

Application Areas I

☞ Terminological KR and Ontologies

- DLs initially designed for terminological KR (and reasoning)
- Natural to use DLs to build and maintain ontologies

☞ Semantic Web

- **Semantic** markup will be added to web resources
 - ➔ Aim is “machine understandability”
- Markup will use **Ontologies** to provide common terms of reference with clear semantics
- Requirement for web based ontology language
 - ➔ Well defined semantics
 - ➔ Builds on existing Web standards (XML, RDF, RDFS)
- Resulting language (DAML+OIL) is **based on a DL** (*SHIQ*)
- DL **reasoning** can be used to, e.g.,
 - ➔ Support ontology design and maintenance
 - ➔ Classify resources w.r.t. ontologies