System Summary and Timing
Organization Name: University of Minnesota
List of Run ID's: TeknosN05, TeknosN10, TeknosN15, TeknosN20,
TeknosN30, TeknosRel, TeknosW05, TeknosW10,
TeknosW15, TeknosW20, TeknosW30

- Construction of Indices, Knowledge Bases, and other Data Structures
  - Methods Used to build Data Structures
    - Length (in words) of the stopword list: 213
    - Stemming Algorithm:
      - Morphological Analysis: Personal Librarian default
    - Term Weighting: Personal Librarian default
  - Statistics on Data Structures built from TREC Text
    - Inverted index
      - Run ID : All Teknos runs. Load information for Wall Street Journal Disk 2. This is NOT the data set load used to produce the TREC results but is the only data set load that we were able to measure.
      - Total Storage (in MB): 328,904,027 bytes: 222,485,339 data, 106,418,688 for index
      - Total Computer Time to Build (in hours): 10 hours 16 minutes for Personal Librarian indexing.
      - Automatic Process? (If not, number of manual hours): Yes
    - Knowledge Bases
      - Run ID : All Teknos runs
      - Total Storage (in MB): 1.31 MB
      - Automatic Process? (If not, number of manual hours): Manual. Did not measure time. Estimated 40 hours.
      - Use of Manual Labor
        I. Mostly Manually Built using Special Interface: yes
      - Number of Concepts Represented: 10 pertaining to this experiment
      - Type of Representation: semantic network
  - Data Built from Sources Other than the Input Text
- Query construction
  - Manually Constructed Queries (Ad-Hoc)
    - Topic Fields Used: Description, narrative
    - Method used in Query Construction
      - Proximity Operators? : yes
      - Addition of Terms not Included in Topic? :
        I. Source of Terms: test data set (WSJ Disk 1)
  - Manually Constructed Queries (Routing)
    - Average Time to Build Query (in Minutes): 8 hours (very rough estimate)
    - Data Used for Building Query from
      - All Training Documents: yes

        * Method used in Query Construction
            · Boolean Connectors (AND, OR, NOT)? : yes
            · Proximity Operators? : yes
            · Addition of Terms not Included in Topic? :
              I. Source of Terms: training documents

- Searching
    - Search Times
        * Run ID : TeknosRel
        * Computer Time to Search (Average per Query, in CPU seconds): 30
    - Machine Information
        * Machine Type for TREC Experiment: Gateway 2000 66 MHz 486DX2 running Windows 3.11
        * Was the Machine Dedicated or Shared: Dedicated
        * Amount of Hard Disk Storage (in MB): 2 drives: 424 MB, 540 MB (real) compressed using Stacker 4.0
        * Amount of RAM (in MB): 12 MB
        * Clock Rate of CPU (in MHz): 66 MHz
    - System Comparisons
        * Amount of "Software Engineering" which went into the Development of the System: Indexing system is commercial. System to maintain knowledge base and expand conceptual graphs to boolean search expressions: 200+ hrs. (it evolved from a different project - this is the time I estimate it would have taken to develop from scratch).
        * Given appropriate resources
            · Could your system run faster? : yes
            · By how much (estimate)? : unknown