

# Accountability Tools

*Oshani Seneviratne*  
*Decentralized Information Group, MIT*

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# Tabulator

# Tabulator

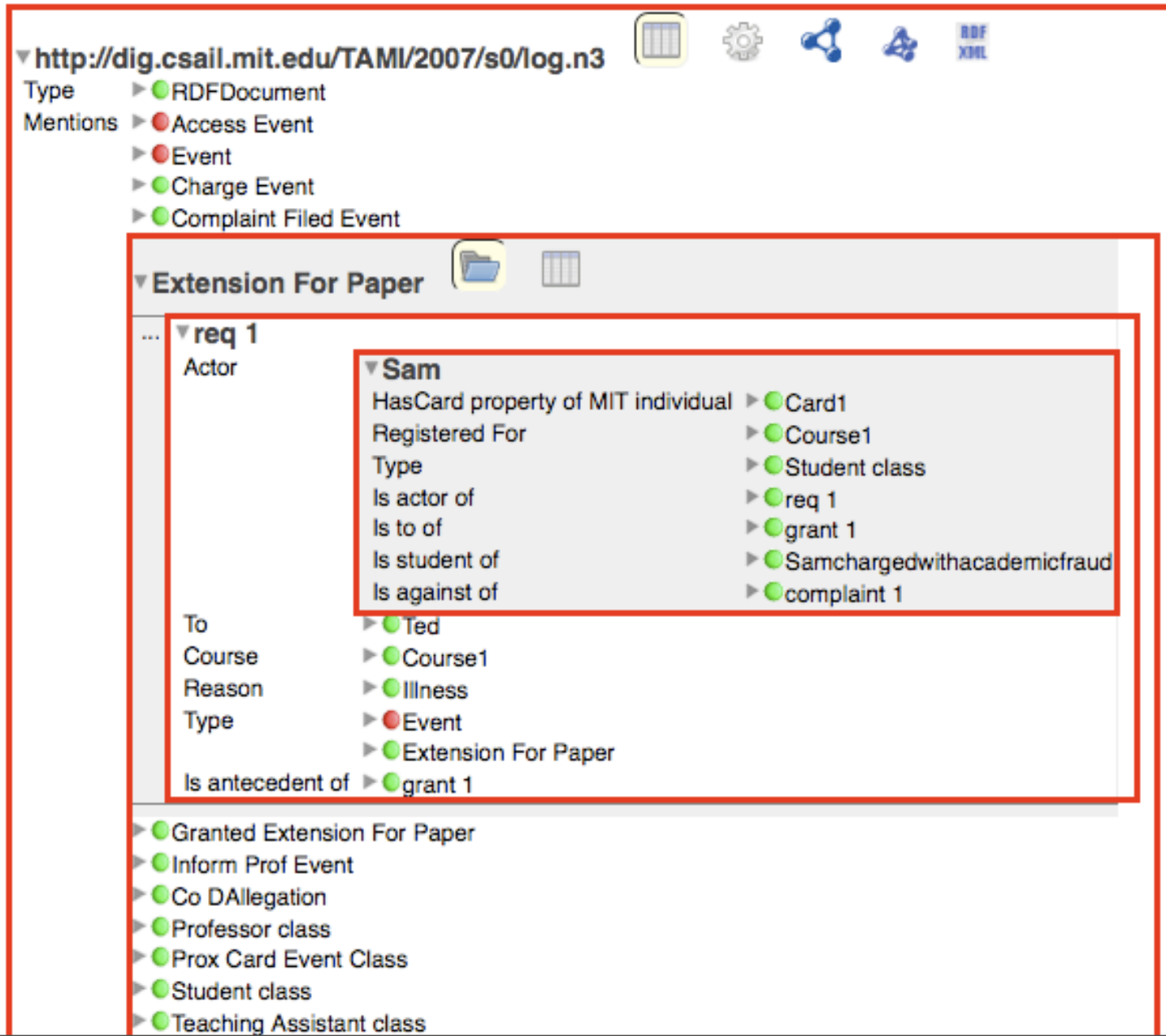
- Available in Firefox Extension and Online flavors
- Avoids RDF jargon in your face
- Looks up data on the web and follows links
- Can do SPARQL Queries
- Can Modify existing data, and also add new data
- Can be customized for application specific tasks

# Can Vary the views of data



1. About the Document
2. Under the Hood
3. Data View
4. RDF/N3 View
5. RDF/XML View
6. Explanations View
7. Lawyer's View
8. Friend-Of-A-Friend View

# Outline Pane



▼ <http://dig.csail.mit.edu/TAMI/2007/s0/log.n3>

- Type ▶ ● RDFDocument
- Mentions ▶ ● Access Event
  - ▶ ● Event
  - ▶ ● Charge Event
  - ▶ ● Complaint Filed Event

▼ Extension For Paper

- ... ▼ req 1
  - Actor
    - ▼ Sam
      - HasCard property of MIT individual ▶ ● Card1
      - Registered For ▶ ● Course1
      - Type ▶ ● Student class
      - Is actor of ▶ ● req 1
      - Is to of ▶ ● grant 1
      - Is student of ▶ ● Samchargedwithacademicfraud
      - Is against of ▶ ● complaint 1
    - To ▶ ● Ted
    - Course ▶ ● Course1
    - Reason ▶ ● Illness
    - Type ▶ ● Event
      - ▶ ● Extension For Paper
    - Is antecedent of ▶ ● grant 1
- ▶ ● Granted Extension For Paper
- ▶ ● Inform Prof Event
- ▶ ● Co DAllegation
- ▶ ● Professor class
- ▶ ● Prox Card Event Class
- ▶ ● Student class
- ▶ ● Teaching Assistant class

# Explanations Pane

▼ [http://mr-burns.w3.org/cgi-bin/server\\_cgi.py?logfile=http://dig.csail.mit.edu/2008/Talks/0922-CSW-os/demo/log.n3&rulesFile=http://dig.csail.mit.edu/2008/T](http://mr-burns.w3.org/cgi-bin/server_cgi.py?logfile=http://dig.csail.mit.edu/2008/Talks/0922-CSW-os/demo/log.n3&rulesFile=http://dig.csail.mit.edu/2008/T)



Complaint On Sam is non compliant with MITProx Card Policy

[More Information](#) [Start Over](#)

Academic Fraud is different from a criminal activity.

Complaint On Sam was for investigating Academic Fraud and used Prox card data 1 in the investigation. Such data usage may only justify an adverse consequence in a criminal investigation.

Premises:

Charge Event	subClassOf	Use Event
Complaint On Sam	charged With	Academic Fraud
	complaint	complaint 1
	type	Charge Event
Prox card data 1	type	Prox Card Event
charged With	subPropertyOf	purpose
complaint	subPropertyOf	data
complaint 1	evidence	Prox card data 1
data	type	TransitiveProperty
evidence	subPropertyOf	data

# Lawyer Pane

▼ <http://mr-burns.w3.org/cgi-bin/server CGI.py?logFile=http://dig.csail.mit.edu/2008/Talks/0922-CSW-os/demo/log.n3&rulesFile=http://dig.csail.mit.edu/2008/Talks/0922-CSW-os/demo/rules.n3>



▼ Issue:

Whether the transactions in [log](#) comply with [MITProx Card Policy](#)

▼ Rule:

Prox card data can only be used for the basis for an adverse consequence in a criminal investigation.

▼ Facts:

- [Complaint On Sam](#) was for investigating [Academic Fraud](#) and used [Prox card data 1](#) in the investigation. Such data usage may only justify an adverse consequence in a criminal investigation.

▼ Analysis:






[Academic Fraud](#) is different from a criminal activity.

▼ Conclusion:

The transaction - [Complaint On Sam](#) is non compliant with [MITProx Card Policy](#)

# Social Pane

Tim Berners-Lee's FOAF file

**Tim Berners-Lee's FOAF file**     

License ▶ <http://creativecommons.org/licenses/by-nc/3.0/>

Title ▶ Tim Berners-Lee's FOAF file

Type ▶ [RDFDocument](#)

▶ [PersonalProfileDocument](#)




Mentions ▶ [Male](#)


▶ [Person](#)

▶ [PersonalProfileDocument](#)

Maker ▶ [Tim Berners-Lee](#)

Primary topic

**Tim Berners-Lee**   



This is you




Knows ▶ [Henry Story](#)

▶ [danbri](#)

▶ [John Gage](#)

▶ [John Seely Brown](#)

▶ [Tim Bray](#)

**Joe Lambda**   

You and Joe know each other.

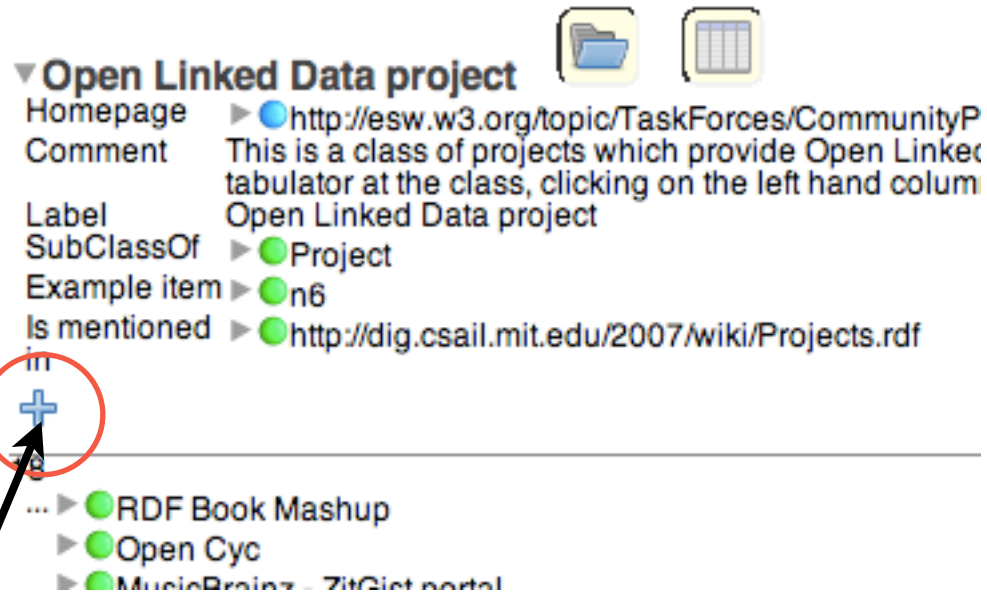
You and Joe know 7 people in common, [Henry Story](#), [Tim Bray](#), <http://dig.csail.mit.edu/People/RRS>, [Aaron Swartz](#), [Ora Lassila](#), [Libby Miller](#), [Daniel J Weitzner](#)



Knows

- ▶ [Henry Story](#)
- ▶ [crschmidt](#)
- ▶ [Tim Bray](#)
- ▶ [Imag](#)
- ▶ [n1](#)
- ▶ <http://dig.csail.mit.edu/People/RRS>
- ▶ [Aaron Swartz](#)
- ▶ [Ora Lassila](#)



# Editing documents in browser



▼ **Open Linked Data project**  

Homepage ▶ <http://esw.w3.org/topic/TaskForces/CommunityP>

Comment This is a class of projects which provide Open Linked Data project tabulator at the class, clicking on the left hand column


Label Open Linked Data project

SubClassOf ▶ [Project](#)

Example item ▶ [n6](#)

Is mentioned ▶ <http://dig.csail.mit.edu/2007/wiki/Projects.rdf>

in



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... ▶ [RDF Book Mashup](#)

▶ [Open Cyc](#)

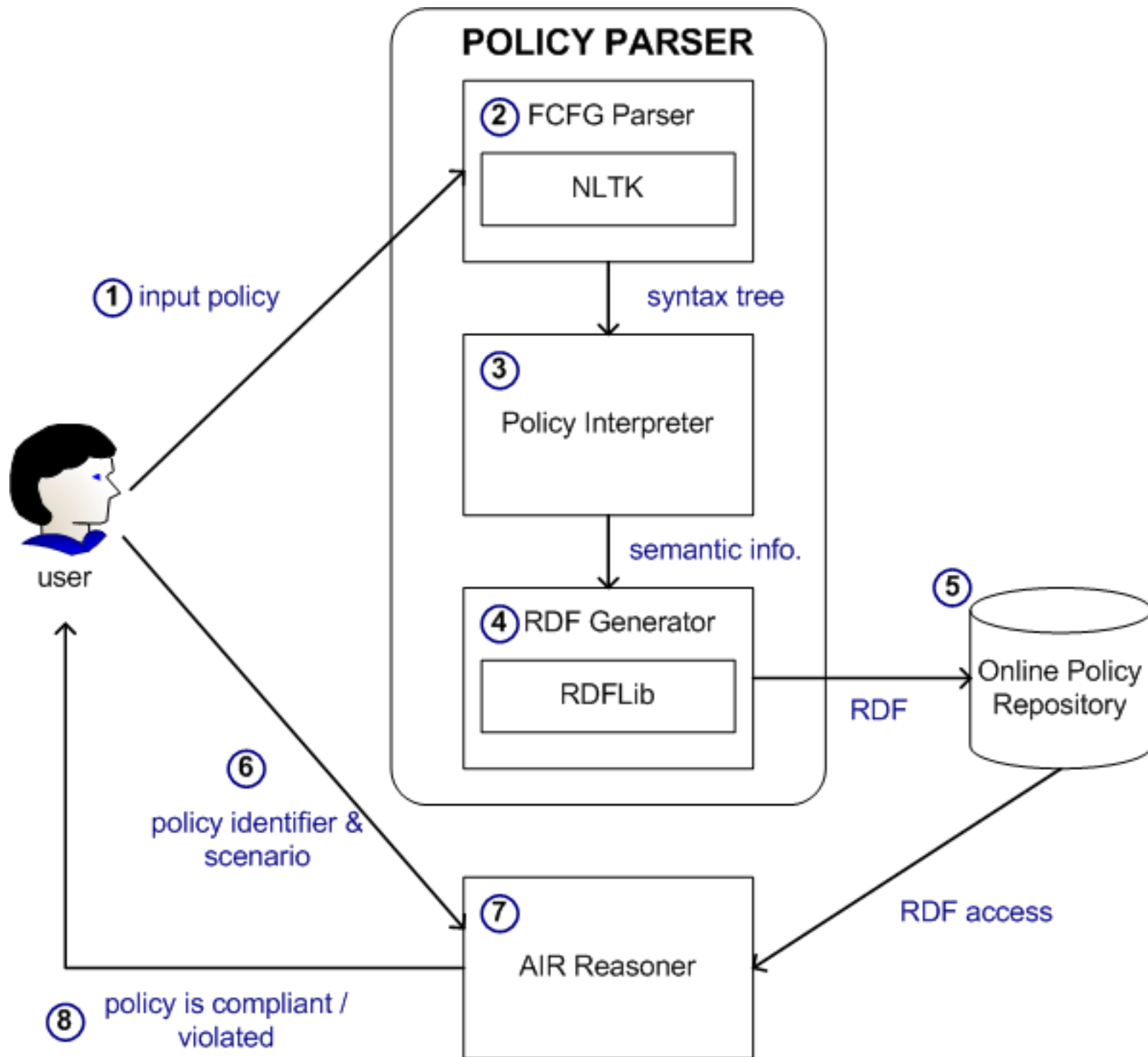
▶ [MusicBrainz - ZitiGist portal](#)

Click this to add new data to this subject

# Policy Parser

# Policy Parser

- Three major components: parser, interpreter and RDF generator
- Has specific formats that it understands



# Structure of the Input

**subject mod action [object] [secondary\_object] [for/to purpose] [if condition (and condition)\*]**

- subject: The main actor or entity who carries out an action
- mod: The modality of the rule (i.e., whether the subject is allowed or disallowed to perform the specified action under the specified constraints, expressed using words such as "can", "cannot" etc.)
- action: The action performed by the subject
- object: The object on which the action is performed (when "action" is a transitive verb)
- secondary object: the secondary object for the action (applicable only if "action" is a ditransitive verb)
- purpose: an (optional) purpose for which the action is performed
- condition: an (optional) condition (or set of conditions) under which the rule is applicable



Policy Parser

Name of the policy:

Domain:  
University (MIT)

Sentence:  
 Select from pre-defined  
 Write your own  
MIT can use prox card data for criminal investigation

Store the generated policy here:

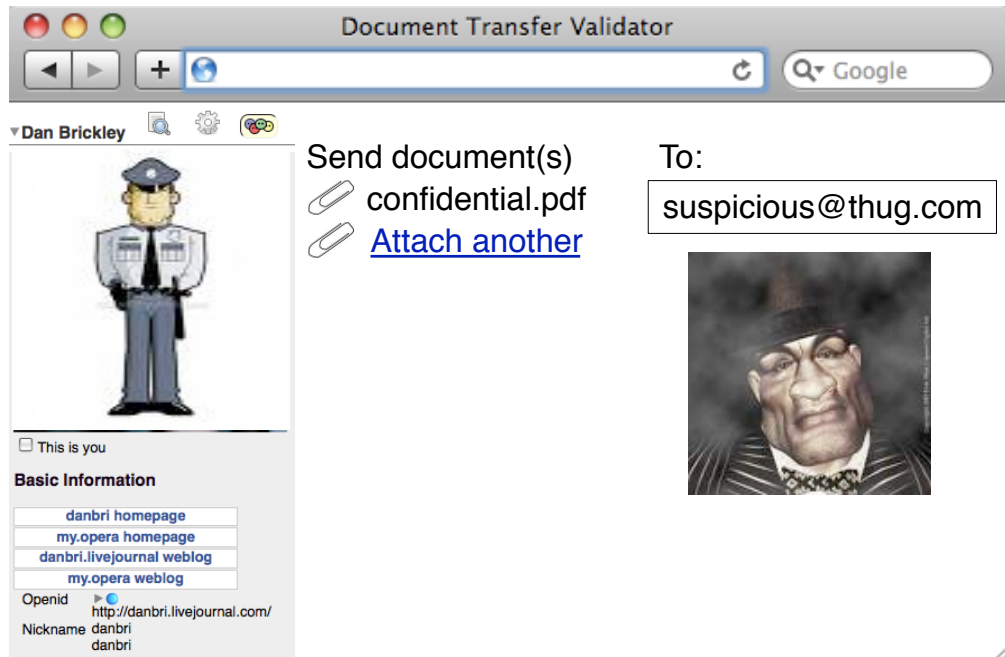
Demo with the AIR reasoner:  
Select the log file:  
University (MIT) log



# What's Next?

# Is this document transfer policy compliant?

UI



1. Extract document metadata
2. Identify the recipient
3. Grab information about the recipient from relevant sources

Policy

- Allow transfer of PII to DHS Center X
- Recipient must be a US person

AIR Reasoner

Facts / Log







# Questions?

[oshani@csail.mit.edu](mailto:oshani@csail.mit.edu)