Fused Analytic Desktop Environment (FADE)

**Battelle Number(s):** 15975, 15388, 14671, 13557, 13938

**Patent(s) Issued**

Available for licensing in all fields

**SUMMARY**

The Fused Analytic Desktop Environment (FADE) provides analysts in information-driven fields with a range of information analysis technologies, capable of handling ad hoc data sources, integrated into a single, easy-to-use system. Integrated into FADE is a robust collection of analytical capabilities that support data ingest regardless of format, then triage available data and documents to identify those most relevant to an analytical task. Once individual documents have been identified as task-relevant, FADE enables analysts to analyze document collections and extract, identify, visualize, and analyze the underlying entities and relationships of interest.

FADE’s components include the following, which can be employed individually or together as an integrated suite:

- **Collaborative Analytical Toolbox (CAT):** provides an information management and integration platform that serves as the integration architecture and data management hub of FADE.

- **Universal Parsing Agent (UPA):** accepts datasets from multiple sources, rapidly extracts and transforms raw data into useful information in a format compatible with other analytical tools.

- **IN-SPIRE:** visually identifies and enables exploration of thematic content in large collections of documents (up to 100,000 documents).

- **Analyst-driven Knowledge Enhancement and Analysis (AKEA):** extracts key entities (persons, places, objects, etc) and relationships from text documents and structured data sources, then assists an analyst in constructing link analysis graphs from the extracted information to support analysis of links among these entities.

- **Concept-Based Clustering (CBC):** Automatically organizes new documents according to a user-specified organization scheme.

- **Frame of Reference Visualization (FoRViz):** visually represents documents categorized by CBC, enabling the user to graphically explore categorization results and determine the degree to which categorized documents match the user's mental model of the analysis domain.
ADVANTAGES

- A single interface enables integrated tools to access a common repository of user-organized data and process or display it to support different analytical purposes.
- Results obtained in one analytical tool can be expanded by making productive use of the results in another tool within the suite. This significantly expands the realm of analytical possibilities discoverable by users.
- Allows collaboration among individuals and teams through access to group or task-relevant data and analytical results.

STATE OF DEVELOPMENT & AVAILABILITY

- FADE could be used for virtually any form of information analysis, including in:
  - Homeland security
  - Intelligence / Counterterrorism
  - Nuclear non-proliferation
  - Law enforcement/first response
  - Business/competitive intelligence
  - Technology scanning
  - Policy & research support
  - Customer relationship management
  - Economics
  - Bio-informatics
  - Scholarly research in any domain

PATENTS & INTELLECTUAL PROPERTY

- 7,917,548

TECHNOLOGY PORTFOLIO(S)

- IT
POTENTIAL INDUSTRY APPLICATION(S)

- Aerospace & Defense
- Agriculture & Mining
- Automotive & Transportation
- Chemicals
- Communications & Media
- Computers & Electronics
- Consumer Products
- Education
- Energy & Utilities
- Entertainment & Recreation
- Fabric & Apparel
- Food, Beverage & Tobacco
- Healthcare, Pharma, Biotech & Medical
- Manufacturing & Warehousing
- Oil & Gas
- Professional Services
- Public Administration & Government
- Recycling & Waste Management
- Security

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