

# RSpecs: **Alternative View** Max Ott - max.ott@nicta.com.au

**Presented by Aaron Helsinger –** ahelsing@bbn.com March 16, 2011 www.geni.net



#### Alternative View – Max Ott

- Need to separate object model from semantic meaning of a specific resource
- Object model should be fairly stable
  - Baked into most software components
  - Defines wire format
  - Change is bad requires wide-spread modifications
- Semantic meaning (ontologies) captures characteristics and dependencies of our resources
  - Will change regularly
  - Change is a good indicator of a vibrant community



## Alternative view from Max (cont)

- Object model: Named & typed entity/object/component with named & typed properties and relations to other entity
  - Will also need an object life-cycle to be useful
  - Object references, names, and types are just URIs
  - Any wire format is fine as long as it is consistent (domain independent)
    - However, there are plenty of existing standards to choose from
- Meaning of names and types defined separately
  - Can be simple tables with free-form descriptions
  - Can be formally defined (e.g. OWL)



## Alternative view from Max (cont)

- Why re-invent the wheel when you can stand on the shoulders of giants?
  - Yes, it takes a while to appreciate the subtleties
  - But these standards and frameworks were developed by folks who know a lot more about describing resources than we do

 NDL (based on ISO standard) defined in OWL (W3C standard). Serialization using RDF/XML (W3C standard).



#### Alternative view from Max (cont)

#### Move Forward

- Will help define a common ontology for wireless resources
- Will support Ilia's effort to maintain a translator from whatever format is 'forced' on us to a formally consistent one.