-COMPUTER SOFTWARE REVIEWS

Ami Pro for Windows 2.0, a Powerful Word Processor for Scientists

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I tested release 2.0 of Ami-Pro for Windows on my 386-33MHz system with 4 MB RAM, 64K cache, SVGA with 1 MB RAM, 2 FD drivers, 105 MB HD driver, a 24 pin dot matrix printer, and an HP laser printer.

Ami-Pro requires a 286 or higher computer, a Hercules, EGA, VGA graphics card (or better), and either a 1.2 MB 5.25-in. disk driver or a 1.44 MB or 720 KB 3.5-in. disk driver. A Microsoft Windows-compatible mouse is recommended but not required. Ami-Pro requires a minimum of 1 MB of RAM to run in Windows Standard mode or a minimum of 2 MB of RAM to run in Windows Enhanced mode. Depending upon the options you choose to install, you need up to 10 MB of available hard-disk space. You will need a minimum of 6 MB space to install program files, and also need at least an additional 3 MB for the temporary files Ami-Pro creates. You can run Ami-Pro in either Windows or HP NewWave. You can also install and run Ami-Pro on a Local Area Network (LAN). Ami-Pro may only be installed on networks that are compatible with MS Windows 3.x. The Ami-Pro 2.0 for Windows package comes with four program disks and one Adobe Type Manager (ATM) disk, one set on 5.25-in. disks and one set on 3.5-in. disks. So you can install Ami-Pro to hard disk from either the 5.25-in. disk drive or the 3.5-in. disk drive.

When you first start Ami-Pro, you will immediately notice its "SmartIcons" which give the word processor a very fashionable look. SmartIcons are mouse shortcuts for Ami-Pro functions, commands, and macros and are displayed on a palette on the screen. You can specify where the icons should be displayed and which icons should appear in the palette. You can put the SmartIcons palette on the left, right, top, or bottom of the screen, or let them "float" on the screen. When you choose the floating mode, Ami-Pro allows you to position the palette anywhere on the screen and adjust its size. You can customize SmartIcons by adding new icons and by assigning a macro to a custom icon. You can create a custom icon using the Ami-Pro Drawing function or any Windows application that can save a picture to a Windows Bitmap file. You can create a macro incorporating Ami-Pro functions or commands and assign it to a custom icon and you can then put this custom icon into SmartIcons palette as a mouse shortcut. During lengthy and tedious typing tasks, changing the shape and place of SmartIcons is a diversion and can shorten your mouse-moving distance.

Ami-Pro provides abundant but easy-to-use text editing abilities that allow you to create professional documents. You can change font, font size, alignment, and line spacing easily, and just as easily add special typeface characteristics such as bold, italic, superscript, subscript, underline, double underline, strikethrough, or overstrike. You can use Ami-Pro's "Modify Style" dialog box to specify the font, alignment, tabs, indents, spacing, breaks, special effects, lines, table format, and hyphenation for a paragraph style. You can change the

appearance of the page by adjusting margins and columns, page size, and adding lines around the page or between columns. Headers and footers can be controlled with the "Modify Page Layout" dialog box. Ami-Pro also allows you to view a document in five ways: Full Page, Working (91% of Standard View, easy for editing), Standard (same size as other MS Windows applications), Enlarged (200% of Standard View), and Facing Pages (displays two pages side by side). Ami-Pro provides three display modes: Layout mode, Outline mode, and Draft mode. The Layout mode provides a WYSIWYG view of a document. The Outline mode provides a collapsible and expandable view of a document and allows you to view and organize the contents of a document. Ami-Pro displays nine outline levels, which are based upon paragraph styles. Each paragraph style has a level assigned to it. You can display all the text in a file, or just those parts of the text which use the paragraph styles specified. Using Outline mode, you can quickly rearrange large sections of text and create a new hierarchy for the information in the document. Draft mode provides a less formatted view of a document than Layout mode. The text is displayed with enhancements and attributes, but without page breaks, headers, footers, or footnotes. This mode allow you to view the entire text of a file very quickly.

Ami-Pro provides two dictionaries for support of spell checking. The main dictionary contains 130 000 words and cannot be edited. The other is a user dictionary that you can customize, edit, and update to meet your needs. Ami-Pro is shipped with the primary language used in your country. However, the following language dictionaries are available from Lotus: American English, French, German, Dutch, Spanish, Italian, U.K. English, Swedish, and Danish.

Ami-Pro provides several reference tools. You can insert footnotes and glossary records into a document quickly and easily. You can use the 1 400 000-word thesaurus to find definitions, variations, and synonyms for 40 000 root words, and to replace text in the document with an alternative word. Ami-Pro can automatically create a table of contents (TOC) with up to three levels of indentation. The table of contents can be placed at the beginning of the current document or into a separate specified document. Ami-Pro allows you to create an index in two ways: you can create the index entries and index references by selecting and marking text in the document you want to index, or you can create a list of index entries in one document, insert the list into the documents you want to index, and use the index entries to create the index reference.

Ami-Pro provides import filters for a variety of text file formats. You can convert or insert any of the following text file formats: Advance Write; Ami-Pro; Ami-Pro Macro; ASCII; dBase III, III+, and IV; DCA/FFT (Final Form Text); DCA/RFT (Revisable Form Text); DIF; DisplayWrite 4 and 5; E-Mail; Enable version 1.5-2.5 (in Lotus 1-2-3 format), Excel version 3.0 and prior versions; Executive MemoMaker;

Lotus 1-2-3 release 3.0 and 3.1 (.WK3); Lotus Manuscript release 2.0 and 2.1; Lotus Symphony release 1.0, 1.01, and 1.1 (.WRK and .WK1); Microsoft Word version 4.0, 5.0, and 5.5; MultiMate version 3.3 and MultiMate Advantage II; Navy DIF; Paradox version up to 3.5 (.DB); PeachText version 2.11 and prior versions; Rich Text Format; Samna Word; SmartWare version 1; SuperCalc version 3 and 4; Windows Write; Word for Windows; WordPerfect versions 4.1, 4.2, 5.0, and 5.1; WordStar versions 3.3, 3.4, 4.1, and 5.0; and WordStar 2000 versions 1.0 and 3.0. You can convert a text file stored in any of the above formats to an untitled Ami-Pro document and then save it as an Ami-Pro document. Ami-Pro also provides export filters which allow you convert an Ami-Pro document to all the above formats except dBase, DIF, Excel, Lotus 1-2-3, Lotus Manuscript, Lotus Symphony, Paradox, SmartWare, and SuperCalc format. One unsatisfactory point is that when you export Ami-Pro document to another format, nontextual material such as graphics or equations is lost. Such nontextual material has to be saved as a graphics file in order to transfer it to another word processor.

In Ami-Pro, you can create a frame within which you can enhance your text or insert a graphic. Ami-Pro can directly import the following types of graphic files: AmiDraw (.SDW); AmiEquation (.TEX); Computer Graphic Metafiles (.CGM); DrawPerfect (.WPG); Encapsulated PostScript (.EPS); Freelance (.DRW); Hewlett-Packard Graphics Language (.HPGL); Lotus 1-2-3 Graphics (.PIC); PC Paintbrush (.PCX); Scanners (.TIF); Windows Bitmap (.BMP); and Windows Metafiles (.WMF).

Ami-Pro has a Macro Language composed of BASIC-like commands which allow you to create macros that automate a particular task or group of tasks. You can learn these commands from Ami-Pro's online "Macro Doc" from the Help menu. You can create a macro by either having Ami-Pro record the actions necessary to perform a task or by typing the commands into an Ami-Pro document. This powerful function will save you a lot of time with routine work.

Ami-Pro provides another powerful tool called "Power Field" which can be used to automate production. Each power field contains instructions for completing a desired action. These instructions can be simple or complex. For example, a power field can determine the location of a referenced area in your document, such as a frame, chart, or text, and insert the current page number for that area into the document (for instance, See Figure 5 on page 56). Ami-Pro provides 39 predefined power fields.

If you use either cc: Mail for Windows release 1.2 or higher or Lotus Notes release 2.1 or higher, you can send and receive E-mail message within Ami-Pro. Ami-Pro also allows you to establish Dynamic Data Exchange (DDE) and Object Linking & Embedding (OLE) links between Ami-Pro documents and other Windows applications. When you create a DDE or OLE link to an Ami-Pro document, a change in the data is automatically reflected in the linked Windows application, e.g., Lotus 1-2-3, Charisma, or Excel.

Ami-Pro 2.0 incorporates an Equations editor which allows you to create and edit scientific and mathematical formulas like the following equation, which was printed on a 24 pin dot matrix printer and reproduced here:

$$\lim_{n\to\infty} \left| \frac{a_{n+1}}{a_n} \right| = \left| \left\{ \frac{b^2 - \sqrt[3]{\frac{A_a c^3}{\sqrt{X+Y}}}}{\int_b^a \int_d^c x_i^2 dx dy} \right\} \right|$$

When you choose "Equations" from the Tools menu, Ami-Pro automatically changes to Equation mode and displays 43 equation icons in two rows across the top of the screen: template, operator, toggle, dialog box, character and symbol, and pulldown box. From eight dialog box icons, Ami-Pro provide 18 operator symbols, 23 pairs of customized brackets, and 30 functions. When you click on the equation pulldown box icons, Ami-Pro displays a pulldown box with additional mathematical characters and symbol icons, including 27 lowercase and 11 uppercase letters of the Greek alphabet, 14 binary operators, 15 binary symbols, 10 single and bidirectional arrows, 18 miscellaneous symbols, and 6 left and right delimiters. After you create your equation, formatting, modifying, moving, copying, or saving it as a TeX file is simple. You can import an entire equation or part of an equation from a TeX file. This allows you to insert equations you created in Ami-Pro or in another application into an existing equation or a new equation frame.

If you have a mouse, you can use the Ami-Pro Drawing function to create and edit an object-based picture to enhancing your document. When you use the Drawing function, Ami-Pro automatically changes to Draw mode and displays 11 draw object icons and 13 command icons across the top of the screen. Ami-Pro provides line, polyline, polygon, square, rounded square, circle, and arc icons to allow easy drawing of straight lines, connecting lines, polygons, squares, or rectangles, with or without rounded corners, ellipses, or parabolic arcs. Once you are in Draw mode, you can use the Select All, Group/Ungroup, Bring to Front, Send to Back, Rotate, Flip Horizontally, Flip Vertically, Show/Hide Grid, Snap To, Extract Line & Fill, Apply Line & Fill, Line Style, and Fill Pattern command icons to modify and manipulate the objects in a drawing. In Draw mode, you can import an AmiDraw file, a Windows Bitmap file, or a Windows Metafile. You can save a drawing or an object in a drawing as an Ami Draw file, a Windows Metafile, or a Windows Bitmap file. Ami-Pro can import into a frame, Windows Bitmap files, and the following types of vector graphics: Ami Draw(.SDW, Ami-Pro 2.0 package contains 100 .SDW files), Computer Graphic Metafiles(.CGM), Draw Perfect(.WPG), Encapsulated PostScript(.EPS), Freelance(.DRW), HPGL, Lotus 1-2-3 Graphics (.PIC), and Windows Metafiles (.WMF). You can modify these files by Graphics Scaling or rotation within the frame. Ami-Pro also allows you input TIFF (Tagged Image File Format) files and provides an Image Processing function. When you import any 4-, 6-, or 8-bit TIFF file, Ami-Pro automatically adjusts the brightness, contrast, edge enhancement, and smoothing to produce the best image. You can use Image Processing to refine those options and to invert the image.

Ami-Pro also allows you to use a Charting function to create a variety of charts. Ami-Pro creates the chart using data you provide. You can specify the type of chart you want; column, stacked column, bar, stacked bar, line, area, line and picture, pie, expanded pie, picture, and stacked picture charts. You can create data for a chart in two very easy ways: cut or copy data from an Ami-Pro document or table or from another application to the Windows Clipboard, or type the data directly into the Charting Data dialog box. After you have entered data, you can preview the 12 types of chart from a charting dialog box, either in two or three dimensions. Creation of a chart is so easy that it requires only a few minutes.

Ami-Pro supports most commonly-used dot matrix printers and laser printers. Ami-Pro allow you to print your document in background. Ami-Pro provides a separate printer program called AmiPrint. If you enable AmiPrint, Ami-Pro creates a temporary file in your temporary directory each time you use the print command. AmiPrint translates the descriptive information into data that can be interpreted by the printer.

Another unsatisfactory feature of Ami-Pro is the absence of an on-line tutorial like those found in, for example, Word for Windows.

Ami-Pro was selected as one of "100 BEST PRODUCTS" of 1991 by WINDOWS magazine² which commented: "Ami-Pro is the fastest of the highend Windows word processors.

It's also easy to learn and use."

REFERENCES AND NOTES

- Ami-Pro for Windows is a product of the Lotus Development Corporation, 55 Cambridge Parkway, Cambridge, MA 020142. The list price of Ami-Pro for Windows, Release 2.0 is U.S. \$495, and the average mailorder price is U.S. \$294.
- The Windows 100, this year's WinAwards highlight the world's best Windows hardware and software, by the Windows Magazine Staff; Windows Mag. 1992, Feb, 76.