



Architecture

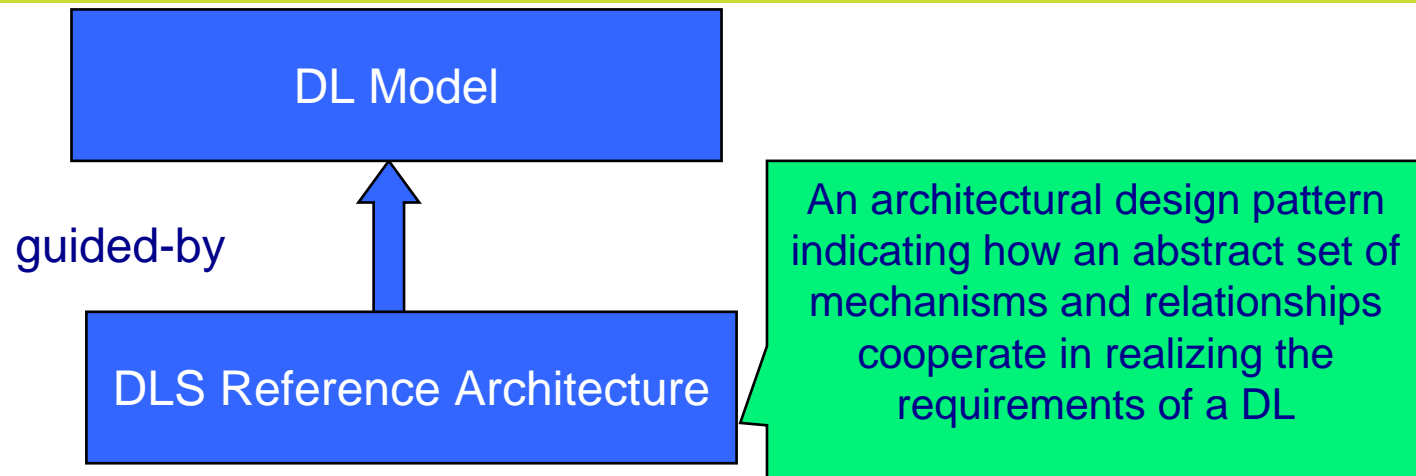
Donatella Castelli

CNR-ISTI

System architecture - definition

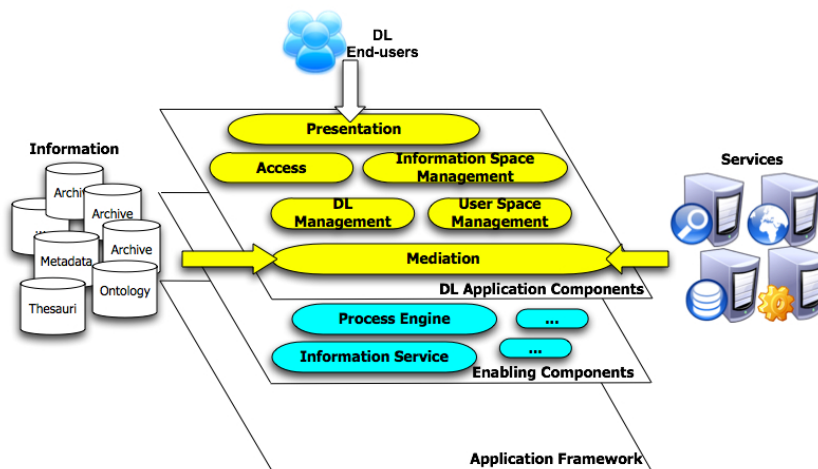
Mapping of the functionality offered by a DL onto hardware and software components

DLS reference architecture

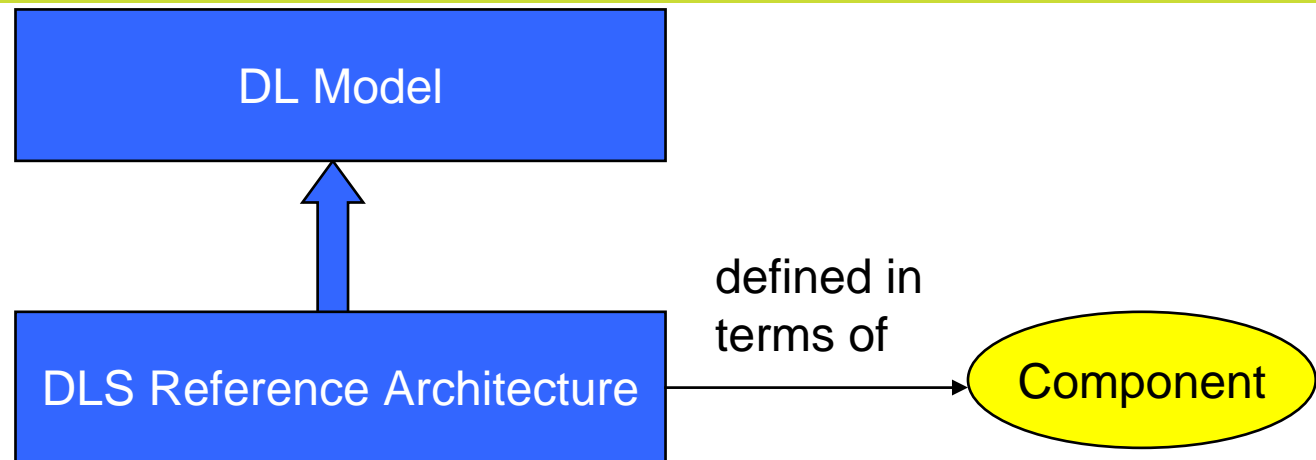


A DLS Reference Architecture

- Suitable for an application scenario characterized by:
 - organizational model based on sharing (federated model)
 - (dynamic) growing number of participants
 - evolving requirements



A component-based architecture

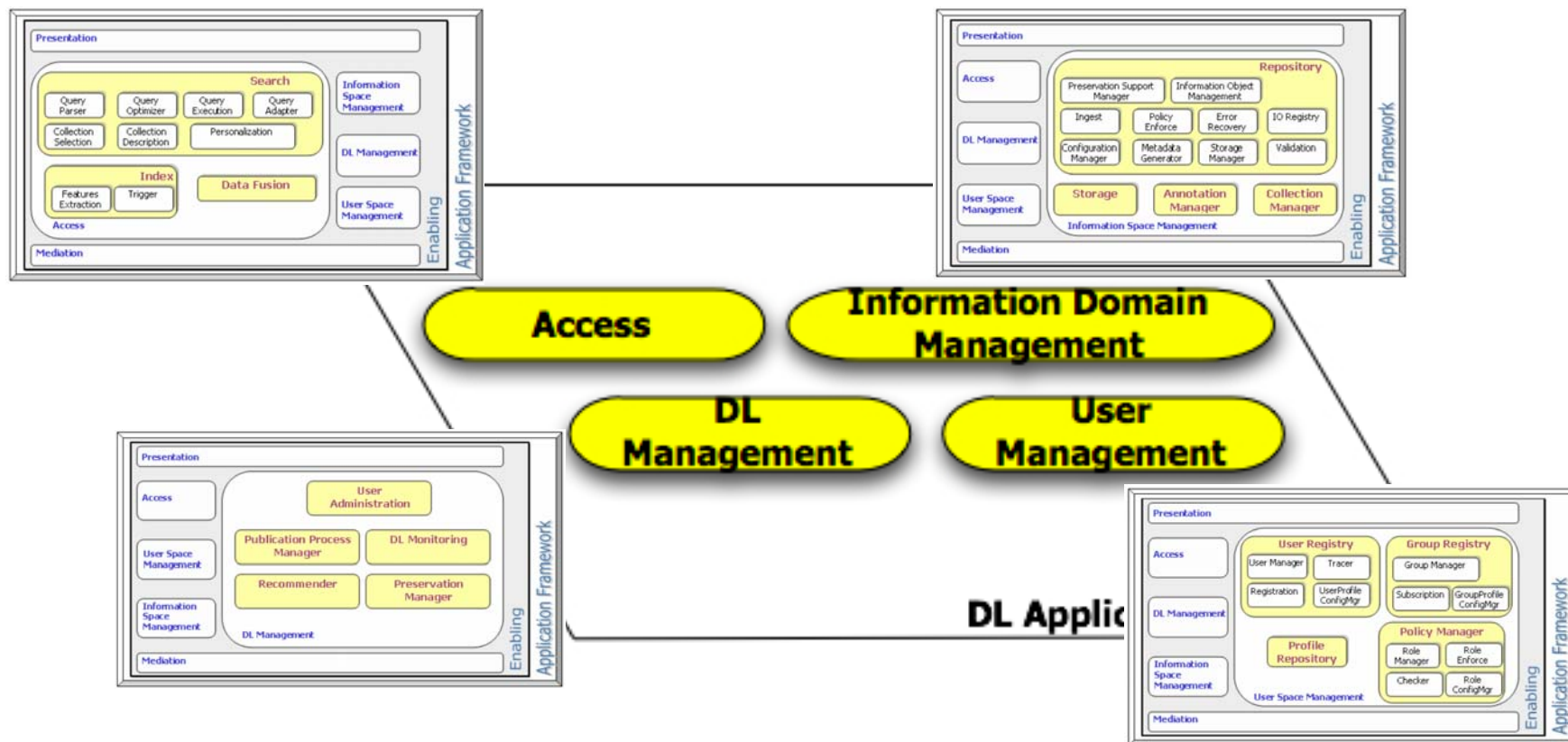


Component:

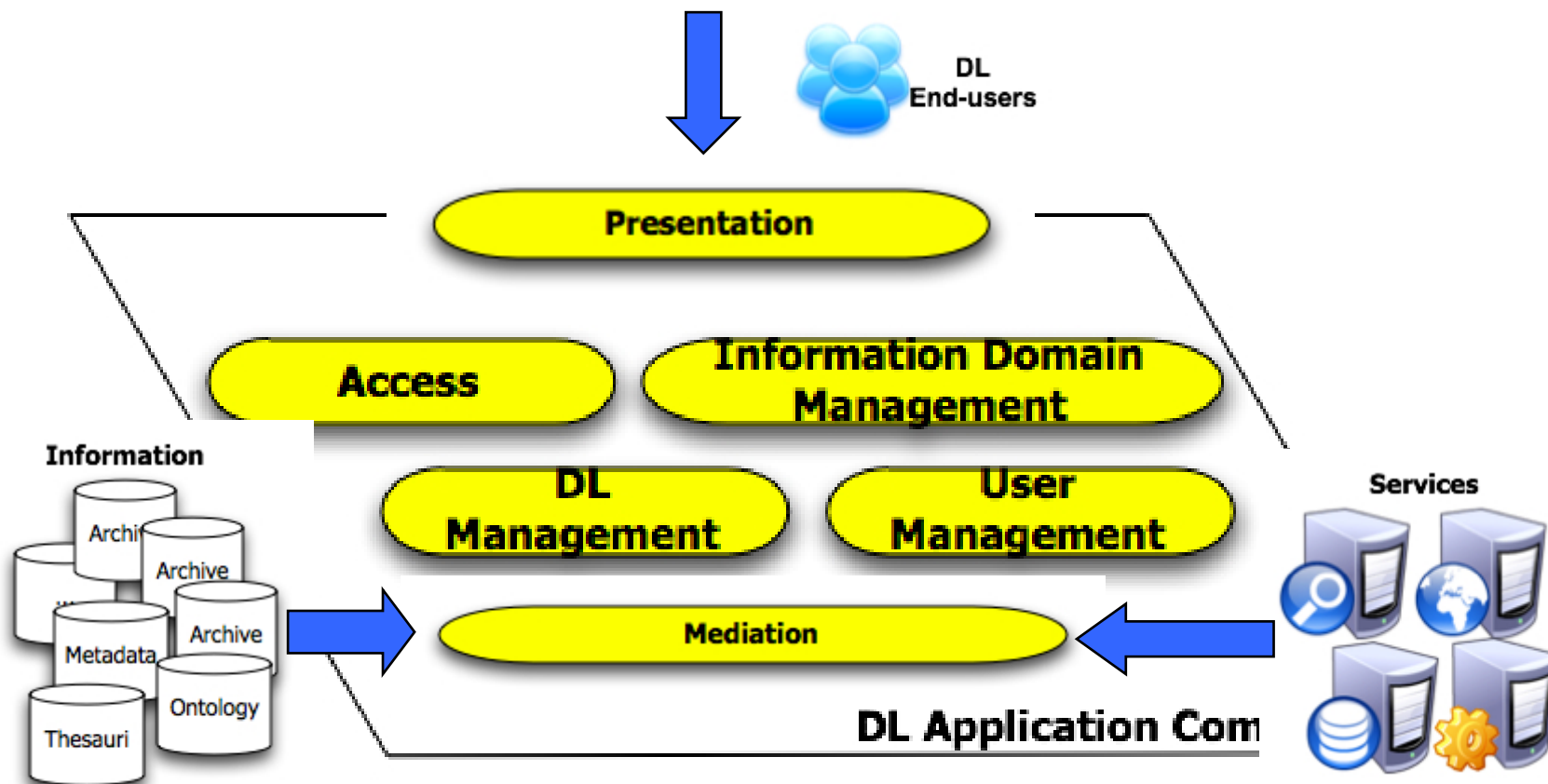
A software module providing a well defined functionality such that

- it has a well defined interface
- it is autonomously configurable
- it is deployable on one or more hosting nodes

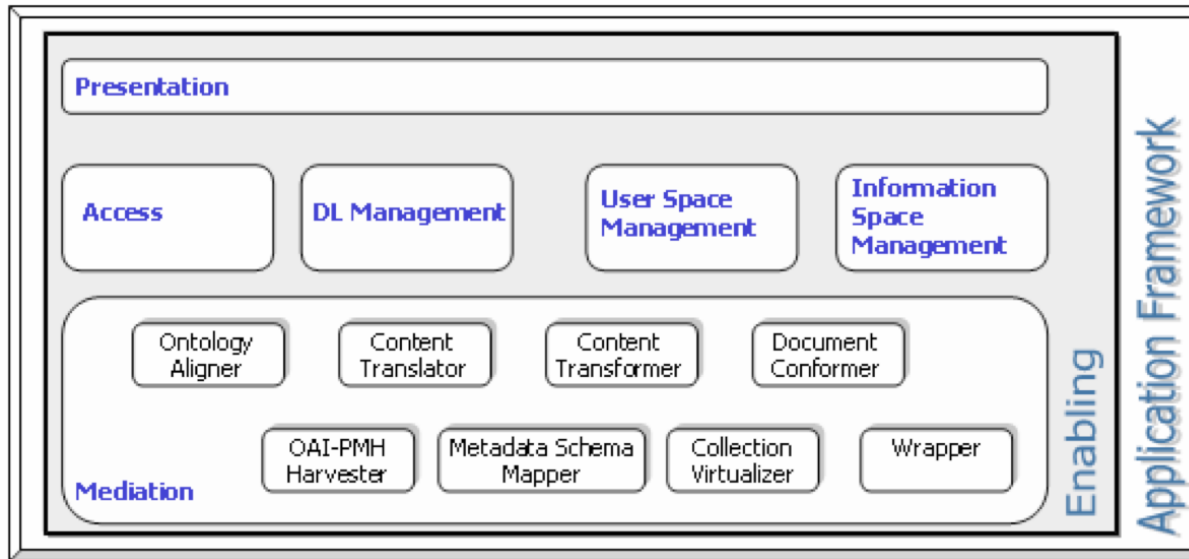
DL application components



DL application components (cont.)

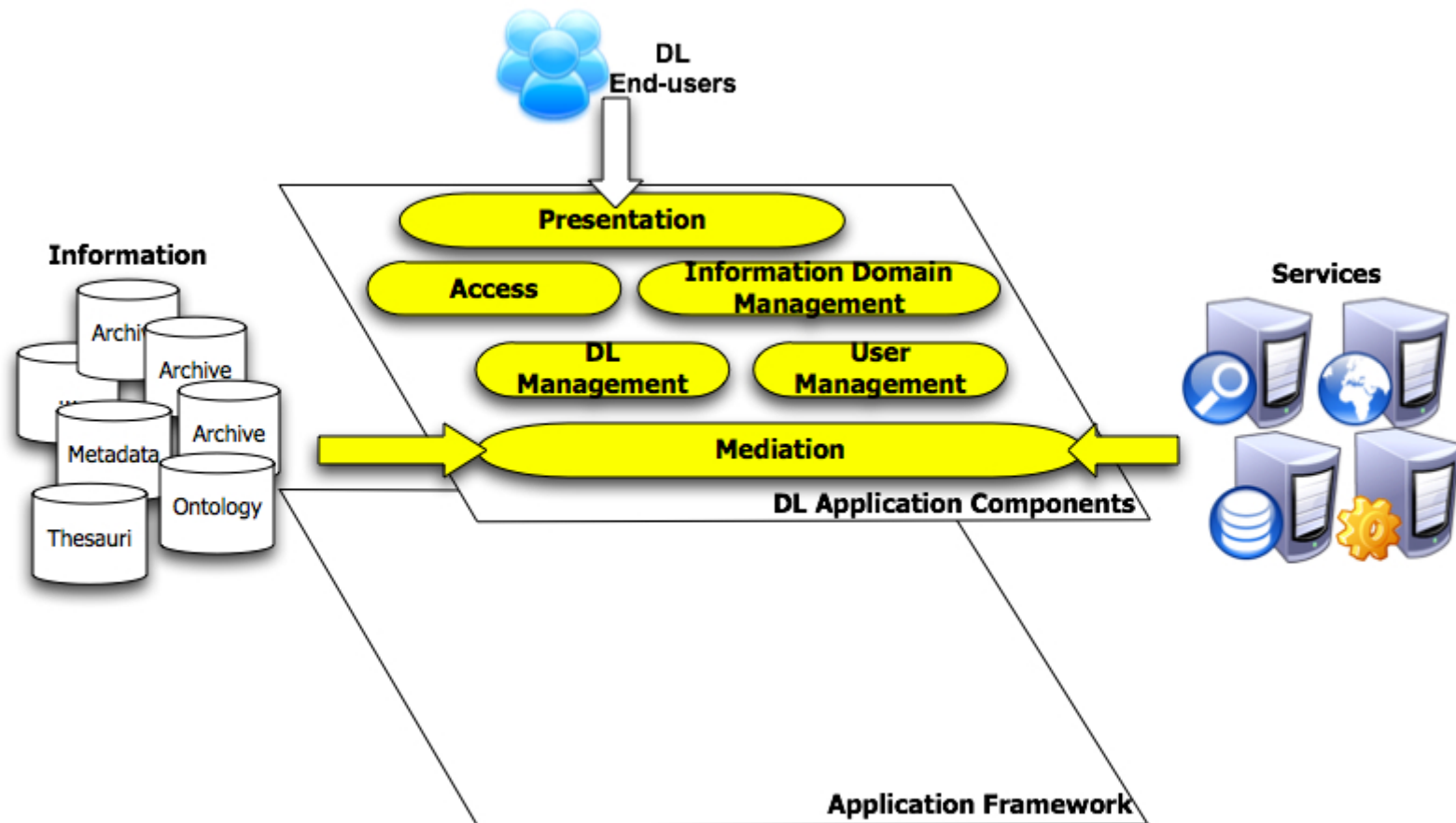


Mediation



- Collection
- Information object
- Information object mode
- Manifestation
- Metadata schema
- Ontologies
- ...

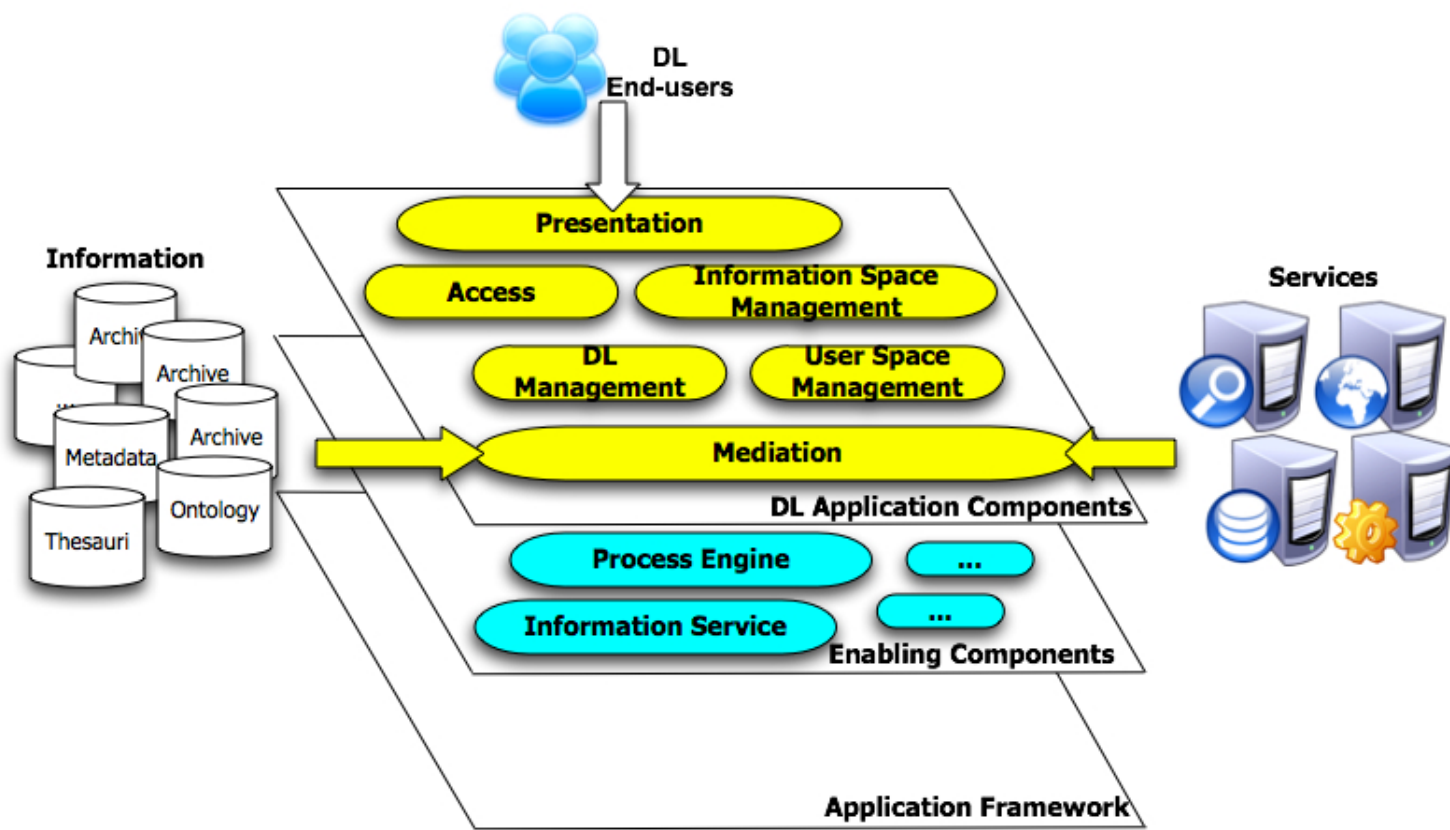
Application framework



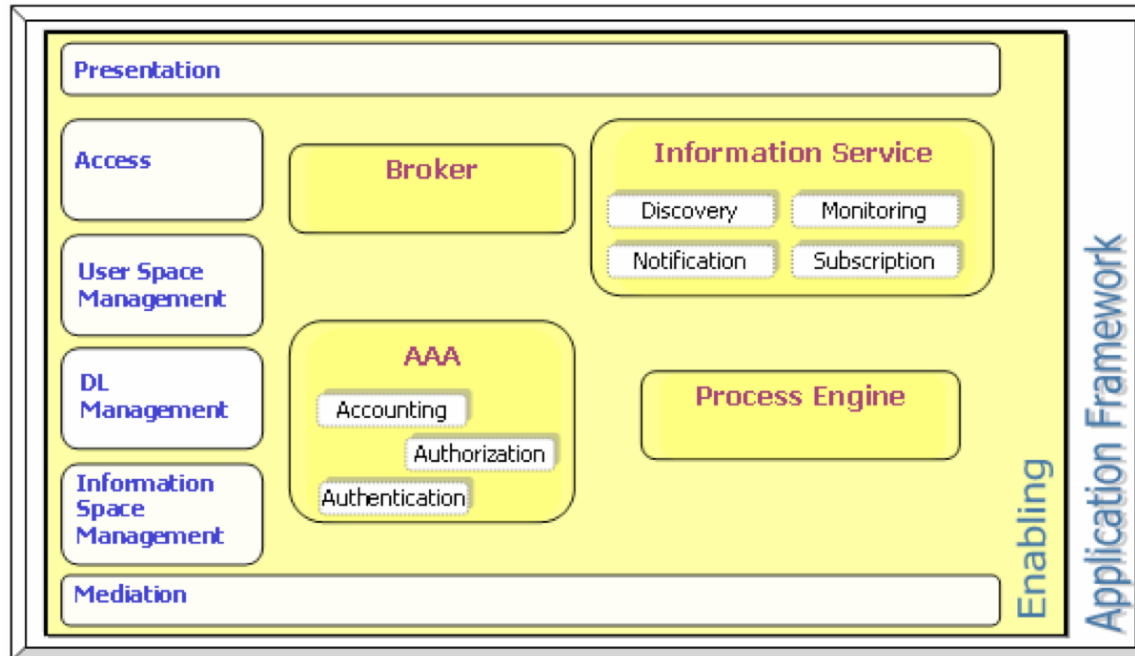
Application Framework

- A middleware available at the hosting nodes that provides the run-time environment for all the the components.
e.g. Web Services, CORBA, ...

Enabling Components



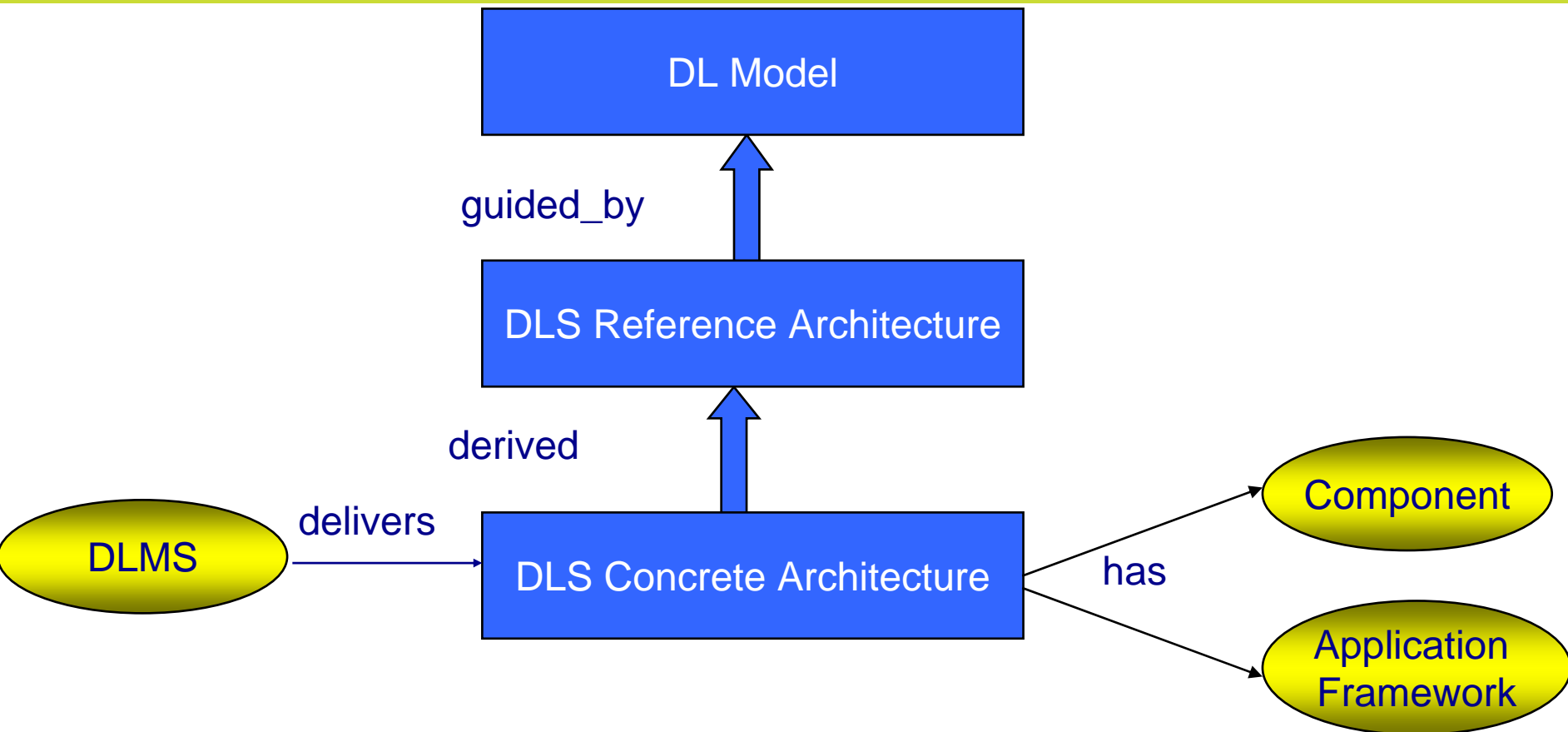
Enabling Components



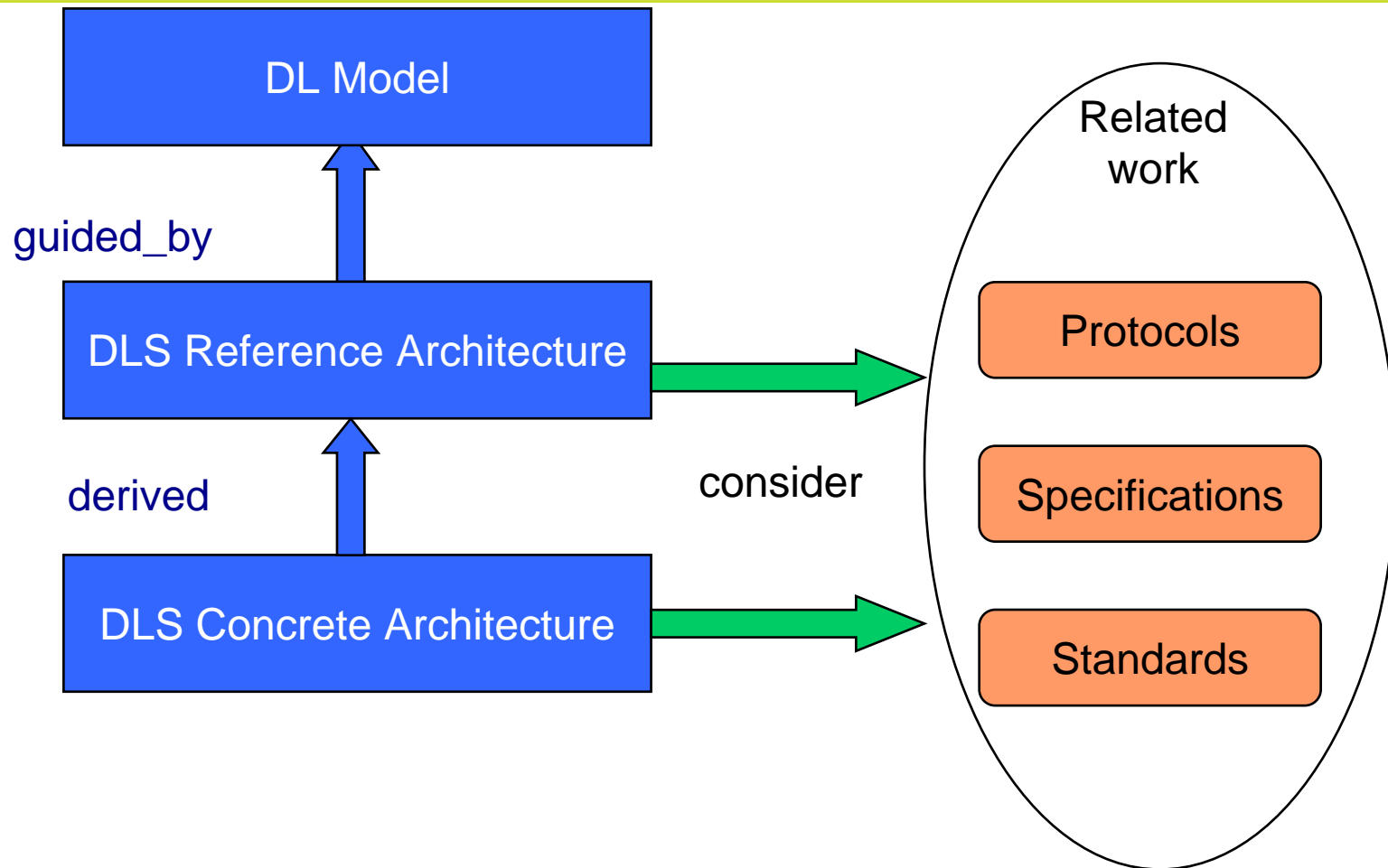
Provide functionality for:

- supporting the DLS components co-operation
- ensuring quality
- enabling workflow composition

Concrete Architecture



Related Work



Architecture Instance

