Key SEAS Benefits

**Faster**
- Understanding lines-of-reasoning
  - by decision makers
  - by analysts
- Creating new intelligence products
  - individually (experimentally verified)
  - in collaboration (division of labor)
- Learning of analytic methods by novices
- Finding relevant products (arguments) and methods (templates) used in the past
- Understanding the relationship of the new product to the old products

**Better**
- Promotes use of best practice (templates) and superior results (arguments)
- Encourages
  - Critical review by others
  - Leveraging other analysts’ products (arguments) as supporting evidence
  - Co-authoring (each doing what they do best)
- Results are more easily and completely assimilated by decision makers
  - at the level of detail desired

**Cheaper**
- Captures corporate knowledge and facilitates reuse; no need to reinvent
- Asynchronous remote collaboration (fewer meetings)
- Provided as service across current browser clients with no systems integration costs
- Better prioritization of risk leads to better utilization of resources

Applications of SEAS

SEAS templates have been developed for the following applications pertaining to national defense:

- Nation-State Stability Assessment
- Asymmetric Threat Assessment
- Assessment of Terrorist Motives
- Mission Information Preparation
- Counter Intelligence Assessment
- Network System Analysis
- others

And for the following applications in the commercial sector:

- Project Management
- Sales Pipeline Tracking
- Balanced Scorecard
- Competitor Intelligence
- Scenario Tracking
- Fraud Detection
- Legal Case Management
- HR Grade Assessment
- Applicant Evaluation
- Bidder Selection

SEAS is a software tool for analysts
That records analytic reasoning and methods
That supports collaborative analysis
Across contemporary and historical situations & analysts

Dr. John D. Lowrance
SRI International
333 Ravenswood Avenue
Menlo Park, CA 94025
(650) 859-5298
Fax: (650) 859-3735
Email: lowrance@ai.sri.com
URL: http://www.ai.sri.com/~seas/
Structured Argumentation

- Structured arguments & templates record analytic products and methods
- Templates structure and guide analytic thinking, encouraging higher fidelity reasoning
- Cascaded templates support deeper reasoning where the analyst determines it is desirable
- Structured arguments are easily communicated, explained, and compared
- Structured arguments record lines of reasoning allowing users to drill down to supporting evidence, its relevance, the answers it induces, and the rationale for those answers
- Graphical depictions of structured arguments speed comprehension and comparison

Corporate Memory

- A knowledge base of analytic products (arguments) & analytic methods (templates), indexed by the situations to which they apply
- Arguments are the opinions that drove decisions; Templates capture best practice
- Expanded by analysts as a by-product during productive use of the tool rather than being required before the tool becomes useful
- Queries against corporate memory retrieve arguments/templates that were applied to similar situations
- Summaries of retrieved arguments/templates allow one to quickly understand the thinking of the past and how it might apply to the present
- Guaranteed access, privacy, persistence, and information assurance

Collective Reasoning

- Web server architecture
  - Simultaneous access
  - Across all browser clients
  - Little or no systems integration
- Published arguments/templates are guaranteed to be both stable and persistent
  - The audience has simultaneous read access
  - The co-authors have simultaneous write access, while unpublished, & read access thereafter
- Memos attached to arguments/templates provide a means for users to communicate asynchronously
  - critiques, instructions, to-do, ...