Slide 1

GACS: Model and Namespace

MTSR 2016, Göttingen
22-24 November 2016

http://agrisemantics.org/gacs/

Slide 2

3. One GACS namespace, or many?

- Option 3a: One GACS namespace
- Option 3b: Many GACS namespaces

2

Slide 3

Background on "namespace"

- Namespace: a base URI used for concept identifiers

  - http://id.agrisemantics.org/gacs/ - namespace
  - http://id.agrisemantics.org/gacs/C16178 - concept *gall bladder*

- Concept scheme: a set to which concepts belong

  - "*gall bladder* is a member of GACS Core"
  - gacs:C16178   skos:inScheme   agri:gacs-core

3

Slide 4

Background: Namespace and Concept Scheme are orthogonal

"*4-H club* in GACS namespace but not GACS Core"
gacs:C21789   skos:inScheme   **agri:gacs-nalt**
- Could use this to "prune" the Core

"*acetone* in CABT namespace and in GACS Core"
cabt:4863   skos:inScheme   agri:gacs-core
- Possible in theory but impractical and rarely done

4

Slide 5

Option 3a: "One GACS namespace"

GACS = set of concepts identified in GACS namespace
- SKOS concept schemes (always?) use just one namespace
- Non-GACS namespaces can fall under Agrisemantics
- Multiple namespaces problems:
  - Developers hate multiple namespaces
  - SPARQL queries must declare extra namespace prefixes
  - Set of prefixes hard to track as GACS evolves
  - Cannot know whether a given URI is "in GACS" without querying
  - Lists extracted from GACS also have multiple namespaces
  - No credible persistence for URIs in namespaces outside GACS control

5

Slide 6

Option 3b: "Many GACS namespaces"

- GACS = concepts from many namespaces
  - URIs are a political issue
  - Organizations wanting to contribute may want to keep their URIs

6