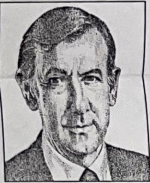


APPLIED INTELLIGENCE

Software Tools Copy Manual Process of Creating Text



**JAMES
MARTIN**

This is the third article in a series on text management and its influence in the corporate environment.

The success of any organization depends on effective communication. Most communication depends on the written

word, and it is the content rather than the format of these text items that conveys their primary value. To fully profit from the ever-expanding corporate paper trail, organizations must begin to address the management of textual information and provide content-based access to data.

To facilitate this new focus, software tools that mimic the manual process of creating text are making their debut, helping writers shape a document's meaning and content. Among the new products in this class are outlining tools, document-assembly tools, information managers and several groupware offerings, including Lotus Notes and Symbolics' Concordia.

To assist writers in developing and fine-tuning the structure of a document, outlining software programs work to emulate the classical manual approach from which they were derived. The programs understand the structure of an outline—for example, a Roman numeral heading (I, II and so on) that has alphabetized subheadings (A, B, C), which in turn can contain numeric subheadings (1, 2, 3).

As headings are moved, the software automatically renumbers the structure. Some products can even associate

short textual notes with each heading or subheading, which are also moved in tandem with the heading or subheading. An outline can be reviewed in either collapsed form (just the skeleton) or expanded form to include associated notes.

Document-assembly products, another category of text-management tools, help

nate these deficiencies by creating scripts that describe how segments are to be combined. When a segment is changed, the scripts can help determine which documents are affected, thus creating an electronic trail.

This process can be useful in many business applications. Lawyers, for in-

employees. Information-management products are a third class of tools that can be applied to track and retrieve textual information.

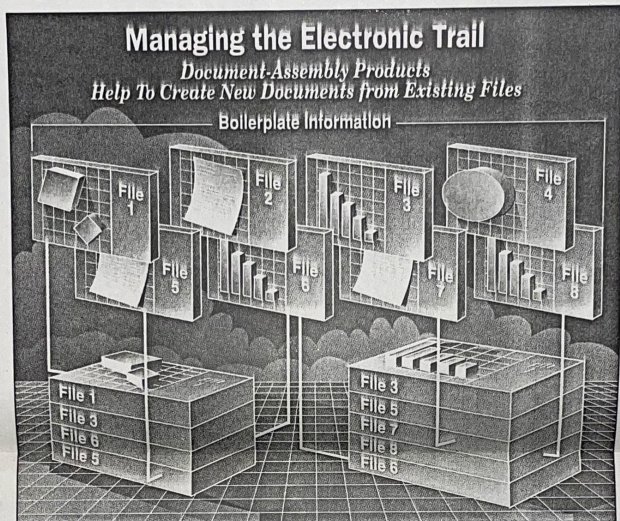
Personal information managers (PIMs) provide facilities for capturing, modifying, retrieving, recombining and reproducing unstructured information. PIMs are designed to let users work with random, free-form short pieces of text and to establish relationships among these pieces of text. The result is a structure similar to an outline, but unlike outlining products, PIMs assign items to the categories in the outline.

PIMs are personal tools; they are not designed to support "shared understanding" in work-group environments. Individuals create structures that are meaningful personally, but not necessarily to others in the group.

A new class of information managers known as groupware promotes efficient collaborations among work groups.

Groupware applications range from ventures such as engineering projects to the preparation of documents for publication. Each member of the group reviews sections (and possibly drawings) of the final document; group members' comments are incorporated into the final document and can be traced.

Next week, I will discuss how printed material can be converted to machine-readable and searchable formats. ■



John Arakian

to create new documents from existing boilerplates. While word processors combine many segments of text into one document, it is difficult to trace which segments went into which documents. In addition, word processors also create a new file for the document, resulting in higher storage requirements.

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nate these deficiencies by creating scripts that describe how segments are to be combined. When a segment is changed, the scripts can help determine which documents are affected, thus creating an electronic trail.

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First Look \ Dataflex Upgraded

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around, version 3.0's performance was faster than version 2.3b's.

The OOP user interface is implemented as an include file, so there is no additional memory overhead if a developer chooses to use the Dataflex 2.3b procedural-style user interface.

Dataflex 3.0 retains version 2.3b's data-field-locking capability for multiuser applications. The index structure has been bolstered to 16 on-line indexes by 16 data elements per index, up from version 2.3b's 10-by-10 maximum. Indexes can now be defined as ascending or descending, as well as case-sensitive or case-insensitive.

As a welcome relief, Dataflex 3.0's data structure is record-length dynamic, as opposed to version 2.3b's fixed-length structure. Memo fields have also been added to support the editor object.

As a 4GL, Dataflex 3.0 handles most of the user interface with 4GL macros, such as the Enter or Entergroup commands.

The Enter command, for example, can handle all appends, deletes, queries, searches and edits to a database, as well as scrolling through records.

Overall, the programming language has been cleaned up considerably over version 2.3b and expanded to support a new command set that most programmers will consider a major improvement.

Experienced Dataflex programmers are free to work within the macros that define the language. The source code for the 4GL macros is available in a disk file for study and editing by those who feel brave. Likewise, the new OOP source code is available in the include file.

Several new commands have solved some problems with the 2.3b implementation; the most notable are true logical functions (and, or, not), case statements and arrays. ■

Paul Nielsen is an information-services manager at a textile firm in North Carolina.

CASE \ Data Modeling Completes 4.0

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grams, and Bachman Entity Relationship diagrams.

Without this data-modeling horsepower, the current version of Visible Analyst Workbench lacks a key feature of its higher-priced competitors, according to CASE analysts.

Corporations that have passed over Visible Analyst Workbench for other tools, such as Index Technology Corp.'s Excelerator, will now have a reason to consider the product, said David Sharon, president of CASE Associates Inc., an Oregon City, Ore., research and consulting firm that specializes in CASE.

"In the past, [users of Visible's tools] had to go out and buy someone else's data-modeling tool to round out their tool set," Sharon said. "With data modeling added to the [existing] process-modeling and design components, they have a complete analysis and design solution."

With Visible Analyst Workbench 4.0, us-

ers will be able to create data models at either the project level or the corporate-wide level. Version 4.0 maintains data integrity among multiple projects spread across an organization, company officials said.

Another key feature of the new version is its ability to automatically diagram and print large projects, according to John Nash, sales manager for the Waltham, Mass., company.

"If you've chosen so many entities that it can't print on a page, it will organize it for you in logical pieces and give you a map of how to put the pieces together when it prints out," Nash said.

Visible Systems is in the middle of changing its price structure and has not yet settled on a price for the upgrade.

The current release of Visible Analyst Workbench costs \$1,785 for a single-user version and \$4,950 for a three-node network version.

Visible Systems Corp. can be reached at (617) 890-2273. ■

The concepts in this article are described in a new volume, Text Management, of The James Martin Report Series. For more information on this volume, call (800) 242-1240 or (617) 639-1958. For information on seminars, contact Technology Transfer Institute, 741 10th St., Santa Monica, Calif. 90402 (213) 394-8305 (in the United States and Canada). In Europe, contact Savant, 2 New St., Carnforth, Lancs., LA5 9BX United Kingdom (0524) 734 505.