

# **Accountable Information Usage in Fusion Center Information Sharing Environments**

Status Report  
May 18, 2009



# Project Tasks

- Six transactions
  - Identify three privacy-related transactions
    - Plus one variation to each
  - Produce XML schema & OWL ontology
  - Create representation of the transactions
- Applicable rules
  - Convert to engineer-accessible intermediate form
  - Produce in AIR
- User Interface
  - Ask for advice before taking action
  - Receive compliance information
  - Record advice received
- Evaluation

# Identify Transactions

- Change of focus from audit to action
  - Possible Challenges:
    - “Can I share this private information?”
    - “Can I share this private information with that person (or organization)?”
    - “If I share this private information with that person, what will their rules allow them to do with it?”
    - “If I combine this information with that information, does it expose something private that must be protected?”
    - “If I can’t share it with that person, can you tell me who I can share it with?”
    - “If I can’t share it with that person, can you tell me what to change or delete so I can?”
  - Fusion Center to provide input

Program Element / Project	Major Tasks	Key Milestones and Deliverables (end of....)
<b>1.Scenario Creation</b> The goal of this element is to establish the details of the research project by meeting putative users of the work.	<ul style="list-style-type: none"> <li>• 0-1 month – Arrange and meet Fusion Center workers; obtain rules, document(s)/data, and worker attributes to model</li> <li>• 0-1 month – Create the scenario to be used</li> </ul>	<ul style="list-style-type: none"> <li>• 1 month – Written description of the scenario</li> </ul>
<b>1.Policy Representation</b> The goal of this element is to convert complex policies from plain text to program code amenable to reasoning.	<ul style="list-style-type: none"> <li>• 0-3 months – Parse policies into intermediate (engineer-accessible form)</li> <li>• 1-4 months – Code policies in AIR</li> </ul>	<ul style="list-style-type: none"> <li>• 3 months – Brief report of any gaps in the policies discovered through parsing</li> <li>• 4 months – Policies in AIR</li> <li>• 5 months – Brief report of difficulties encountered in expressing policies in AIR</li> </ul>
<b>1.Transaction Accountability</b> The goals of this element are to produce three coded representations of synthetic transactions, reason over them, display the results, and then show how the results change with one change to each transaction.	<ul style="list-style-type: none"> <li>• 2-4 months – Create ontology and taxonomies needed to describe the transactions in the scenario</li> <li>• 3-6 months – Code XML schema representing the transactions</li> <li>• 2-6 months – Create simple User Interface</li> </ul>	<ul style="list-style-type: none"> <li>• 4 months – Ontology and taxonomies</li> <li>• 6 months – XML schema</li> <li>• 6 months - User Interface</li> <li>• 6 months – Demonstrate &amp; present reasoning over each transaction</li> <li>• 6 months – Brief report of any unanticipated challenges or discoveries in this phase</li> </ul>
<b>1.Feedback</b> The goals of this element are to learn how well the reasoning matches user expectations and to obtain general feedback and suggestions.	<ul style="list-style-type: none"> <li>• 6-7 months – Arrange and demonstrate for no more than 10 relevant ISE reviewers</li> </ul>	<ul style="list-style-type: none"> <li>• 7 months – Report &amp; present reviewer feedback</li> </ul>