

Jeffrey's Writing Samples – File 2

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Are you the New
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Integrated Apps

These well-balanced suites
combine different types of data
and work applications

Cross-platform
compound docs
come alive

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Are integrated apps worth the

By Jeffrey Blake & Austin Speed

*We compare
Rapport Pro,
Appixware, and
desktopSlate.*

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There's a common sentiment that integrated applications are second rate; that even though they provide word processing, art tools, spreadsheet functions, image handling, and other features, they couldn't be as good as the focused applications that do each one of these things separately. When referring to complex, specialized tasks and features, this may be true. We were pleasantly surprised, however, by the amount of capability (at relatively low cost) delivered in the three integrated packages we tested.

These integrated Unix applications do two things. One, they tightly integrate a suite of heterogeneous applications. And two, they provide the means to combine different types of data (text, drawings, spreadsheets, sound, and images) into compound documents (called "multimedia documents" by some) that can be shared with other integrated-application users or translated for importing into a variety of nonintegrated apps, such as FrameMaker or Excel. Integrated apps can also read mail and import documents received from numerous environments.

Applications like the ones reviewed here go a step beyond application suites, such as Microsoft Works, and actually integrate word processing, mail, spreadsheet, and graphics functions into a single window. Users no longer have to open a word processor document, spreadsheet, and graphic file, edit each separately with a dedicated application, and then send each to colleagues. Instead, they can do everything from one app.

Three contenders

We reviewed three integrated applications—Clarity Rapport Pro 2.2.1, Appix Appixware 3.1.1, and Paragon Imaging desktopSlate 2.3. Rapport Pro and Appixware are the standard-bearers. Each brings to the table a slightly different twist. Rapport Pro combines word processing, spreadsheet, graphics, slides, macros, audio, and e-mail in its package. Appixware is another multimedia document-development

product that delivers the basics, along with a powerful macro capability. desktopSlate provides a low-cost alternative and adds an intriguing conferencing capability that lets two or more people work on the same document simultaneously.

Who uses these things?

Although they still fill only a tiny niche in the heterogeneous world, integrated applications are important to users who need general-purpose document-development and communications capability. Users who already have word processing, graphics applications, mail, or spreadsheet processors would be reluctant to shift to an integrated application that provides a redundant capability. But workgroups that need to share will thrive with these apps.

We scrutinized these three for a month, using them for our everyday work as much as possible. We wanted to judge overall quality and usability and determine just how these applications fit into different work environments. We compared the ease of installation, system administration, and quality of documentation, on-line help, tutorials, and technical support. We tested and compared basic features—notably mail, image and graphics handling, text processing, spreadsheet, and macro capabilities.

We installed and tested all three on a Sun SPARCstation 330 (a SPARCstation 2-class machine) running X11R5 and OSF/Motif with 24 megabytes of RAM. When scoring these products, we emphasized seamless integration, a smooth, intuitive interface, and full-fledged features that worked as intended. Other considerations included execution speed, documentation, and support.

Clarity Rapport Pro 2.2.1

Rapport Pro is a multimedia communications package that enables users to send and receive "multimedia documents," which may contain sound, images, an active spreadsheet, and artwork, as well as formatted text. The application's automatic translation services

air weight?

let Rapport users prepare and send a multimedia document to PC or Macintosh users, who can then view and read the information they receive. They can even edit it using different applications.

Rapport Pro installed like a champ from a 5-inch tape by using an install script. But it did present some system administration challenges. Appropriately setting up the system resources proved important. The application requires 52 megabytes of disk space, and at least 24 megabytes of RAM is recommended. Lack of abundant disk swap space can be another problem. Clarity recommends setting up the basic swap space at about twice the RAM, and reserving an additional 18 megabytes of swap space per Rapport user. We had to increase our swap space from 40 to more than 70 megabytes to run the app effectively.

Rapport Pro supports Motif or runs with a Motif look and feel within the OpenWindows 3 environment. The application has a standard interface that uses a separate window for each new document. (This stands in contrast to desktopSlate, which displays only the current document.) Each window has a menu bar and an extensive button-laden control panel for performing a number of tasks such as opening a spreadsheet, developing art, adding sound, or accessing mail.

Rapport covers the basics with aplomb. The text, drawing, and spreadsheet editors are reliable and (for anyone with some experience with WYSIWYG document development) take a minimum of time to learn. The drawing tool and the spreadsheet tool are easy to invoke and use. Format (character font, size, color, etc.) for drawings, spreadsheets, text documents, and charts is controlled from the same format menu as the rest of the application. Charts generated by the spreadsheet tool can be treated as any other graphic elements and edited using the art tools palette.

The power of Rapport is its simplicity. The level of integration between functions is higher than it may initially appear to a new user. This integration enables many of the same



functions to be applied to different data within a document. For example, one spreadsheet function lets users easily produce a chart based on spreadsheet data. The chart then can be altered using the art functions like any other drawing or added to another drawing to become part of an overall document design. Also, the font-editing function (font selection, size, color, shading, etc.) works for data in a spreadsheet the same way it works for text.

Clarity refers to its integration approach as an object-based multimedia architecture that enables any object to be manipulated by any appropriate editing tool. Rapport Pro provides both a decent level of internal integration and application programming interfaces (APIs) for integration of third-party applications. Third-party apps are integrated using the API facilities in two ways. First, an application such as Wingz can be launched from Rapport by adding it to one of Rapport's

continues

Reviews

continued

menus. Second (and more intricate), Rapport can bring data in from another application (after a conversion), edit the data, and store it in its original format (after another conversion).

Rapport provides an easy-to-use e-mail tool. If a document has data other than text (images, drawings, sound, spreadsheet data), Rapport will automatically convert the data in accordance with the file conversions selected by the user. For example, a drawing can be converted to PICT format for a Mac user, and images can be converted to TIFF format for PC or Mac users. Likewise, spreadsheets can be converted to Lotus or Excel formats, and a text document can be converted to WordPerfect or a host of other formats.

An address book stores information about e-mail correspondents along with their "document profile," which is used to invoke custom conversions. This slick feature opens up cross-platform communications possibilities. For example, if you want to send mail to a PC user who's fond of WordPerfect and TIFF graphics, simply save these preferences in the phone book and Rapport will automatically convert your multimedia document to suit the PC user's needs. The filters found in the basic package cover most common data-conversion situations.

Rapport's macro facility, FLEX (Facility for Linkage and EXTension), not only lets you record a set of actions to create your own macro, but also enables integration of Rapport's capability with other applications. As in most programs, the macros in Rapport perform complex sets of functions or tasks with a single menu selection. FLEX provides hundreds of predefined macros.

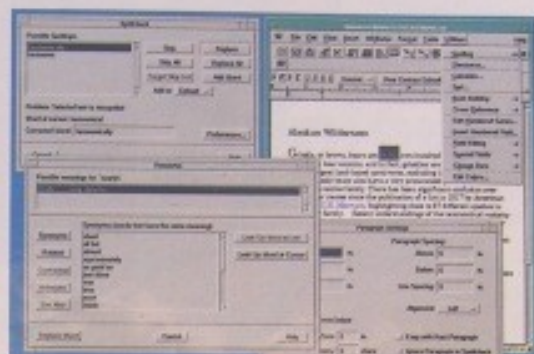
Rapport also passed our graphics-import tests. The application can automatically import a variety of images into its multimedia documents and also collect visuals with its snapshot tool.

A maintenance agreement that includes technical support costs \$155 per year and includes support 6 am to 6 pm, PST. The product comes with a 90-day media warranty and a money-back guarantee. We did have some difficulty getting through to the busy technical support staff, and we frequently had to wait on hold 5 to 10 minutes to talk to someone.

Clarity provides Rapport documents—
continues

SHOW & TELL: INTEGRATED APPS IN ACTION

APPLIXWARE



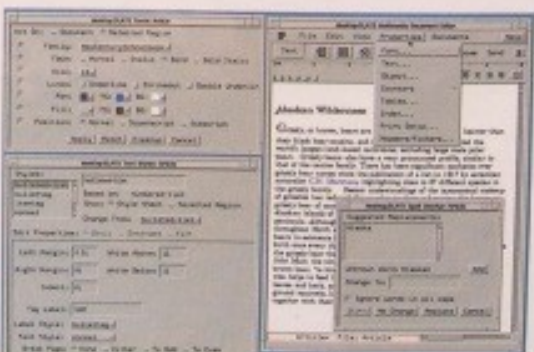
While editing an article, Applixware users can check for misspellings and look for synonyms in the thesaurus. To adjust formatting, users can adjust paragraph settings.

RAPPORT PRO



We've checked for misspelling using the spell checker and have replaced some words using search-and-replace. Rapport also lets us set our text properties for the entire document.

DESKTOPLATE



In this basic edit session, several utilities are available, including the spell checker, the font manager, and a text styles window.

Reviews



After finishing up the text-based work, users can add a raster image to the document and flow text around it. The graphic editor lets users make minor adjustments to the image.



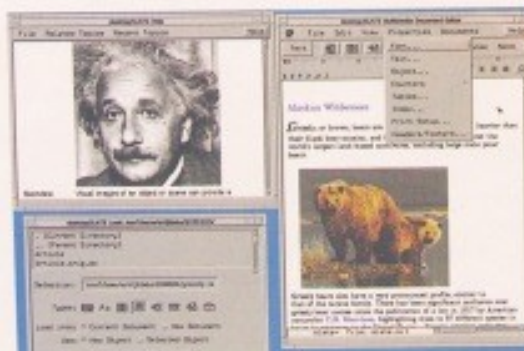
Now we are ready to mail the document. **Send** is selected from the pull-down menu. We then select a recipient from the address book and press **OK** to mail the document as specified in the recipient's profile.



Place a raster image into the document and adjust the text frames to allow the text to flow around the image.



Mail a document by first selecting the send mail icon located at the top of the main window. Mail is sent according to the address book profile for each recipient.



A raster image is inserted by bringing up a selection window, which allows us to load the image.



Send a document by selecting the appropriate option in the **Send** menu. Here, we send the document as **Multi-media** to another desktopSlate user. The mail header is automatically added to the top of the document.

Reviews

How the Test Strip works: Categories are judged compared to other products in their class. We judge different products on different categories as needed. **Features** evaluates capacity, expandability, reliability, and availability features. **Interface** rates whether the product's interface is intuitive and straightforward. **Documentation** looks at the quality and completeness of paper and on-line documentation. **Performance** summarizes tests of various comparative performance metrics. **Support** summarizes installation, technical support, and its availability, upgrades, and the quality of the product's warranty. Weightings are based on reader surveys and expert knowledge. Total of evaluations is divided by 50 and truncated to one decimal place to yield an overall rating on a scale of one to ten. Adjust the weighting to customize the Test Strip to your own needs.

continued
tion via a combination of on-line help and extra-cost (\$35 each) printed manuals. The three manuals we received (about 170 pages each) cover composition, communications, and the FLEX extension language. We did not receive the 700-page fundamentals guide. Documentation of the art tools and the spreadsheet tool in the books we received was barely adequate, but we found ourselves satisfied with the comprehensive on-line help.

Early on, Rapport did crash several times. Clarity technical support immedi-

ately identified a lack of swap space, which we corrected. Our experience taught us that since Rapport launches new tasks to do things like mail, it's important to run the application on a machine with sufficient speed, memory, and disk space.

Rapport Pro 2.2.1 is a beauty. It has a well-designed interface that is easy to learn and use. Its many text, spreadsheet, and image filters provide smooth and automatic translation to and from common workplace products. This translates to easy communication in a heterogeneous corporate environment.

Advanced Systems Test Strip: Compound document integrated applications

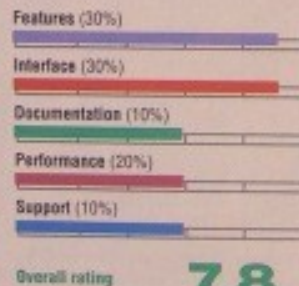
Rapport Pro 2.2.1

Clarity Software
2700 Garcia Ave
Mountain View, CA 94043
415-691-0320, 800-235-6738
415-964-4383 fax
info@clarity.com

Pricing Base license (includes e-mail), compound document editor, spreadsheet, drawing package, image support, audio editor, presentation slide manager, macro capability and standard filter pack is \$895. Fax costs \$1,095.

Platforms HP-UX 8.x and 9.x, Solaris 1 and Solaris 2.3, DEC Ultrix 4.3, SCO OpenDesktop 2 and 3, SGI IRIX 5.2, IBM AIX due in mid-'95.

Summary Rapport is a highly competent and satisfying program. It provides a sleek interface and high-fidelity automatic filtering to help integrate various applications.



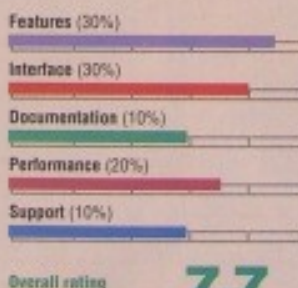
Applicware 3.11

Appix
112 Turnpike Rd.
Westboro, MA 01581
508-870-0300
508-386-9313 fax
appixinfo@appix.com

Pricing Base license is \$895 (includes Words, Graphics, standard filter pack). Maintenance comes at 15% of product price. Prices for Send Mail or OpenMail Clients, \$195; Spreadsheet, \$495; Real Time (spreadsheet/data analysis), \$1,995; Data (database access), \$995.

Platforms SPARC Solaris 1 and 2, Solaris 2.1 for x86, Ultrix 4.2, OSF/1 1.3, HP-UX 9.x, AIX 3.2, Motorola 88000/Sys5 3.2.x and 4.x, IRIX 4.0.x, Univel USL 5.4, DG-UX 5.4 rev. 2.1, Intergraph CLIX 3.1 i 6.x, NCR/SVR4.

Summary Applicware is a top-notch application with an interface that handles complex processes well. It has a powerful macro capability and supports many optional Applicware components and third-party add-ons.



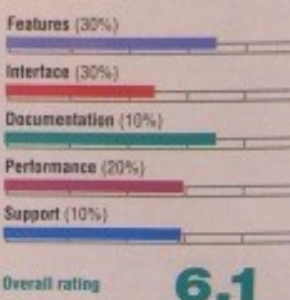
desktopSlate 2.3

Paragon Imaging
400 West Cummings St.
Woburn, MA 01801
617-937-9800
617-937-9877 fax
info@paragon.com

Pricing \$395 per single copy, maintenance is \$39 per year; upgrades cost \$120.

Platforms SPARC Solaris 1 and 2.

Summary An inexpensive solution to workgroup communication, desktopSlate is straightforward and simple to use. It provides limited translations to other formats, but has a powerful macro language and sports a unique document-conferencing capability.



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Applix Applixware 3.11

Like Rapport, Applixware combines comprehensive applications designed to help users with many daily tasks, such as writing letters and reports, mailing compound documents, sending faxes, creating illustrations and technical drawings, and performing data analysis.

Applixware comes on 3/4-inch tape or CD-ROM (which we used). The installation process took about 15 minutes from CD. Applixware employs Globetrotter's FLEXlm license manager. For first-time installers, the system comes up free for 30 to 40 days.

Applixware takes up a hefty 75 megabytes if you install everything. Minimum installation fills about 45 megabytes. Applix recommends 16 megabytes of RAM and 15 megabytes of disk swap space for each user on a workstation; X terminals demand a bit less.

Applixware runs in Motif or OpenWindows and uses a small main window with five buttons to access the major components: *text processing*, *graphics*, *spreadsheets*, *mail*, and *database access*. We liked the approach of having the main components readily available.

Applixware's feature-rich set of components includes a word processor, a graphics editor, text and graphics filters/translators, and a macro scripting language and editor with a graphical dialog-box generator; adding the optional e-mail (\$195) and spreadsheet (\$495) modules effectively doubles the base package's \$695 price tag. Applix also sells file-conversion filter packs, as well as Applixware components that automate business processes, provide access to external data sources, and enable real-time analysis of financial data.

The Applixware document editor includes just about everything you might expect from a word processor. Although both Applixware and Rapport contain basic document-building capability, users generating intricate or involved documents might want to invest in FrameMaker or Interleaf. (Rapport and Applixware can exchange files with both FrameMaker and Interleaf; desktopSlate can import but not export FrameMaker and Interleaf files.)

Applixware's document window consists of a row of pull-down menu items and a row of "express-line" buttons to save to disk, send mail, print, undo, cut, copy, paste, and so on. A zoom com-

mand shrinks or enlarges your view of the document. When we enlarged the view to 120 percent, however, the font didn't scale up very smoothly; the letters looked slightly deformed. (We didn't have this experience with Rapport or desktopSlate, but we have experienced this with WordPerfect.) Applix said this is a result of Applixware's font-scaling algorithms. Note that this problem af-

spiring than Rapport's or desktopSlate's macro engines. We were quickly overwhelmed with ELF's details. Anyone can do the simple processes we did, but ELF provides enough breadth to satisfy a power user. It can activate windows, gather data, or invoke external applications such as databases, word processors, or CAD systems. Applixware is the winner here.

Applixware's macro language, ELF, is awe inspiring and the best of the lot.

fects the screen display only, and does not affect printing. Like Rapport, Applixware can take screen shots of portions of your screen and incorporate them directly into the document.

The mail tool has a concise window design with four windows: one to show your mail directories, one to show incoming mail, a third to display the mail after it has been selected, and last, a window for attachments. When new mail arrives, a small window pops up and asks if you want to read it now.

Applixware handles images well. We imported several image formats into a document, and when e-mailed, they arrived in perfect shape. Applixware has more power than Rapport Pro in image handling. For example, Applixware displayed one imported raster image more clearly than Rapport. On the other hand, we found Applixware more complicated than Rapport (smaller icons, more choices) and occasionally a bit quirky. In the graphics editor, for example, when we selected *Import* from the pull-down menu, it first responded by asking whether we wanted to save the document. And to embed a raster image in a document, we had to wade through several levels of menus. None of the functions were particularly baffling; on occasion they just required a little extra interaction.

ELF (Extension Language Facility) is Applixware's macro tool. We tested some basic functions, including simple keystroke recording, defining accelerator keys, and recording mouse movement. Applixware's process works much like Rapport's extensive macro capability, but it was even more awe in-

spiring than Rapport's or desktopSlate's macro engines. We were quickly overwhelmed with ELF's details. Anyone can do the simple processes we did, but ELF provides enough breadth to satisfy a power user. It can activate windows, gather data, or invoke external applications such as databases, word processors, or CAD systems. Applixware is the winner here.

Applixware's performance is reasonable, considering our aging workstation. Applixware is a first-rate, industrial-strength application that seems to do almost everything right. Its extensive interface is quirky in places and not quite as straightforward as Rapport Pro's, but presents no major inconvenience. It has powerful macro capabilities that let users customize their environment—they can even build tailored GUIs. And Applixware sports numerous text and image filters and includes several optional (extra-cost) add-on components.

desktopSlate 2.3

Paragon Imaging's multimedia document-development and communication application lacks the polish and robustness of its peers and is supported only on Solaris 1 and 2, but its unique conferencing capability (which lets users take turns making changes to a single document simultaneously visible to all) and lower price make it attractive.

Installation of the 30-megabyte application took 10 minutes. desktopSlate creates a multitude of files in each user's home directory, and the resulting directory structure lacks elegance. We counted 11 files, including a backup file and two

continues

Reviews

Integrated applications features

	APPLIXWARE	RAPPORT PRO	DESKTOPSLATE
WORD PROCESSOR			
Spell check	•	•	•
Thesaurus	•		
Grammar check	•		
Mail-merge	•	•	•
Conditional text	•	•	
Templates	•	•	•
Character, catalog	•	•	•
Paragraph catalog	•	•	•
Color	•	•	•
Filters	ASCII (iE), DCA (iE)	WordPerfect (iE), FrameMaker (iE), Word (DOS, Mac, Windows) (iE), d5C, WPS-Plus (iE), ASCII (iE), Interleaf (a x2.3) (iE)	WordPerfect (i), FrameMaker (i), Interleaf (i), ASCII (iE)
SPREADSHEET			
Graphics creation	•	•	•
Real-time access	•	•	•
Filters	WKS/WK1/WK3 (iE), CSV (iE), DIF/NDIF (iE), SYLK (iE), XLS/34 (iE), ASCII (iE)	Just macros Excel (Mac, PC) (iE), tab-delimited ASCII (iE), WK1/WK3 (iE)	Tab-delimited ASCII, Lotus WK1
GRAPHIC DRAWING			
Raster	•	•	•
Vector	•	•	•
PostScript	•	•	•
Color	•	•	•
Filters	HPGL (iE), TIFF (iE), ILM (i), SGI (iE), GIF (iE), SEM (i), XBitmap/Pixmap (iE), Win. BMP (i), PBM/PPM (iE), EPS (i), XWD (iE), WMF (iE), FAX GRP 3.4 (iE), SunRaster (iE), WPG (i)	Import only Sun Raster (iE), TIFF (iE), GIF (iE), SGI rgb (iE), WordPerfect raster graphics (iE), PICT (iE), WMF (iE), WordPerfect Vector Graphics (iE), Word WPG (iE)	Sun Raster (i), EPS (iE), HPGL (i), GIF (iE), TIFF (iE), PBM, PPM, XBitmap
E-MAIL			
Phone book	•	•	•
Filters	•	•	•
MACROS			
GUI-aware	•	•	•
Editor	•	•	•
Recorder	•	•	•
Libraries	•	•	•
Language	•	•	•
DATABASE ACCESS			
Filter	•	Through macros	
FAX SERVER			
Automating	No fax server; integrate with others with macros	•	
OPTIONAL FILTERS	\$295 each: WP Word (Windows & Mac) (i), RTF (iE), WordPerfect 4.2/5.1 (iE), Office Writer (i), Word (DOS) (iE), Interleaf (ASCII) (iE), Frame (iE), d5C: Graphics: GDM (iE), PCX (i), IGS, DIF (i), PCT/PICT (i), MacPaint (i), IGS (i)	Included: WP: DCA/RT, DisplayWrite, OfficeWriter, MacWrite, WriteNow, WordStar, WordPerfect (old), PFS: Write, Prof. Write, PFS: First Choice, MultiMate & Advantage, VolkovWriter, IBM Writing Assistant, XWrite, RFT, d5A Write, Samna, Ami Pro, WangPC, Lotus Manuscript; Graphics: PCX, BMP, JPEG, GDM, Ami Pro Draw	Pricing unavailable; WP: ASCII (E), Frame (i), Interleaf (i), Word (i)
OTHER FEATURES			
Doc. conferencing	•	•	•
Lic. manager/server	•	•	•
Audio support	Audio & video	•	Optional

i/E = import/export

continued

directories; most are hidden.

desktopSlate launches under OpenWindows or Motif. Its pragmatic, smartly designed interface offsets any drawbacks of its monochrome-only window borders and drop-down menus. desktopSlate launches with three windows: a folders-and-surveys window, an e-mail window, and a multimedia editor window. In the surveys window you can create and monitor directories (folders) to contain those files that meet a particular need. For example, you can designate a certain directory (folder) to receive all mail from a particular user. We found this an easy way to organize and prioritize incoming mail.

The e-mail window displays all mail entries in a standard fashion. We found it easy to use, but we also craved an address book (like that found in Rapport or Applixware). Instead, a desktopSlate user can add aliases to a customizing file—one of those hidden files in the home directory.

The mail window does have one special feature called Conferencing. We tested conferencing by adding addresses to a conference list and pressing *start conference*. We initially had difficulties—our entire system would hang. As it turns out, desktopSlate will not let users launch multiple conference windows. The conference window is a replica of the multimedia document editor that appears in each conference participant's root window. Participants take turns making changes to a single document, and changes are immediately visible to all.

All of the desktopSlate windows have an on-line help feature located in the expected top right corner. Based on a simple hypertext format, the on-line help does the job. It doesn't have an accompanying side-by-side hypertext index like Rapport, but does include a pull-down menu with related topics that can be accessed quickly and lets users print help pages.

The multimedia editor window comes up large and is a focal point for all work. The menus and buttons available on the window provide access to graphics, text, spreadsheet, audio, and mail.

We tested the mail system for desktopSlate by sending combinations of multimedia and plain text. During an

continues

Reviews

continued

e-mail conversation with technical support, we swapped personal-image files just to see what each other looked like. We were impressed at desktopSlate's easy-to-use, menu-based, image-handling capabilities; the image came into the document window quickly.

To send messages, you need to be working with a multimedia document editor, since the *compose* and *send* selections are found there. This is similar to the other products. Mail is centered around having your document window available.

Where Rapport Pro and Applixware are feature-laden, desktopSlate is utilitarian.

Incidentally, we like desktopSlate's resource-friendly approach to the use of screen real estate. Unlike Rapport or Applixware, desktopSlate displays only one copy of the editor window at any given time. When using the other vendor's applications, we sometimes found ourselves with three or four windows that were difficult to use effectively in restricted display space. Furthermore, Rapport essentially runs a copy of the window-management segment of the application for each document that is open, so multiple documents can put quite a strain on your system resources. And since desktopSlate lets users switch between documents almost instantly, we did not consider its inability to simultaneously view and edit multiple documents much of a drawback.

In general, desktopSlate is surprisingly snappy. In fact, under certain circumstances we got better performance out of it than we did with the big boys. desktopSlate can be used effectively even on slower systems, whereas Rapport and Applixware demand faster systems with more RAM and disk space.

desktopSlate's macro language, Slate Extension Language (SEL), is C-like and lets users customize their environment. SEL can perform simple tasks like customizing menus, dialogs and icons, and creating mail aliases. Alternatively, SEL can be used to write detailed routines that interface to outside applications. desktopSlate's technical support related

an example of how a law firm integrated a fax server that allowed the lawyers to bring up a Rolodex of e-mail and fax recipients and simply click on the names of users to whom they wanted to forward their message or information. The law firm also integrated an image-retrieval system that let the attorneys access a jukebox complete with all the evidence and litigation materials for a particular suit. Another organization integrated a workflow application so that users could pass forms, technical specs, and CAD drawings among the workgroups using the mail facilities, and re-

cipients used an electronic sign-off or "workflow" application to reroute or approve the data.

Audio attachments are easily added to a compound desktopSlate document by selecting an audio icon on the document editor. A controller window pops up, and by starting the recorder, users can record an audio message. An audio icon is then pasted into the document. (Don't worry; it's easy. We did it without consulting documentation.) After the message has been sent, the receiver can double-click on the audio icon embedded in the document to replay the message.

desktopSlate comes with a pair of 200-page softbound books, one on getting started and one on customizing. The getting started manual is chock full of examples and pictures describing most of desktopSlate. We discovered, however, that there is no documentation on conferencing.

desktopSlate is not a mainline source of income for Paragon Imaging, so the company's technical support is a bit informal today. However, we had no trouble getting through using e-mail and the phone to resolve the minor problems we had. Although not set in stone, Paragon probably will offer "network customer service" as long as the traffic is manageable.

desktopSlate is a bargain. For less than \$400 you can get a powerful productivity tool. It has a simple interface, it doesn't use fancy icons, and it has

minimal filtering capability. But it does the job. We liked how easy it was to create and send compound multimedia documents through the mail. Attaching audio notes was a no-brainer. If you are looking for a SPARC-based workgroup tool to share ideas via conferencing and exchange multimedia documents, or if you primarily edit one document at a time and need a product that doesn't demand too much hardware, desktopSlate fits the bill.

Handicapping integrateds

There is no clear winner in this category; each of these rich products has its own strengths. Rapport Pro has a satisfying, intuitive interface and all the features you need to communicate automatically with all users, regardless of the computer they use. We appreciate its robust multimedia mail tool and its integrated fax program. Best of all, Rapport includes many text and image filters in its standard package.

Applixware is astonishingly powerful. Its extensive interface seems a bit quirky at times. Applixware brings a competent macro language to the table that is simple enough for lightweight users and robust enough for power-users. It has only a small set of filters in its basic package but offers a plethora of optional filters. Configured with the same applications that Clarity and Paragon Imaging consider standard, Applixware is the most expensive of the three.

desktopSlate earns kudos for its simple, functional interface that provides straightforward multimedia communication between desktopSlate users, its shared-whiteboard conference feature, and its affordability. It excels even on less powerful SPARC systems.

We highly recommend either Applixware or Rapport for large, heterogeneous organizations that need an industrial-strength application to communicate different types of data. For Sun shops that want a set of integrated applications at a reasonable price, we suggest desktopSlate.

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