Identity Crisis and Serendipity

Ora Lassila
Research Fellow – Nokia Research Center Cambridge
Elected Member – W3C Advisory Board

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Semantic Web: A Difficult Message

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• Q: Why then is the Semantic Web so attractive?
  A: For future-proofing
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Semantic Web can be a solution to those problems and situations that we are yet to define
Serendipity

• Characteristic to the Semantic Web is **serendipity** in
  • reuse of information
  • integration of information
  • interoperability

• Role of serendipity is critical in “ephemeral” use cases
  • e.g., Semantic Web in pervasive computing

• There is an “identity crisis” we need to address to take us closer to this serendipity…
Identity Crisis?

- TimBL: “[...] everything of importance deserves a URI”
- Nice idea, but current reality is unfortunately different
  - many things do not have URIs
  - it is unclear how to choose URIs (w/ obvious consequences)
- Can we add something to RDF to help?
  - using something like owl:sameAs allows you to give “hints” to system (reasoner) on how to unify data
  - inverse functional properties (i.e., primary keys) allow automatic integration
  - use a reasoner to do this
- (I call this “RDF++”)