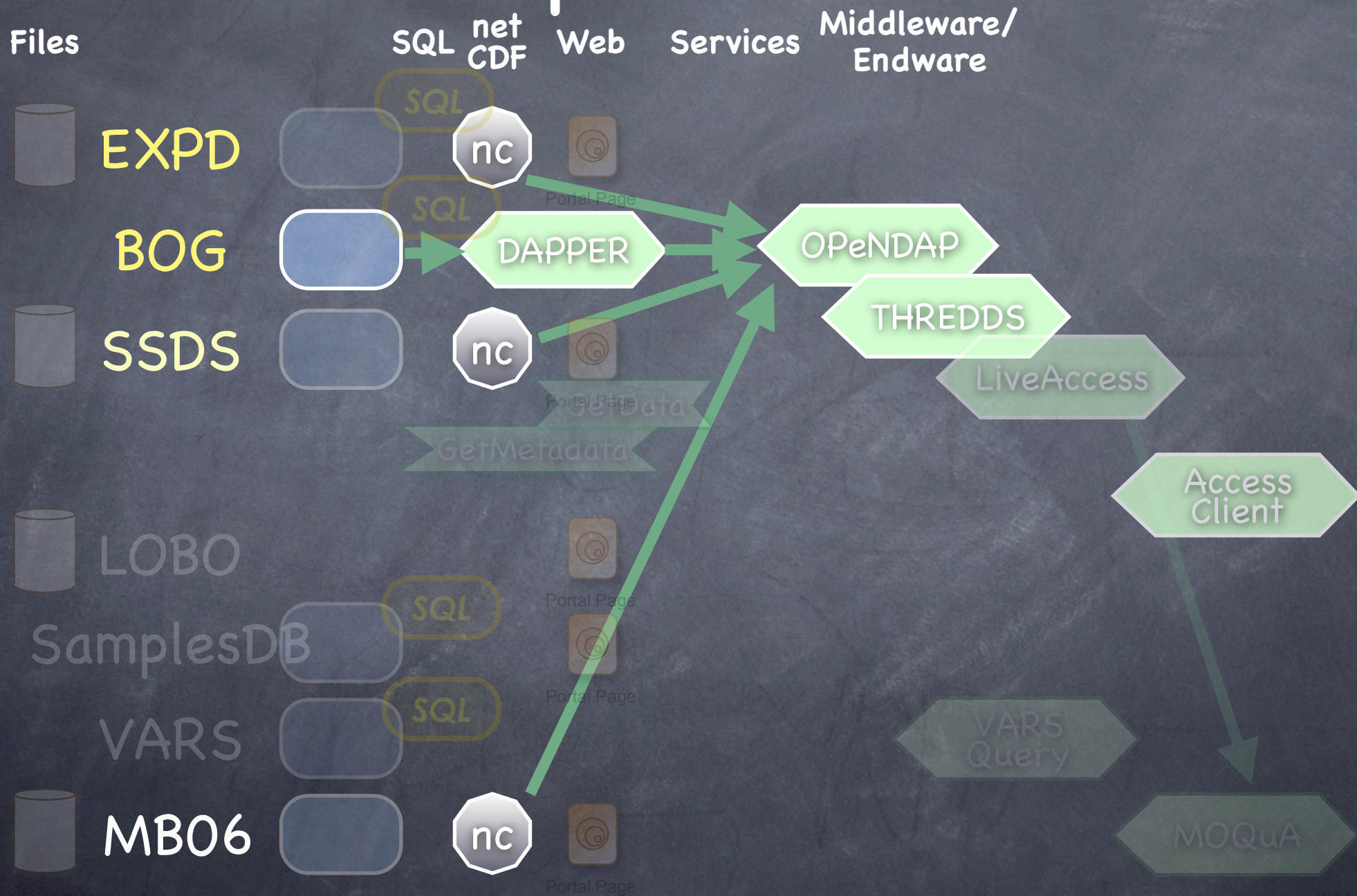
Existing Services & Files



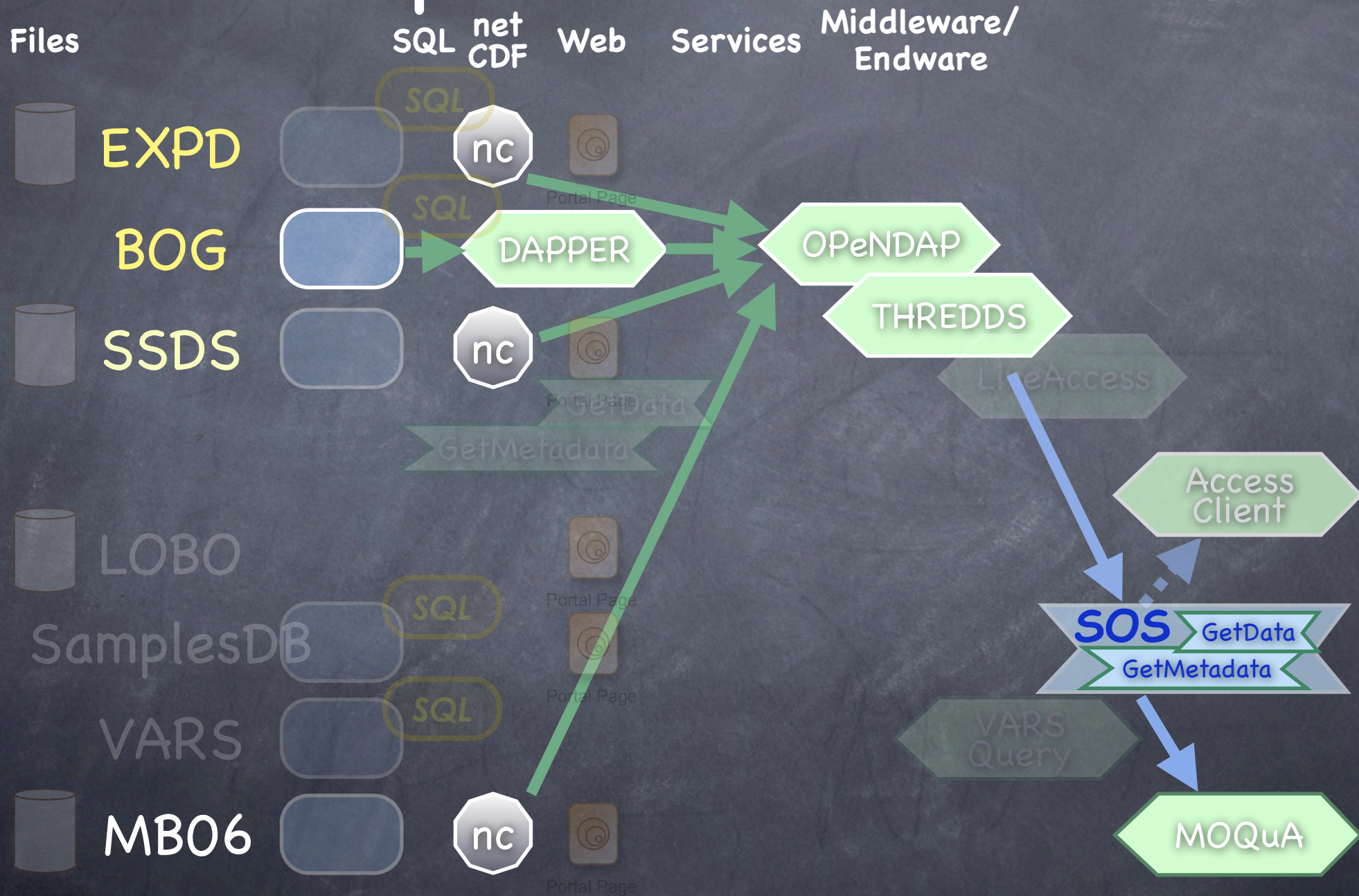
Existing Services & Files



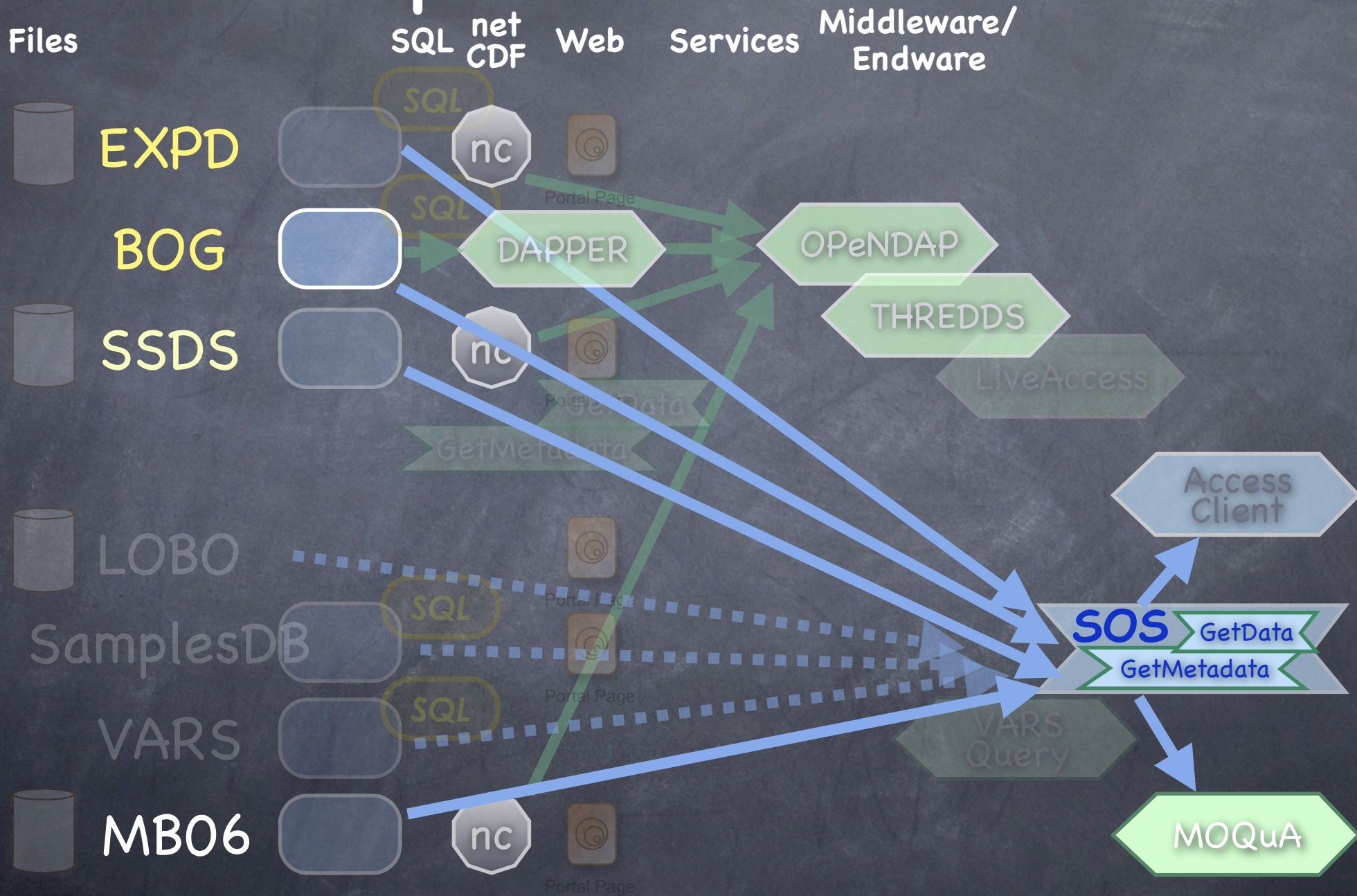
netCDF Proposal



SOS Proposal Phase 1



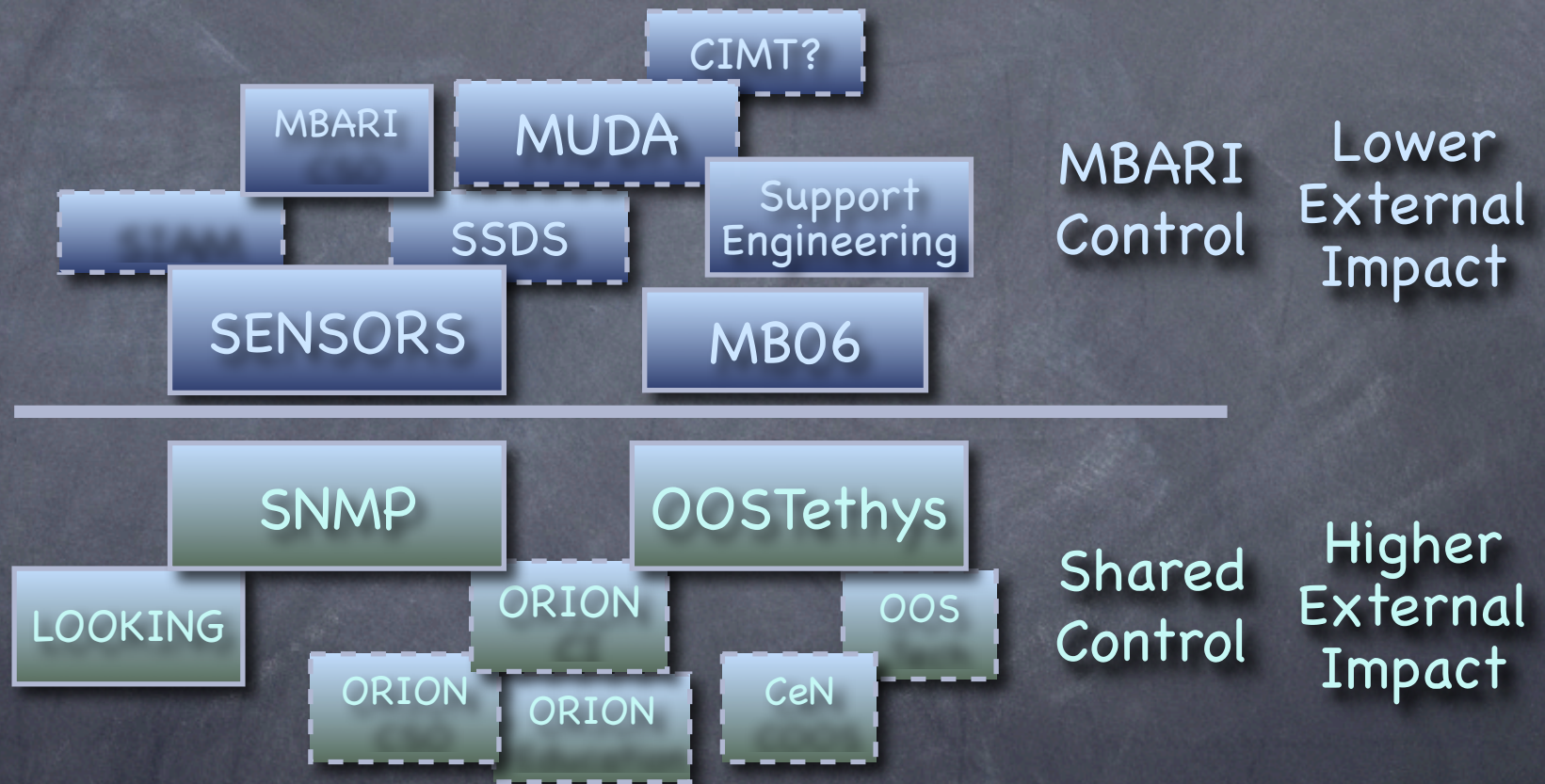
SOS Proposal Phase 2



Existing Activities

Resources
Allocated

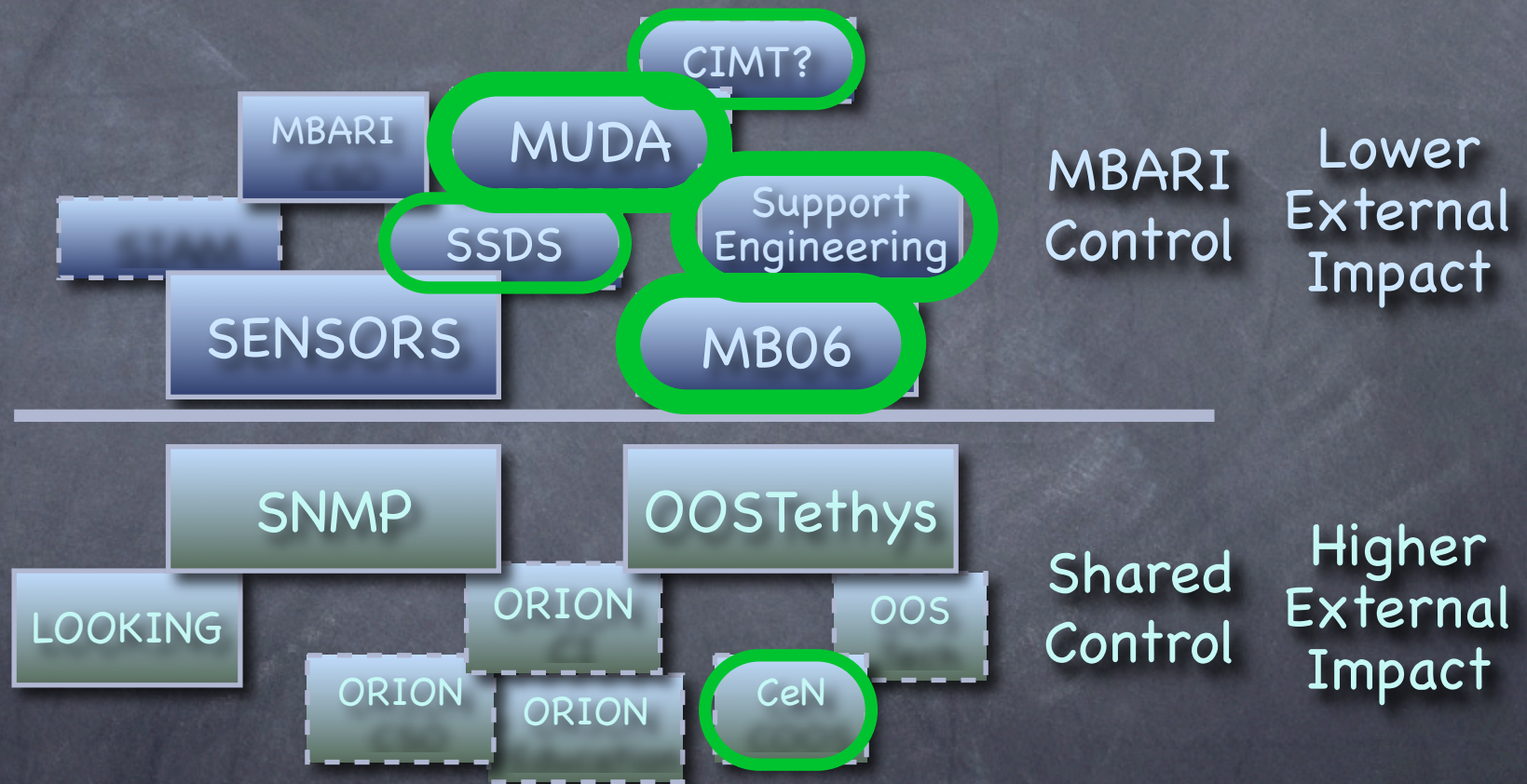
No Resources
Allocated



netCDF work applies to...

Resources
Allocated

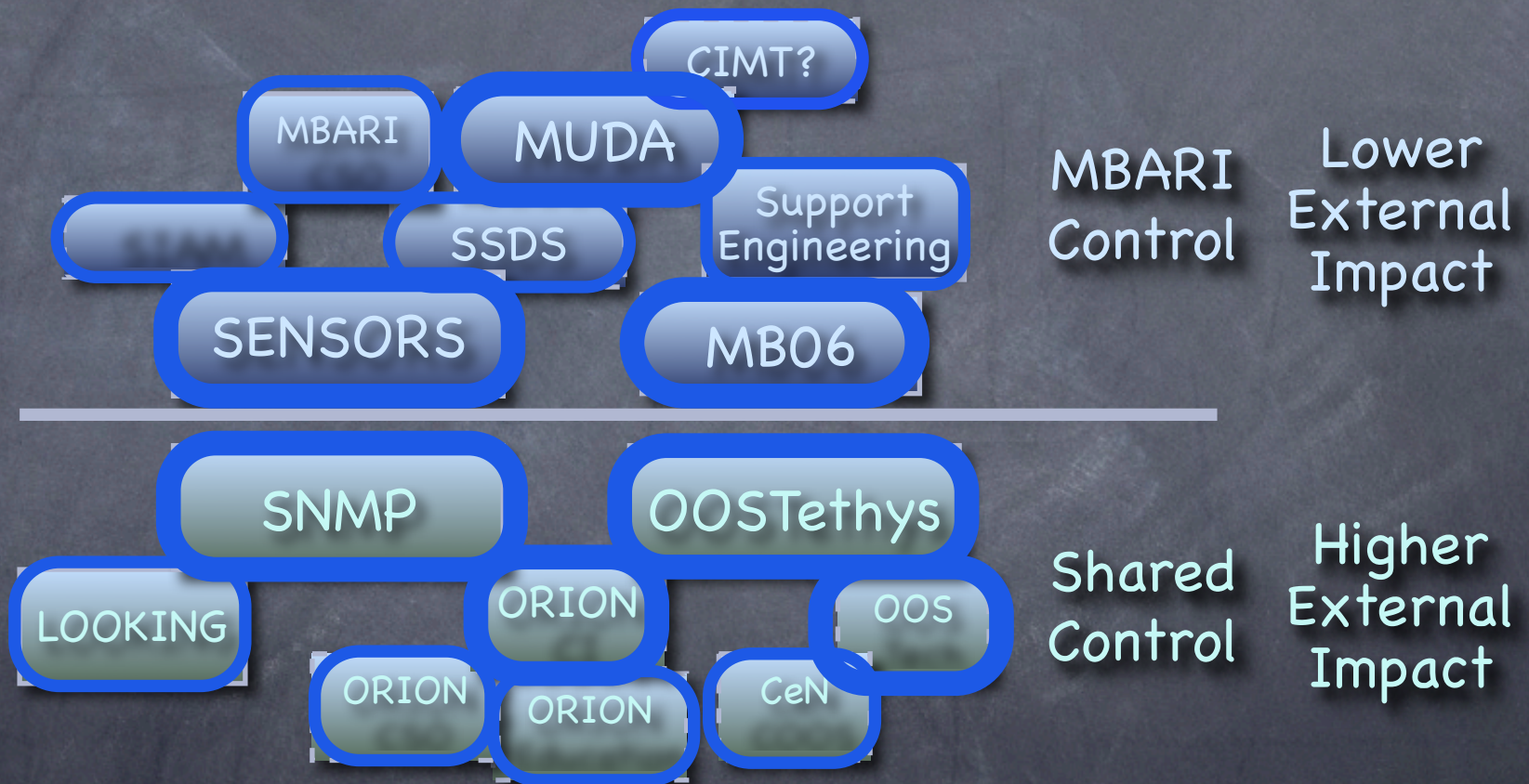
No Resources
Allocated



SOS work applies to...

Resources
Allocated

No Resources
Allocated



What is SOS?

Sensor Observation Services

- an Application Programmer Interface (API)—specifically, a web service interface—to obtain information from sensors (a.k.a. instruments)
 - enables requesting, filtering, and retrieving observations and sensor system information
 - the intermediary between a client and an observation repository or near-real-time sensor channel
- part of Open Geospatial Consortium's (OGC) Sensor Web Enablement (SWE) initiative

Sensor Web Enablement

- Observations and Measurements (describe data)
- Sensor Model Language (describe sensors)
- Transducer Model Language (like SensorML)
- Sensor Observations Service (access observations)
- Sensor Planning Service (control sensors)
- Sensor Alert Service (subscribing to information/events)
- Web Notification Service (delivery protocols)

SOS Interfaces

- GetCapabilities

- identify such things as offerings (files, areas observed), observed properties (variables), and information on data sources (sensors or processes)

- GetObservations

- retrieve observation data in the form defined in the Observation and Measurement specification (O&M)
- select based on time, property, location

- DescribeSensor

- return detailed description based on SensorID

SOS Status and Usage

(this page in progress)

- Status of standard
 - Submitted as candidate specification (version?)
 - In work by SWE Working Group
- In early use or recommended by many
 - MMI's OOSTethys (Luis Bermudez)
 - CI IO (proposer Matthew Arrott)
 - SEACOOS (developer Jeremy Cothran)