CASE roadmap

Cyber-investigation Analysis Standard Expression

DRAFT - version 2018-04-12

Scope

Describe traces from digital or physical resources to support cyber-investigations

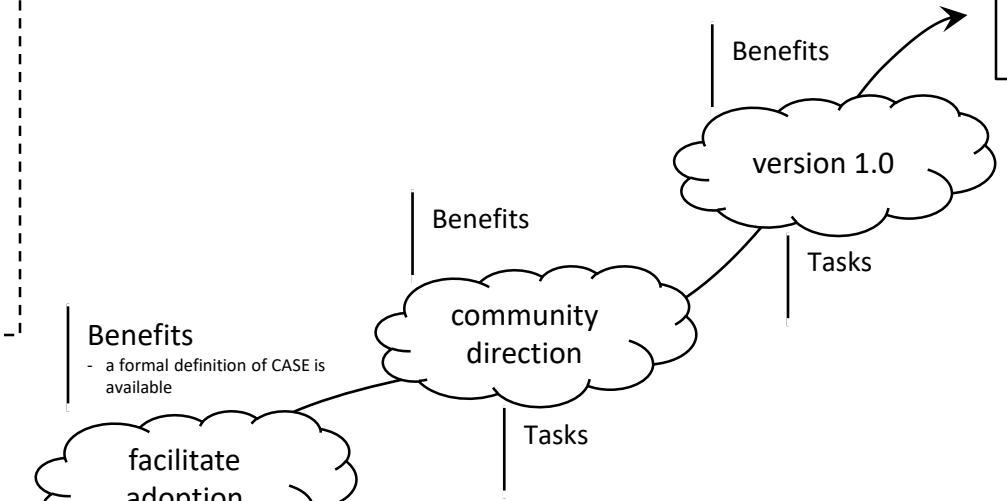
RDF-oriented ontology:
- release versioning
- trace descriptions
  - ontology release version (mandatory)
  - metadata using duck-typing
  - data (included / referenced)
  - provenance (chains of evidence and custody)
  - marking / classification
- relationships between traces
- natural language glossary
- licensing

Tools:
- application programming interfaces
- validators
- translators
- proof of concept implementations
- support tool-specific mappings
- licensing

Goals

All major tools provide a mechanism for importing and exporting CASE expressions.

CASE is actively used to:
- support investigations
- evidence exchange
- validate tools (based on ground truth available as CASE expression)



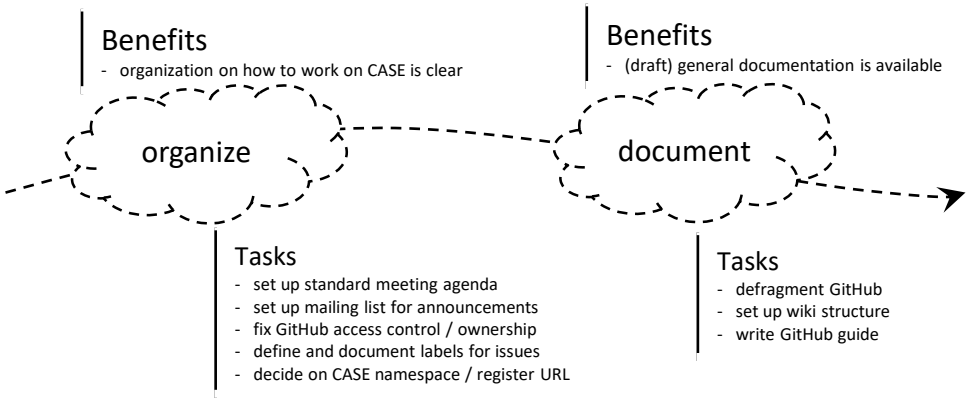
Issues

General:
- no end-users (investigators/prosecutors) involved
- not all major tool providers involved
- licensing not defined
- documentation is not easy to find

Ontology:
- release versioning not defined / available
- no mandatory version in CASE expressions
- no best practices, e.g.
  - referencing / including data
  - unsupported property bundles
- conflicting semantics, e.g.
  - Contact vs. PhoneAccount

Tools:
- no support for Java, C#
- no validator

Organization:
- no (issue-based) agenda for meetings
- no announcement mailing list
- GitHub fragmentation
- GitHub access control / ownership
- no wiki structure
- issue labeling
- CASE namespace not defined (URL)



Organization

Online community

Regular (virtual) community meetings:
- ontology directions
- proposal/change decisions

Mailing list:
- announcements

GitHub:
- issue tracking
  - bugs
  - proposals (voting)
- versioning
  - releases
  - milestones
  - snapshots (work in progress)
- wiki
  - recorded meetings
  - meeting notes
  - implementer guide
  - contributor guide
  - GitHub guide

Website:
- publications
- announcements
- mailing list subscriptions
- RDF releases