INFO WORLD

Reviewer's Manual & Guidelines

January 1994

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Welcome to the staff of the *InfoWorld* Review Board. We have selected you for this influential position because of your knowledge and understanding of the microcomputer market, writing and analytical skills, and your ability to fairly and accurately judge hardware and software. Beyond this, you and our company share a common interest and curiosity about the ever-broadening realm of the personal computer. This will contribute to a strong working relationship between us.

The purpose of this manual is to acquaint you with our editorial and business operations, the company policies regarding reviews, and the general guidelines for preparing a review.

If you have any questions concerning *InfoWorld*, a review, or an idea for a review, don't hesitate to call our Reviews Editor or any member of our reviews staff at (415) 572-7341 or, toll-free, (800) 227-8365.

We sincerely hope your association with *InfoWorld* is a rewarding one and we look forward to your input and ideas.

The *InfoWorld* brand of product review

InfoWorld's Reviews section exists for a single, basic purpose: To evaluate new PC hardware and software and help readers decide whether a product is appropriate for their needs. Since their initiation in 1980, our reviews have accrued enormous respect in consumer and professional circles, and have been praised by The Wall Street Journal and others as the best in the industry. We attribute our success to thorough, accurate product evaluations and a tight, readable style that concentrates on appraising the most relevant aspects of a product, from the point of view of our readers. To be fair to both manufacturer and consumer, we review only final production versions of any package or piece of equipment. (Only our First Look and Test Drives cover pre-production software.)

InfoWorld's consistent report-card style makes it easier for the consumer to directly compare two similar products and rate them objectively in the same areas for the same criteria. It is essential that our reviews maintain this consistency to allow cross-referencing with our other reviews on similar hardware or software. In our reviews, we are explicit about how we arrive at our judgments. Our readers don't have to take our word for it; they can judge for themselves. If a reader's own situation differs

from the norm, our reviews are specific enough that he can adjust the scoring to suit his own needs.

Our reviewers

We commission hardware and software reviews and product comparisons according to strict guidelines. We look for reviewers who are both *InfoWorld* readers and use the products they review. They should be familiar with what businesses need. In general, we do not look for hackers, programmers, journalists, or freelance writers. We commission reviewers with impressive credentials as professionals who use computers in their work.

InfoWorld reviewers should be heavy users of material in their expert categories; they need to know the issues and the products involved in their category. In general, the more technical the area, the more technical the reviewer's background should be. In addition, a reviewer needs to be able to write well, to be well organized, and to want to be the user-expert in that field.

All reviews are commissioned; we publish no reviews sent "on speculation." Even if you have already done reviews for *InfoWorld*, always get an assignment from the appropriate editor before writing a review.

In order to maintain consistency across reviews, we prefer to have no more than two reviewers (and if possible, only one) cover a product category. If we are working with a new reviewer, we prefer to first assign a test drive, the easiest type of review.

GENERAL INFORMATION

CHARTER & OPERATIONS

InfoWorld is the leading PC news weekly, published for multiple-unit buyers of personal computers and related products in large and medium-sized businesses, government, and higher education. In readable, non-technical language, we share with our readers the latest news and most crucial information pertaining to the expanding world of personal computer technology, with heavy emphasis on how PC hardware software and networking products fit into business enterprises that are increasingly downsizing from mainframes.

We take a great deal of pride in our timely reporting and evaluation of what takes place in the personal computing industry. Our position as a perennial leader in the industry is contingent on supplying our readers with the fastest, fairest, and most accurate judgment of new products. In so doing, we give readers reliable judgments on which to base their decisions when purchasing hardware or software.

InfoWorld is not intended as a tutorial; it is rather like a combination of *The Wall Street Journal* and *Consumer Reports* for an audience that purchases and manages computers.

Our coverage is focused on IBM PCs and compatibles and software and peripherals for these machines. We devote a much smaller percentage of our reviews coverage to Macintosh products. We do not cover hardware or software sold primarily for home use or grade school education, including the Apple II family, Atari ST, and Commodore Amiga computers.

Who publishes InfoWorld?

InfoWorld is published by InfoWorld Publishing Company, in San Mateo, California. InfoWorld is a wholly-owned subsidiary of IDG Communications, Inc., the world's largest publisher of computer related periodicals.

InfoWorld began as the Intelligent Machines Journal, a monthly, quarter-fold tabloid newspaper for the computer community in Silicon Valley. IDG acquired the newspaper in 1980 and in fairly rapid succession changed its name, frequency, size, and format. Since 1985, InfoWorld has been a controlled-circulation weekly tabloid aimed at volume buyers of personal computers and related products.

Our company's mission continues to be to assist in the development and application of personal computing technology for professional environments. Not coincidentally, our audience consists of multiple-unit buyers of personal computers, hardware and software products for large- and medium-sized businesses. Our circulation reflects the spread of technology in these markets, and as personal computing needs continue to grow, our circulation will mirror it directly.

Our parent company, IDG Communications, publishes more than 194 periodicals about computers and associated topics in 62 countries. Other respected journals in the IDG family include Computerworld, Mac World, and PC World. These publications and others are connected worldwide through an electronic mail system, and most participate in our international news service, which gathers and redistributes news from our foreign and domestic publications weekly. IDG employs more than 5,000 people.

International Data Group also owns one of the world's leading market research firms, International Data Corporation (IDC), which markets proprietary information to most leading computer companies. IDC owns Link Resources in New York, which specializes in selling electronic information and communications services to small businesses and home offices.

InfoWorld businesses

InfoWorld Publishing Company produces several editorial products other than InfoWorld, three of which were founded by Stewart Alsop, InfoWorld's editor-in-chief.

P.C. Letter, a respected publication begun in 1985 (Alsop remains publisher), covers PC products and news in a twice-monthly newsletter format, featuring the popular VaporList and Alsop's Open Letters to industry leaders. Demo, a P.C. Letter-sponsored event first produced in 1991, showcases products to a select number of industry insiders. Agenda is Alsop's small, exclusive annual conference for industry executives, first held in 1987.

InfoWorld also publishes InfoWorld Direct, a glossy 8 1/2-inch by 11-inch buyer's guide bundled with InfoWorld.

How InfoWorld is published

Following is a brief description of *InfoWorld*'s general operations. The editorial department writes and edits all articles and designs the editorial section of the magazine. The production department operates the typesetting equipment, maintains the text processing system, pastes up individual pages, and performs quality control. The advertising department develops the advertising clientele and assures their timely delivery of advertisements. The circulation department manages all direct-mail solicitations, general distribution, and works in conjunction with our circulation-fulfillment house to solve any customer service problems. Finally, the administration department establishes business policies, provides companywide office services, and oversees the entire operation.

InfoWorld is a weekly periodical that operates more like a daily. We send sets of pages to the printer as often as four or five times a week, which of course makes some sections more upto-date than others. (News pages are always sent to the printer last, thus making it the most timely section in the paper.)

Before any pages are shipped, a layout (or "dummy") is constructed that determines where the editorials, advertising, and color sections will appear. The week is then spent coordinating copy between editorial and production to ensure the paper is assembled correctly. The final pages are delivered to the printer on Friday, and the paper is printed over the weekend. The following Monday, *InfoWorld* is delivered to about 245,000 subscribers, 225,000 of whom are qualified multiple-unit buyers of personal computers and related products.

THE EDITORIAL DEPARTMENT

InfoWorld's editorial staff consists of more than 80 full-time editors, writers, reporters, researchers, designers, technicians, copy editors and assistants. In addition, we employ on a free-lance basis approximately 40 reviewers and columnists. We also draw on the direction provided by a 12-member Corporate Advisory Board composed of industry experts and reader-executives from some of our largest subscribing companies.

InfoWorld's editorial content is divided into four sections: News, Views, Enterprise Computing, and Reviews & Testing. Of particular interest to you should be the functions of the editors and technicians in Reviews & Testing.

News

InfoWorld's news staff consists of more than 20 editors and reporters at InfoWorld's headquarters in San Mateo and at full-time bureaus in Boston, Washington D.C., Dallas and Seattle. The news section of the newspaper consists of "high" news (usually the first 10 pages) and software, hardware and networking sections. Types of stories include news about new products and industry issues, technology and user features, and special reports.

Views

InfoWorld's Views department consists of columns, editorials, the One-on-One Q&A features, and letters to the editor. The opinions dditor is responsible for editing all opinion material and manages InfoWorld's relationship with free-lance columnists.

Enterprise Computing

The staff of the Enterprise Computing section consists of three editors/writers who also use free-lance contributors. The group each week produces a main technology feature, a management feature, a case study and associated columns dealing with higher end issues involving client-server applications development, internetworking and multiplatform integration.

Reviews & Testing

The Reviews & Testing department consists of over 30 editors, technicians, and assistants who produce an average of 700 hardware and software reviews annually for *InfoWorld*'s Reviews section.

The department is structured into seven "teams": Communications & Spreadsheets, Application Development, LAN, Text & Graphics, Hardware, Enterprise, and Macintosh. Each team includes one editor and usually one analyst and one test developer. Depending on the team, there may be more than one analyst or test developer. Each team has a designated leader who guides the work for that team and makes sure deadlines are met — in addition to meeting the requirements for his or her primary job as editor, analyst, or test developer.

As suggested by the names, each team is responsible for tracking products in specific topic areas. The applications development team, for instance, covers language and database software products used for building applications. Though teams tend to cover exclusively their assigned software and hardware categories, the topics may shift among teams from time to time. The first five teams each produce a product comparison every six weeks (in the sixth week of the cycle we publish only standalone reviews). The Enterprise team comparisons less frequently, due to the complexity of its multiplatform testing and its obligation to produce for the Enterprise Computing section the weekly column Down to the Wire. The Macintosh team produces reviews and sidebars, and advises other teams on Mac coverage.

CHOOSING PRODUCTS

With strong input from the team's editor and leader, each team makes a weekly pitch of products from its categories that it thinks are suitable for product comparisons, standalone reviews, or test drives (we discuss each of these types of reviews beginning on page 16). To decide what products to pitch, team members consult *InfoWorld*'s news pages, other publications, vendors, staff, members of the *InfoWorld* Review Board, and readers.

The Reviews Editor and/or the Executive Editor of Reviews & Testing approve the pitched products, and the team then chooses the best qualified reviewer available. In picking a reviewer, we consider his or her previous review experience and

expertise with the product category. After the team has received the product from the vendor, the team sends it to the assigned reviewer.

If the product is software, we send one copy to the reviewer and keep a second copy, on which the *InfoWorld* Test Center performs benchmark tests. The Test Center and the reviewer must stay in touch to ensure that the results of Test Center tests are incorporated in the review. The Test Center is also available to confirm serious bugs or other anomalies the reviewer has found.

When we review hardware, the Test Center typically performs all or most of the testing. Established in 1987, the Test Center has grown from a one-LAN room to a 2,000-square-foot, multi-network, multimillion-dollar showpiece facility. New equipment purchased annually keeps our testing platforms upto-date and allows us to expand the types and scale of evaluations we offer our readers. Nonetheless, many of the machines in the Test Center are "loaner" evaluation units, which we return to the manufacturer shortly after testing.

When they test hardware, *InfoWorld* technicians function as the reviewers, responsible for following all the procedures and for writing up the results of these tests. If the hardware is unusual or unique, it may be sent to a Review Board member for a closer look, or for the complete review.

Sometimes, a review board member will help us develop tests, help us conduct those tests, and evaluate the results (see page 50).

THE EDIT CYCLE

Once the review is completed, the team's editor enters it into our electronic text-processing system and edits it for consistency, content, and readability. Editors also do a final fact check of each review with the vendor. The editor also confers with the reviewer and with the Test Center to ensure that the individual scores that are assigned to a product are fair and consistent with the body of the review.

After the department's Reviews Editor approves the review, it is copy edited, laid out, typeset, and pasted up. The review pages are typically sent to the printer in under a week's time, and are usually published no later than three to four weeks after the manuscript is received.

THE REVIEWS PROCESS

EDITORIAL POLICIES

As a contracted reviewer for *InfoWorld* (see Appendix A, page 55 for contract), you must understand our procedures and ethical guidelines, as well as the details of the policies we require you to follow as part of your contract with us.

Equipment loans/gifts

Writers and editors associated with the publication of *InfoWorld* are not permitted to accept gifts from vendors or other industry contacts that have a value of more than \$25. You are also not allowed to accept manufacturing discounts for equipment purchased for a review; that would constitute a gift.

Disposition of review materials

Hardware sent to us for review is on loan to use for an agreedupon time (60 days is typical). After this time, we must return the equipment to the manufacturer or be billed for the cost. Because of this, we request that equipment be returned to us within two weeks of the completion of the review. We track all the hardware here, and will let you know about the best way to return the equipment. Software, on the other hand, need not be returned to the vendor. We retain a copy for future comparisons with similar packages or later versions of the same product. Reviewers are prohibited from selling or exchanging the software; if you do not wish to keep it, please return it to us. You are expected to register the software, so you continue to get the most current updates.

If we obtain access to an on-line information service for review purposes, it is usually for a limited time. If we ask you to review a service so obtained, use of our review account must be related to evaluating the service for *InfoWorld*. Personal use of the service, or use in conjunction with a review for another publication, is not permitted.

Investments and financial disclosures

We have a duty to our readers to be fair and unbiased when reviewing hardware or software. Therefore, it is basic to our code of ethics that no individual connected with the newspaper profit directly or indirectly from material published in *InfoWorld*. This is particularly important in light of the fact that Securities and Exchange Commission rulings are becoming increasingly applicable to journalists.

Although our rules don't prohibit owning stock or investment in any company, you are strictly prohibited from altering your investments in a given company from 30 days before until 30 days after a review you have written of that firm's product appears in the newspaper. The nature of the review might also dictate the same restrictions with respect to a competing company. You are also forbidden to disclose the content of a review to anyone except the *InfoWorld* editorial staff prior to publication.

To minimize the potential conflicts of interest created by investments in the computer industry, we require that you disclose to us any and all associated investments you have made. This disclosure must also include any investments made by your spouse or dependents from which you might profit. This helps us avoid any possible conflicts of interest. A form for disclosure purposes is included in the reviewer's contract and reproduced as an appendix here. All financial information disclosed is held in the strictest confidence.

Co-payments

You are prohibited from accepting any payment in any form from a company whose products you are reviewing for *InfoWorld*, including any discounts on hardware or software.

Obtaining products and company contact

To provide a buffer between the reviewer and the company, InfoWorld serves as the sole vehicle for product orders for all reviews. Unless expressly given permission by an InfoWorld team member, you may not contact any company to request a product for an InfoWorld review. Direct contact with a vendor not only can compromise your position as an objective reviewer, it also can create a problem with companies that believe InfoWorld has committed itself to review their products when this is not the case.

Your status as an *InfoWorld* reviewer should remain confidential when contacting a company to determine the degree and quality of telephone support. Therefore, you should use a pseudonym, as your name may be familiar to the companies whose products you may be reviewing. In some cases, you need to contact the company to determine general facts such as price and the versions available; for this, you may use your own name. If you wish to do more extensive fact checking or resolve technical problems or questions before turning in your review, you may ask your editor to make arrangements for you to speak with a vendor representative.

In general, we will not inform any company of the identity of the reviewer assigned to its product or of the content of the review prior to publication. Some companies do wish, however, to contact the reviewer after a review has been published to discuss the review and suggestions for improving the product. If the company makes such a request to us, we will forward the name and phone number of the company contact to you.

In any such discussions, be polite, avoid arguments, and do not act defensive about the review. The vendor has a right to understand the basis on which the product was reviewed and scored; you have a right to make judgments based on your expertise. Remember that you represent *InfoWorld*; if you think that a problem in the review has arisen because of the Test Center or the editing, do not discuss this with the vendor; have the vendor discuss this with the Reviews Editor. Therefore, be cautious about admitting error; if you discover an error, you can

tell a vendor that an error seems to have occurred, but you need to talk to the Reviews Editor first. Avoid promises of reviews, updates, or corrections until you have talked to your editor. We will correct mistakes and run updates, but we need to check our facts before agreeing to run a correction. It is important that you keep notes of any such conversations, and keep us informed about what was discussed.

Be careful with your relationship with any company you may contact on a follow-up. If you choose to perform commercial work, including paid consulting, for that firm — especially regarding the product you reviewed — you must disclose this to *InfoWorld*. It will automatically disqualify you from reviewing new versions of the product and will most likely prevent us from allowing you to review any other products by that firm or its competitors. For the sake of objectivity, we strongly discourage such arrangements. Avoid being compromised.

If a company does manage to find out who is reviewing a given product prior to the review and contacts you, please notify the Reviews Editor as soon as possible. Do not discuss unpublished reviews with the company.

Publication rights

Upon acceptance, *InfoWorld* acquires universal copyrights and publication rights of that review, as well as sole ownership and authority to transfer ownership. Universal copyrights refer to all methods of publication, including print, broadcast, and electronic forms. This provision also covers all means of publication or reproduction devised in the future.

InfoWorld allows reviewers to reprint or republish a review for noncompetitive, noncommercial purposes. We also allow reviewers to review the same product or its updates or revisions for noncompeting publications (usually magazines devoted to a specific type of software, such as CAD). We require the reviewer to obtain express permission to review the same or updated product for a publication that competes with InfoWorld. We consider PC Week and PC Magazine to be competitors.

These stringent guidelines are necessary because we are part of a company that publishes magazines and newspapers on similar subject matter throughout the world. We share articles and news stories with our sister publications, and some of these, particularly those overseas, translate and reprint our reviews.

This means an increased exposure for you and the opportunity to be read by people who are responsible for buying computer hardware and software throughout the world. If you have questions concerning these requirements, please contact the Reviews Editor.

TYPES OF INFOWORLD REVIEWS AND HOW TO PREPARE THEM

InfoWorld has very specific parameters to follow for preparing reviews. We publish three main types of reviews for which we use outside writers: Test Drives, standalone Reviews, and Product Comparisons. Each of these types of reviews may cover hardware or software. Depending on the product, we may decide to use only one type of review to cover it. If it is a very important product, we may wind up covering it using all three formats — as the product progresses from beta to shipping.

Test Drives are unstructured, unscored, short reviews. Standalone reviews and product comparisons follow formal test plans, assign scores relative to those of competing products, and offer the Buyers' Assurance Seal (see page 45) to qualified products.

We'll start with the simplest type of review first, Test Drive, and progress to the more complex standalone Review and Product Comparison formats.

TEST DRIVES

Test Drives are an excellent vehicle for the first-time reviewer. Short, informal looks at shipping or beta products, Test Drives do not require scores or benchmark tests. Test Drives also do not follow any particular format for discussing a product's features. As a result, the reviewer ideally should not have to spend an exhaustive amount of time producing the review. We recognize, however, that complex products will take longer to evaluate, even superficially, than others.

We draw upon both *InfoWorld* in-house staff and Review Board members to write Test Drives. These reviews appear in the same section of *InfoWorld* as the First Look, written by the Executive Editor of Reviews & Testing.

We choose the Test Drive format when:

 we want to cover a hot product more quickly than the scored-review process allows. We want to be the first publication out with some type of review of the product, which may still be in beta testing. a product (a simple but interesting utility, for instance) does
not merit a full-length, scored review. Or, it is such an
unusual product that we have no ready test plan for it, or
we ordinarily do not cover it. For example, every December
the Test Drives section features reviews of games, which
InfoWorld ordinarily does not cover.

When you are assigned to write a Test Drive, you will be asked to turn in two components:

- · The text
- · Screenshots and descriptions

THE TEXT

Test Drives should be lively, concise commentary on the major merits and drawbacks of a product. Try to be entertaining without making capricious remarks at the vendor's expense. At the same time, you should include enough detail to provide useful information to the reader. For instance, you might back up a blanket statement such as, "It has the best interface I've ever seen in a communications package" with a factual comment such as, "I didn't have to dig through layers of menus to find the xx command, as I have with other packages." You should write a Test Drive in first-person in order to convey a sense of hands-on involvement and personal opinion from an experienced user. You have only a very small space in which to accomplish this feat of succinctness — 350 to 500 words, which translates to between 50 and 70 lines in an InfoWorld four-column format.

SCREENSHOTS AND DESCRIPTIONS

We require our reviewers to take their own screenshots of software products. We produce our own art for software reviews because we do not want to duplicate the vendor-supplied art used by other publications and *InfoWorld*'s own News & Views department. If you need screen-capture software (such as Appart or Hijaak), let your editor know.

Take at least three screenshots of the product that depict features you talk about in your Test Drive. Provide a detailed description of what is going on in each screenshot so the editor can write cutlines from it.

Pay: We pay from \$75 to \$125 for Test Drives. We may negotiate to pay more if the product requires programming or network connectivity.

Average turnaround: Due two to four weeks from date of assignment.

STANDALONE REVIEWS

Because *InfoWorld* is the only technical publication in the industry that uses a precise scoring schema, our standalone reviews and product comparisons must follow a specific style and structure. Both reviews and product comparisons are composed of the same basic subsections and are always accompanied by certain components, such as the report card. Both must contain scores (see How We Score, page 42) and must be written to support those scores.

When you are assigned a standalone review, you will be expected to turn in several pieces of work. Those pieces vary slightly depending on whether the review is of software or hardware. Following is a separate discussion of each.

SOFTWARE

You will need to provide:

- the review text itself;
- a product summary;
- screenshots and descriptions; and
- call reports.

The following discusses each component in detail.

THE REVIEW TEXT

The text of a standalone software review runs from about 2,000 to 2,500 words, depending on the complexity of the product.

As the reviewer, you must assign a word score to each scored category. Scores may change pending review by your editor or other members of the team, but you must assign the initial score because you have had the most hands-on experience with the product. It is essential that you follow the test plan when you assign a score and, though you are reviewing only one product, you must take into account the scores that competing products have earned in other *InfoWorld* reviews. If you do not have

access to past issues of *InfoWorld*, ask your editor to send you the pertinent reviews and product comparisons.

Keep in mind that *InfoWorld* reviews software as it is supplied by the publisher to the general public. Though it is fine to try the software using as much memory as possible, you must also run it on the minimum configuration suggested by the manufacturer in order to review it as a typical user might.

Following are descriptions of each part of the review text.

Introduction. 3-4 paragraphs.

The first paragraph should function as an effective lead, presenting the general tone of the review — positive or negative — along with some highlights of the product. Within the first two paragraphs, you should make some mention of what the product does, what machines it runs on or with, and other statements of fact. Always remember that the lead should stimulate the reader to read the rest of the review: Keep the writing tight and the message clear.

Devote the last paragraph of the introduction to explaining which scoring criteria we used to review the product. Also mention the hardware platform used for both tasks and benchmark testing.

Features. 6-8 paragraphs.

This section should summarize the major features of the product. It should be fairly short and concise, discussing any changes to the product (if it is an update) and any differences between the product and its competition. This should be a brief commentary on salient features, not your review of the features themselves — it should set the stage for the judgments that follow. You do not score features.

Performance. 3-6 paragraphs per category subsection.

The number and types of performance category subsections in a review will vary according to the type of product you are reviewing. Unless you are helping to develop the test plan, your editor will give you the report card structure and scoring criteria to follow.

Most performance subsections describe how well the product completes a "task." This means you will write and score a subsection after using the product to perform a specific function. *InfoWorld* is unique for its task-oriented approach. Rather than give products higher scores as they add more

features — the "kitchen sink" method of improving a product — we determine what typical tasks a user would want to accomplish. Extra features in a product may or may not improve the facility with which you can complete a task.

The test plan you follow will describe the task you should perform for each performance subsection and what you should look for. A typical task for a low-end word processor, for instance, might be to create a simple letter document and format it. Products that are easiest to learn and use for the described task earn higher scores than those that might offer more features, yet do little to make the user's job easier.

Keep in mind the type of user for which the product is designed when you are scoring. For example, makers of a language product presume their buyers know the language; makers of a financial analysis package presume a certain level of accounting knowledge. But some programs, such as word processing and nonprogrammable databases, are used by a wide range of people, from knowledgeable to naive.

When assessing ease of use as part of your task scoring, consider how convenient and usable the product is once you've learned it well. Best of all is a product that is easy to use at a casual level for basic tasks, and filled with conveniences and shortcuts for the power user. In any event, there are no excuses for cryptic programs, arcane command structures, or a program that requires extraordinary efforts to complete a task.

The performance subsections are also where you note how well the product recovers from error situations. Pay particular attention to how easily the program lets you accidentally delete or erase information. Programs that automatically save backup copies, periodically save information, and offer "undo" capabilities should get extra points.

If you encounter bugs in the product, report them immediately to your editor. The *InfoWorld* Test Center may want to attempt to verify the bugs by reproducing them. In the meantime, report on the bugs in the appropriate subsection and have your editor check with the vendor for the availibility of patches. It is essential to keep copious notes on error messages and other conditions when you encounter problems so that the editor can fact check these problems with the vendor. If, since you began your review, the vendor has begun to ship an incremental update to the product, we may want to order it so that you can check the veracity of the bug fixes.

All performance subsections, as well as all other scored sections, should conclude with a strong summary statement that balances the pros and cons and justifies the final score. For example: "Because xx made it possible to not only complete our task but gave us more options for printing than any of its competitors, we rate it very good." The summary is the most important part of each subsection. Summary statements should be clearly thought out, persuasive, and convincing. After all, this is the final explanation of why a product received the score it did.

If *InfoWorld* has done benchmark tests for speed on a product, there will also be a performance subsection for speed. You may be given the results to write this subsection, or your editor may write it. Consult your editor.

There may also be a performance subsection called Other Features. This category is a catch-all section for important capabilities we did not get to exercise as part of any task but want to acknowledge and score. You will not have to perform any tasks to score Other Features.

Documentation. 2-3 paragraphs.

This section scores both written and on-line documentation. Ideally, your writeup should be short, unless there is something particularly good or bad about the program's documentation.

InfoWorld puts a great priority on documentation. Effective documentation consists of a tutorial (preferably on-line), a reference guide, and an electronic help facility. Documentation should be readable and instructive without being didactic. Check the general format for easy access to misunderstood areas. Also check the accuracy of the illustrations. Do they represent what you will actually see on the screen?

Documentation should be appropriate to the audience for the product. When the market includes novices, the documentation is under extra pressure to be clear, explicit, and helpful. If the market includes advanced, technically proficient users, the appropriate technical information should be included.

When you discuss specific manuals, use either generic descriptions or the complete, correct names with correct punctuation for each manual — but do not mix the two styles. Be consistent. For instance, you may talk about the users' guide, a quick-start card, the written tutorial, and the reference manual. Or, you may refer to these as the FoxPro Users Guide,

the Quick-Start Guide, Quick Results, and the FoxPro Reference Manual.

Use the following procedure for determining the score for documentation. First, award a base grade, determined by the following considerations:

Excellent: All qualities found in a "Very Good" rating, plus something unusually special. 5 points.

Very Good: Describes the product well; well organized, well written; some extras. 4 points.

Good: Describes the product well; includes some extras. 3 points.

Satisfactory: Describes the product and how to use it; no special features. 2 points.

Poor: Lacks important information in some areas. 1 point.

Unsatisfactory: No useful documentation, lacks vital information, or contains significant errors that make it impossible to use the product. 0 points.

Next, see if the documentation includes any of the following bonus features:

- Quick start guide
- On-line tutorial
- On-line help
- A complete on-line version of the written documentation
- Quick reference card
- Written tutorial
- Technical reference manual (machines only)

Each of these would increase the final score of the documentation by 1/2 point. If any of these features are done poorly or inaccurately, however, you give no points.

Reduce the final grade if the documentation contains any of the faults or omissions listed below:

- Missing minor information (subtract 1/2 for each instance)
- Badly indexed (minus 1)

- No index, but detailed table of contents (minus 1)
- No index or detailed table of contents (minus 1-1/2)

No product may receive an "Excellent" score in documentation if it has any of these deficiencies.

The section should end with a summary statement and a score.

Support policies. 1-2 paragraphs.

In this section, we score the support offered by the vendor, including amount of free support, money-back guarantees, fax or BBS support, and support hours. Traditionally, it has been the job of the *InfoWorld* editor to interview the vendor for support policy information and to write and score this section. Some reviewers, however, prefer to write the section themselves. Discuss this with your editor.

The scoring criteria for software support policies follows.

Start with these points for various situations, listed below:

Unlimited free support	2
Not unlimited, but 90 days or more	1 1/2
Fewer than 90 days of free support	1
Unlimited period, but limited connect time (for example, an hour of free telephone support)	1
No free vendor support (paid only or support available only from dealers)	1/2

Add points for the following from vendors:

Toll-free line	1
Money-back guarantee (of any length)	1
Fax support	1/2
Private BBS support	1/2
Extended support hours (more than 10	1/2

hours a day or hours on the weekend)	
Availability of custom corportate support plans	1/2

A software vendor that does not offer unlimited free telephone support can earn more than a score of satisfactory, but not a score of excellent, no matter how many types of other support it offers.

A software vendor that does not offer any free support at all can score no higher than satisfactory, no matter how many other types of support it offers.

Extra points for fax support, private BBS support, and CompuServe support cannot add up to more than 1 point. (In other words, if a vendor offers all three, it still cannot earn more than 1 point.)

Total your points, then calculate the word score:

5 and above	Excellent	
4-4.99	Very Good	
3.0-3.99	Good	
2.0-2.99	Satisfactory	
1.0-1.99	Poor	
0.0-0.99	Unsatisfactory	

Technical support. 1-2 paragraphs.

You must call the manufacturer for technical support in order to grade the product in this category. Call the manufacturer's support line several times (see instructions on the next page for how to score); if you have any actual problems with the product, now is the time to clear them up. Use a pseudonym to protect your reviewer's position and ensure that the treatment you receive is typical of what any user would receive. If necessary, you can identify yourself as someone who has been asked by your company or client to evaluate the product.

If for some reason you find it difficult to remain anonymous (the technical support personnel recognize your voice from previous contact, for instance, or the vendor requires a registration number), let your editor know. Your editor will arrange for anonymous support or arrange for an *InfoWorld* employee to make the calls.

When you write the technical support section, be explicit as to why you are scoring a product a certain way. If the support was excellent, but having to wait a long time for a call back lowered the score a point, say so. Do not force your editor to use your call reports to reconstruct why you awarded a particular score. Your call reports are strictly for backup in case a vendor wants to know the details of a call.

The scoring criteria for technical support follows. First, rate the quality of the information you receive after completing at least two calls. Then, adjust the score according to how easily you were able to reach support.

Excellent: Technical staffers go above and beyond the call of duty. They do everything required for "Very Good" and more. Examples of extra effort: Technicians offer fixes or workarounds; offer to send patches; after answering questions correctly, they call back later with yet more helpful information or to see if the suggestion worked; are willing to spend as much time with you as necessary to get your questions answered; tackle particularly difficult aspects of the product. 5 points.

Very Good: Requires everything for "Good", plus willingness to offer extra hints. 4 points.

Good: Technical staffers know the product, answer questions correctly, and are courteous and helpful. 3 points.

Satisfactory: Technical staffers know the product and answer questions adequately. 2 points.

Poor: Technical staffers are either less than completely knowledgeable or less than completely helpful. 1 point.

Unsatisfactory: No help at all. 0 points.

Subtract points for the following:

Time on hold

More than three minutes	1/2
Up to 10 minutes	1

More than 10 minutes, hang up and consider the call an incomplete.

Callbacks

- It takes more than one hour to return your call-1/2
- It takes more than four business hours to return your call .-1

Automatic scores

Award a score of *poor* if the following happens:

It takes more than eight business hours to return your call.

Award a score of *unacceptable* under the following circumstances:

- You cannot get through to speak to a technician or to leave a message after repeatedly attempting to reach the vendor over a period of one day. We define "repeatedly" as calling at least once an hour. We define not being able to get through as always reaching a busy signal or having to wait on hold more than 10 minutes.
- It takes more than two business days to return your call, or you never receive a call back.

Value. 4-5 paragraphs.

The value section should serve both as a concise summary of the review and as a way of positioning the product against its competition in terms of price. The bottom line is a price/performance judgment. You should mention the names and prices of a product's major competitors — if you don't have that information, have your editor get it for you. In general, a product that costs the same as its competitors and offers the same performance is a satisfactory value.

Extra points accrue from better performance or lower prices. However, note that even a product with a very low price is not a satisfactory value if the performance isn't satisfactory. And even an excellent performer is not an excellent value if the price is very high, relative to its competition. Consider the product's main market when judging value.

Don't try to press the value judgment too hard. The value score is an opportunity to note whether, broadly speaking, the product is fairly priced for what it does in its market. It also lets

you give a bonus for special bargains or subtract points for products that are clearly priced unrealistically.

Another problem is one-of-a-kind products. Because there is nothing with which to compare, consider factors such as alternative methods of getting work done, the inherent value of the work being performed, and how widely applicable the product's function is. A narrow product of great value to a handful of people won't score as high as a product of great value to virtually every computer user. Basically, if they could have charged a lot more and still had a hit, it's a bargain and earns a high score in value.

Prices drop steadily, so a good value last year may not still be a good value this year. Judge product value against *current* prices; if this results in a discrepancy compared with previous reviews, explain it. (For example, "Since we awarded this product an excellent in value last year, all its competitors have cut their prices severely, but this vendor has not changed its prices. You can now get similar quality products for similar prices, so we now rate value satisfactory.)

For software, we use manufacturers' list prices for comparing products and rating values. We are beginning to use street prices for some hardware reviews.

As with all other sections, Value should end with a summary statement and a score.

PRODUCT SUMMARY

With each review we publish a product summary box. You must provide company, price, and system requirements information, briefly sum up the pros and cons of the product, and write a summary sentence.

Pros and cons should hit the highlights of the review. The summary sentence should offer in a nutshell our take on the product without repeating pro or con information.

Following is an example of what you should write, including correct style and formatting:

Company: WordPerfect, in Orem, Utah, is at (801) 225-5000; fax; (801) 222-5077.

List price: \$495 for full package; upgrade \$129; competitive upgrade \$149.

Requirements: Intel 80286 or compatible (386 recommended); DOS 3.1 necessary for full functions (DOS 6.0 recommended); VGA or better; 16MB disk space (7MB minimum); 520KB minimum RAM (extended or expanded memory recommended).

Pros: Flexible outliner; wide selection of templates; above-average documentation.

Cons: Substantial hardware investment; complex.

Summary: Newly designed with a fine user interface, WordPerfect 6.0 is the best in its class.

SCREENSHOTS AND DESCRIPTIONS

As with Test Drives, we require our reviewers to take their own screenshots of software products. We produce our own reviews art because we do not want to duplicate the vendor-supplied art used by other publications and *InfoWorld*'s own News department. If you need screen-capture software (such as Appart or Hijaak), let your editor know.

Take at least three screenshots of the product that depict features you talk about in your review. Provide a detailed description of what is going on in each screenshot so the editor can write a cutline from it.

CALL REPORTS

When you send in your review, you must send in at the same time a copy of your Technical Support call reports (see Appendix C). Having a copy of this information enables your editor to back up your technical support score with details about the calls, should the vendor ask.

HARDWARE

Although *InfoWorld* technicians write most of our hardware reviews, including all desktop computers, we occasionally make an outside assignment.

The components of a hardware review assignment are similar to those of software. The review text tends to be shorter. Also, we generally use either vendors' slide art or take our own photographs of hardware, so the reviewer is not responsible for providing any artwork. Your editor may assign technical support scores based on *InfoWorld* reader surveys, in which case you will not have to make anonymous technical support

calls, either. If you must make calls, refer to the technical support and call report descriptions for software reviews.

Therefore, for your hardware review assignment, you need to provide:

- · the review text itself; and
- a product summary.

THE REVIEW TEXT

The text of a standalone hardware review runs from about 1,250 to 1,500 words, depending on the complexity of the product. As with software, though you are reviewing only one product, you must take into consideration competing products when you assign scores and discuss features. Follow the test plan closely.

Introduction. 3-4 paragraphs.

As with software, the first paragraph should function as an effective lead, presenting the general tone of the review — positive or negative — along with some highlights of the product. The lead should catch the interest of the reader and hold it.

Devote the last paragraph of the introduction to explaining which scoring criteria we used to review the product.

Features. 3-4 paragraphs.

As with software, this section should summarize the major features of the product compared to the competition. It should be a brief commentary on salient features, not your review of the features themselves — it should set the stage for the judgments that follow. You do not score features.

Performance. 2-3 paragraphs per category subsection.

Ordinarily, there will be no "tasks" to perform with hardware; performance will consist mostly of benchmark tests. You may be given the results to write the subsections, or your editor may write them. Consult your editor.

Documentation. 2-3 paragraphs.

The instructions for scoring software documentation generally applies to hardware as well. You should not look for on-line help or written tutorials, however. Rather, you will want to check for clear setup instructions and how well the manual is

written specifically for the hardware at hand. (Vendors are notorious for using one manual for several pieces of equipment.)

The section should end with a summary statement and a score.

Setup. 2-3 paragraphs.

This section talks about how easy it is to get the hardware up and running. This may include following the directions, adding any optional parts, etc. Documentation can seriously affect this score: this section should discuss any ways a user could misinterpret the documentation and cause serious problems. For a single machine or add-in board, a setup time of 30 minutes or more is considered unacceptable; a complex network might take longer.

Though your editor may slightly customize the setup criteria to fit a particular type of hardware, in general you should score as follows:

Excellent: Tops in its class; we don't know how the hardware could be made easier to set up. It can be installed in a single, short session, including configuration to the user's specific system or needs; it requires no special skills or knowledge of the user; and it includes complete instructions on installation. Ideally, the product should be self installing. If not, it should include a program or tutorial that guides the user through the process of verifying that all steps have been properly completed.

Very Good: Easy to set up, with many significant advantages (as outlined above). Not quite an Excellent, but no significant shortcomings. Superior to most of its competitors.

Good: Still fairly easy to set up, with some advantages (though not enough to earn a Very Good, or balanced with some less significant negative points).

Satisfactory: The product can be set up, but doesn't provide anything special to make it easier.

Poor: Problems in the design of the system or in the instructions make it difficult to set up.

Unacceptable: The equipment cannot be set up with the instructions provided by the vendor or design flaws allow possible damage to equipment during the setup.

End this section with a summary statement and a score.

Serviceability.

Serviceability serves as the umbrella section heading for Workmanship, Support Policies, and Technical Support.

Workmanship. 1-2 paragraphs.

The following guidelines should be used for scoring workmanship:

Excellent: Extremely well built; no patch wires on printed circuit boards; no problems. As well built as its best-built competitor.

Very Good: Well built; no or very few patch wires; no problems.

Good: Well built; any problems encountered are minor.

Satisfactory: Adequately built; should continue working.

Poor: Substantial problems.

Unacceptable: Unlikely to last.

Support policies. 1-2 paragraphs.

In this section, we score the vendor's support policies for its hardware. Discuss with your editor which of you will write this section. (See software support policies for full explanation.)

The scoring criteria for hardware support policies follows.

Start with these points for various situations, listed below:

Unlimited free support and 1-year warranty	2
Dealer support only (no free telephone support from vendor)	1
Warranty of less than a year, but 90 days or greater	Automatic score of Poor
Warranty of fewer than 90 days	Automatic score of Unaccept- able

No free vendor support (paid only or support available only from dealers)	1/2

Add points for the following from vendors:

Toll-free line	1
Money-back guarantee (of any length)	1
Fax support	1/2
Private BBS support	1/2
CompuServe support	1/2
Extended support hours (more than 10 hours a day or on weekends)	1/2
Two-year warranty	1
Three-year warranty	1 1/2
Free on-site support for more than 30 days	1
Vendor ships replacement parts within 24 hours	1/2

A hardware vendor that does not offer unlimited free telephone support and a 1-year warranty can earn more than a score of satisfactory, but not a score of excellent, no matter how many types of other support it offers.

A vendor that does not offer any free support at all can score no higher than satisfactory, no matter how many other types of support it offers.

Extra points for fax support, private BBS support, and CompuServe support cannot add up to more than 1 point. (In other words, if a vendor offers all three, it still cannot earn more than 1 point.)

Total your points, then calculate the word score:

5 and above	Excellent	
4-4.99	Very Good	
3.0-3.99	Good	
2.0-2.99	Satisfactory	
1.0-1.99	Poor	
0.0-0.99	Unsatisfactory	

Technical support. 1-2 paragraphs.

See the technical support description for software.

Value. 4-5 paragraphs.

See the Value description for software.

PRODUCT SUMMARY

Product summary boxes also accompany hardware reviews. You must provide company, price, and system requirements information, and briefly sum up the pros and cons of the product. You must also write a summary sentence.

Pros and cons should hit the highlights of the review. The summary sentence should offer in a nutshell our take on the product without repeating pro or con information.

The components of hardware product summaries and their style vary among types of hardware. Ask your editor to provide you with a sample.

Pay: We pay \$425 for a standalone software or hardware Review.

Average turnaround: Due four to six weeks from date of assignment.

PRODUCT COMPARISONS

In general, product comparisons are treated as a set of comparative reviews; the same basic criteria and standards that apply to standalone reviews also apply to comparisons. For each product, make sure you have received the most current version available, as well as any marketing material; evaluate the product according to *InfoWorld* standards; and make technical support calls and fill out the technical support call report forms.

You will be assigned a number of products, chosen to be a cross-section within a particular product category (high-end word processors, for example). You are expected to summarize the highlights of each product, and to compare and contrast. You will be expected to read other *InfoWorld* reviews or product comparisons, written by you or other reviewers, in order to ensure consistency.

Product comparisons are the most challenging of InfoWorld reviews. A comparison of six products, for instance, increases the amount of work done for a standalone review more than sixfold. In addition, there are other components, particular to comparisons, that you must provide. You must give yourself plenty of time to evaluate and write; the job will take longer than you think, if for no other reason than it is exacting work to compare multiple products and fairly assign scores. Although how quickly you can complete a comparison depends on how much time you have each day to devote to it, try to arrange with your editor a review period of at least six weeks to evaluate four products. Remember that although your editor fact checks the comparison before it is published, you are ultimately responsible for your work. You must be ready to defend your scores and the reasoning you used to arrive at them, so take pains to evaluate the products consistently.

Though you will no doubt discover what works best for you, we recommend the following in pulling together the pieces of your comparison:

- As you begin using the products, take notes not only on how they complete tasks, but on the documentation as you use it.
- Do not leave doing technical support calls to the last minute. Start the process at the beginning of your review period so you will have given vendors plenty of time to

respond to calls and yourself enough time to make followup calls if necessary.

- Fact check with the vendor anything you are not sure about, particularly if it involves bugs or features that would affect a score. Though your editor will fact check after you, do not depend on this process to fill in holes.
- If you need help with anything or have questions, contact your editor or other designated *InfoWorld* team member.
 Do not leave problems until the last when it may be too late to solve them
- If you anticipate problems making your deadline, let your editor know immediately.

InfoWorld uses two basic formats for product comparisons — side-by-side and linear. Both have the same basic components; the main difference is in how you should structure the files you turn in to your editor. The side-by-side format covers the report card by product; with linear, you create the comparison by category.

Currently, we use the side-by-side format the most, so we will describe it first

SIDE-BY-SIDE FORMAT

When you are assigned to write a side-by-side product comparison, you will be expected to turn in the following separate components:

- An introduction.
- Separate reviews for each product in the comparison, each following the same report card structure, and ending with vendor information.
- A summary column.
- How-we-test sidebar.
- An executive summary.
- Screenshots and descriptions.
- Call reports for each product.
- Sidebars, at your editor's discretion.
- Calculated final report card scores, at your discretion (see How We Score, page 42).

INTRODUCTION

The introduction should set the stage for the product comparison. Make your lead paragraph interesting and snappy. Give a brief overview of the product category and offer some insight into what makes it timely to review this particular set of products. Name the products you are reviewing and their manufacturers within the first few paragraphs.

If it is the first time we are reviewing a particular type of product, you will want to explain what the software does and how it competes against similar products.

Touch on any important, "big-picture" findings the evaluation has unearthed — for example, the products reviewed are not suitable for a particular task, even though they are widely touted to be. Do not go into detail, however, on the performance of the products you are reviewing; save this information for the executive summary and the reviews themselves.

If you are doing a hardware comparison, your editor may ask you to write an intro that includes a "What We Found" section. Hardware comparisons typically do not feature separate, text product reviews, as software product comparisons do. Instead, product highlights (one or two sentences) are usually covered in an expanded report card format. The What We Found section supplements this report card information with an overview of products' performance. Essentially a type of summary column, the What We Found section provides more detail about each scoring category and how each product distinguished itself.

At the end of your introduction, write a short (two or three sentences) biography of yourself, including your current position and years of experience with the type of products you are reviewing, and any other pertinent background information.

500 to 1,000 words.

SEPARATE PRODUCT REVIEWS

For each product in the comparison you must write a separate review, using the same categories and report card structure for each writeup. These comparison reviews are almost identical in structure and length to a standalone review. Each comparison review should contain: an Introduction, Performance subcategories, Documentation, Support Policies, Technical Support, and Value. (See the descriptions for each of these sections under Standalone Reviews, page 18.)

In a comparison review, there is no Features subsection and the Introduction takes a slightly different tone. In the introduction, you need not mention scoring criteria and you can be a little less introductory and a little more casual. The goal is to briefly introduce the product and provide any information that doesn't fit elsewhere, such as other platforms the product works on or the availability of higher-end versions from the vendor.

It isn't necessary to make detailed comparisons to the other products or spend too many words justifying the scores inside the individual subsections of any one review — that is what the summary column is for. Though it is fine to mention other products in passing, you should devote the review sections to the performance of one product only. End each scored section with the score, in this format:

Score: Good

It is *essential* that you apply the scoring criteria exactly the same to each product. Otherwise, you will create inconsistencies in scoring. Even if you have scored fairly and you know why you have given a product a particular score, if you don't cover the same ground in the text for each product, the scores will not seem fair. If you mention a special capability in one product, you must also mention it in the writeups of any of the other products that have it. For instance, if one CAD package gets extra points for having a preview feature, any others in the comparison that also have that capability must receive the same recognition.

Some reviewers find it helpful to create a spreadsheet of product features and capabilities to refer to while writing. This helps them keep track of what they are looking for and scoring by in each product.

Try to write each of the reviews (including their subsections) to about the same length. End each product file with the name of the vendor, its location, and its telephone number for product inquiries. For example: Computer Business Systems, located in Austin, Texas, can be reached at (512) 883-2594.

2,000 to 2,400 words per separate product review

SUMMARY COLUMN

In this file, you should explain exactly why the products' scores in each category stacked up as they did. Provide a brief overview of how each product earned its score in each subsection, highlighting similarities and major differences as you go. For instance, the summary section for a comparison's Support Policies category might read:

"XX provided the best support policies, including a money-back guarantee for the life of the product and a weekend support staff. Xx had the second best set of policies, featuring fax and BBS support. Xx and Xx tied (for a score of good); each has its own CompuServe forum.

"Xx was the only vendor who made custom support plans available, but its limits on connect time brought its score down a notch to satisfactory. All of the vendors provided unlimited free support, but none offered a toll-free line."

Though you should summarize as much as possible, try to keep the length of a summary section fairly close to the lengths of the corresponding subsections in the product reviews. The summary section should never be more than a few lines longer than the corresponding subsections. The better matched across products and summary a subsection is, the fewer lines your editor will have to cut to get the subsections to lay out evenly.

1,800 to 2,000 words

HOW WE TEST

If you are working from an existing test plan, the how-we-test sidebar may be completed already. Your editor will provide you with a copy. If you are helping to develop tests or criteria for the comparison, however, you will need to write the how-we-test yourself, possibly with some help from your editor or an *InfoWorld* test developer. (See page 50 concerning test development.)

The lead for the how-we-test sidebar should draw the reader in with one or two brief observations about what we found in reviewing the products in the comparison. Within the first few paragraphs you should also state what our test platforms were, both yours and any that the *InfoWorld* Test Center used.

Then, subsection by subsection, you should state what the criteria are for scoring each category. Be specific. You should define what a product had to do in order to score satisfactory

and what earned extra points. If possible, specify how a product could earn each score above satisfactory.

For example, a product might earn a score of satisfactory in the category of Input and Output by supporting a certain minimum number of file formats. It could then earn a score of good for supporting a certain number of extra formats, very good for other additional formats, and so on.

Expect a lot from the products, but be realistic; develop criteria that give the products a fair chance at scoring well. For example, if a product does an overall outstanding job of completing a task, but does not meet one criterion you have set for a score of satisfactory, you should probably rethink your criteria so that the product does not receive a poor.

Write the how-we-test sidebar in past tense. For instance, do not say: "To receive a score of satisfactory for creating memos, products have to provide hyphenation and pagination. We also give bonuses for headers and footers." Say instead: "To receive a score of satisfactory for creating memos, a product had to provide hyphenation and pagination. We gave bonuses for headers and footers."

The criteria for Documentation, Support Policies, Technical Support, and Value remain the same for each product comparison. You or your editor can pick up the boilerplate information for these categories.

1,500 to 1,700 words

EXECUTIVE SUMMARY

The Executive Summary sets out our conclusions about the products in the comparison. Which was the best overall? The poorest value? Draw real conclusions.

You will often find that one product is the best for one particular type of use; another better suited for a somewhat different use. This is the place to say so. However, you shouldn't end with a waffling statement such as, "There is something nice about each of these packages." Instead, state definite conclusions. Ask yourself, "Which product is the best for which type of user?"

It is important that this section reflect the report card scores; you should discuss the products in order of their final score, from top to bottom.

500 words or less

SCREENSHOTS AND DESCRIPTIONS

As with Standalone Reviews and Test Drives, we require our reviewers to take their own screenshots of comparison products. We produce our own reviews art because we do not want to duplicate the vendor-supplied art used by other publications and *InfoWorld*'s own News department. If you need screen-capture software (such as Appart or Hijaak), let your editor know.

Take at least three screenshots of each product. Show features or capabilities that you talk about in the comparison. Provide a detailed description of what is going on in each screenshot so your editor can write a cutline from it.

CALL REPORTS

When you send in your review, you must send in at the same time a copy of your Technical Support call reports (see Appendix C). Having a copy of this information enables your editor to back up your technical support score with details about the calls, should the vendor ask.

SIDEBARS

Your editor may assign you to write one or more sidebars to accompany the product comparison. Sidebars may cover products that did not ship in time to be included in the comparison. They may be technical tutorials that expand the reader's knowledge of that product category. If the product category is a new one or especially arcane, a glossary may be useful. "Notes from the field" types of sidebars also provide valuable insight into test results.

If you have any ideas for sidebars, let your editor know.

500 to 750 words per sidebar.

LINEAR FORMAT

Product comparisons written in the linear format contain the same basic pieces, but in a slightly different structure. Instead of having separate product reviews and a separate summary column, you will structure the comparison by scoring category.

InfoWorld developed the linear design to accommodate comparisons that cover a large number of products or are scored in a way that makes the side-by-side format difficult to use.

When you are assigned to write a linear product comparison, you will be expected to turn in the following separate components:

- An introduction.
- How-we-test sidebar.
- An executive summary.
- Screenshots and descriptions.
- Call reports for each product.
- Sidebars, at your editor's discretion.
- Calculated final report card scores, at your discretion.
- Separate files for each scoring category.

To prepare all but the last component, follow the directions in the Side-by-Side Format section.

To prepare the category files, you should combine the writeups for each product for a particular category into one file, along with the products' scores and the summary information for that category. Each file should follow this format: scores listed at the top for each product, then the summary information, then the category writeups by product.

It is the same information you would provide in the Side-by-Side format, only structured differently so that we can pour the text linearly into columns, rather than lay it out side-by-side.

Pay: We pay \$1,500 for product comparisons.

Average turnaround: Due eight to 10 weeks from date of assignment.

HOW WE SCORE

InfoWorld awards scores to products we review in the standalone and comparison formats. We do not award scores in Test Drives. We usually award scores in several different performance categories, as well as in our standing categories of documentation, support, and value.

In the majority of reviews, we use subjective word scores. In some hardware reviews, such as desktop PCs, we also use mathematically-derived numerical scores.

Word scores

As the reviewer, you are required to provide a word score for each performance category except support policies (usually the editor's job). During the editing process, the grades you suggest may need revisions in order to correspond with previous reviews and with tests made by the *InfoWorld* Test Center. The editor will make every effort to contact you about any substantive changes in the content of the review or grades prior to publication.

The six word scores we use are Excellent, Very Good, Good, Satisfactory, Poor, and Unacceptable. Use these words only for scores; do not use them elsewhere in the text to describe a product's performance or the reader will be confused. In very general terms, they mean:

Excellent: Tops in its class. The product offers special benefits, and then some.

Very Good: Meets all essential criteria and offers significant advantages. More than merely good, this product is one of the better ones in its class

Good: Meets all standard criteria and includes some special features.

Satisfactory: Meets essential criteria (in other words, it does everything you expect it to do, nothing more).

Poor: Falls short in essential areas. Unacceptable: Fails to meet minimum standards.

When you write a review or product comparison, you will be provided with the specific criteria that a product must meet for earning each of these word scores in various categories. For instance, for a data compression product to receive a score of satisfactory for the performance category of Removal, it must be capable of removing itself without requiring a backup-and-restore cycle. (See September 13, 1993 product comparison.)

If we decide to update a test plan, we may institute new criteria (or even new performance categories) for a particular type of software or hardware in order to stay current with industry trends and expectations. Criteria for our standard categories, however (documentation, support, value), remain fairly static.

Each word score has an associated percentage (see below). We multiply the percentage by the weighting we have assigned to that scoring category. (Weightings vary from one report card to the next, but always add up to 1,000. We usually choose weightings based on the results of a survey of *InfoWorld* readers.)

To arrive at the final numerical score (a number between 0.0 and 10.0), we add up the numbers from each scoring category, divide them by 100, and round down to one decimal place. A product that scored excellent in every category, for example, would receive a final score of 10. A product that rated satisfactory in every category would receive a final score of 5.

The percentages associated with word scores are as follows:

Excellent = 1.0

Very Good = 0.75

Good = 0.625

Satisfactory = 0.5

Poor = 0.25

Unacceptable or NA = 0.0

We award an NA when a product does not have a feature and does not claim to implement it.

Mathematically derived numerical scores

Our other basic method of scoring is to assign mathematically derived numbers. Essentially, we eliminate the "middleman" — word scores — and go straight to the weightings. Typically, the best performer receives the full weighting, which is shown on

the report card instead of a word score. All others receive a percentage of the weighting based on their performance. For instance, the least expensive desktop in a comparison would receive the full weighting for the Price category. All other products would receive a percentage of the weighting based on their more expensive prices. To calculate their numerical scores for Price, we would divide the lowest number (the least expensive price) by the higher numbers (the higher prices) and multiply the weighting by the resulting percentages.

So far, we have implemented this type of scoring only for hardware reviews because it is typically easier to quantify results, such as benchmark tests and price. (For instance, hardware, unlike software, usually lists for only one price, which means we do not have to factor in upgrade or multiuser pricing.) We may gradually institute this type of scoring wherever possible in software reviews as well, however. Mathematically derived numbers are a fairer way of scoring because they eliminate the subjectivity and point spread inherent with word scores.

What the final score means

In general, the final scores for all reviews and product comparisons are equivalent to an overall rating for the product, as follows:

9.0-10.0	Excellent
7.0-8.9	Very Good
6.0-6.9	Good
5.0-5.9	Satisfactory
3~0-4.9	Poor
Below 3.0	Unacceptable

Though you are not required to build a report card and calculate final scores as a part of your assignment, you may find it helpful to do so anyway. Knowing the final score comes in particularly handy in a product comparison because it helps you get a feel for how to discuss products in the executive summary.

INFOWORLD SCORING TRADEMARKS

Buyers' Assurance Seal

Products receive the *InfoWorld* Buyers' Assurance Seal (BAS) if they earn satisfactory or higher scores in all categories and sign a contract with *InfoWorld* agreeing to certain repair/replacement or money-back terms. Products that receive NAs can also qualify. A product that satisfies *InfoWorld*'s contract criteria and also earns a final score of at least 8.0 receives a "recommended" BAS.

When a comparison uses mathematically determined number scores in some scoring categories, *InfoWorld* determines on a comparison-by-comparison basis at which point a number qualifies as "satisfactory" and is thus eligible for the BAS.

SYSMark

Used by *InfoWorld* to test PCs, SYSMark is a product of the Business Applications Programming Corp. (BAPCo), an industry consortium of hardware and software vendors and trade publications and test labs. *InfoWorld* is a founding member of BAPCo, and several *InfoWorld* Reviews & Testing personnel sit on BAPCo committees, which debate and design standardized testing for software and hardware.

SYSMark grew out of *InfoWorld*'s earlier work with automated applications-based PC benchmarks. SYSMark '92, released in summer 1992, comprises six application categories and includes 11 DOS and Windows programs. Using SYSMark92 reveals PC systems' varying speeds in performing a variety of typical routines in common business applications.

BAPCo updates SYSMark annually and plans to release a SYSMark93 for Servers, which will include five DOS and five Windows applications running on any of three servers: Novell NetWare 3.11 (and 4.x); IBM LAN Server 3.0; and DEC Pathworks

VidMark

Together with Binar Graphics, InfoWorld created VidMark 1.0 to meet readers' needs for a benchmark test that accurately

portrays real-world video performance and isn't subject to artificial inflation that results from adding benchmark-specific code to video drivers.

VidMark measures how much time a test system equipped with a particular video card spends performing video operations while executing typical tests in the most popular Windows 3.1 applications.

REVIEWER'S GENERAL CHECKLIST

Before you start writing, you should follow the steps below so that you can create the most comprehensive and authoritative review possible. These apply to standalone reviews as well as product comparisons.

- 1. Know the market. When you are selected to do a review, we believe you already know a great deal about the market for that product, including its competition. Do your research and stay current. Check with your editor to make sure you have the latest versions of products.
- 2. Read the marketing literature. Your editor should have supplied you with product literature detailing facts required in the review. If you didn't receive this material, ask.
- 3. Read related reviews. It is essential that your review be consistent with *InfoWorld*'s previous reviews, including those of earlier versions of the product and competing hardware or software. As part of your preparation for writing a review, you should read related reviews. This includes reviews of earlier versions of the product and of competing products. This does not mean you can't come to a different conclusion; it does mean you must note and justify your position. The market does change, so some positions taken in older reviews will undoubtedly change, too. (For instance, rules in e-mail packages were only recently a rare capability that earned extra points; now we require an e-mail product to have rules in order to earn a score of satisfactory.)

If you do not have access to back issues of *InfoWorld*, have your editor mail you the issues that contain pertinent reviews.

- 4. Make sure you and your editor agree on the version number being tested. Get this information from your editor before writing. Also make sure you have received a deadline and pricing information, including multiuser, if applicable.
- **5.** Use an active, concise writing style. Read previous reviews *InfoWorld* has published to acquire an idea of our style, format, etc. Be succinct and precise; consider that you will be held responsible for justifying your position.

When writing, avoid using passive voice. Use the active voice unless it isn't practical. For instance, rather than say, "The menus were found to be easy to use" or "Three ways of inputting data were looked at," say "The menus were easy to use" and "We looked at three ways of entering data."

Use the second person when referring to the reader or user, unless this is ambiguous (e.g., when there are two different segments of potential buyers) or unless the product is one that will clearly be purchased by our readers for use by others.

When you need to use a first-person pronoun in a standalone review or product comparison, use the nominative-case "we" instead of "I." This helps contribute to the unified, consistent approach *InfoWorld* takes in presenting information. In Test Drives, a more informal type of review, you may use "I."

Be conscious of being too technical: our audience generally is not comprised of programmers and scientists — it is mainly businesspeople trying to make a buying judgment. Concentrate instead on the product's usefulness and quality.

To ensure that your review is no longer than necessary, be concise. In other words, forget the long exposition and get right into the product, discussing its features and how it compares to similar packages. Avoid giving the reader obvious advice.

6. Practice accuracy. Just as with any news story in the newspaper, our reviews must be properly researched and must convey supportable facts. It is incumbent on the reviewer to ascertain that the information in a review is accurate and verifiable. In addition to the documentation that comes with the product, you should receive from your InfoWorld editor marketing literature and details such as hardware or software requirements, suggested price, and so on. Other information will have to be gathered by your own tests, tests performed by the InfoWorld Test Center, and by calling the vendor. You are personally responsible for the facts presented in your review.

We also require that you keep a notebook in which you record all pertinent information while preparing your review. Note in particular any out-of-the-ordinary occurrences, strange error messages, and the times, dates, and circumstances under which you encountered problems. This will help our Test Center to recreate problems, and acts as a reference should the company dispute a point or should your *InfoWorld* editor need further clarification.

In addition, you should be knowledgeable and current on the features of competing products and the market for which the products you review are aimed. This lets you make appropriate comparative judgments and places your review in a larger context.

In case of any questions regarding potential sources, checking facts, or simply some direction in developing research techniques, call your editor.

- 7. Discuss issues with your editor before writing. Be sure to remain in touch with your assigned editor it lets us solve problems quickly and makes writing the review a much simpler process.
- 8. Meet deadlines. InfoWorld is a weekly newspaper; therefore, deadlines are tight. This is due to our commitment to timely coverage and to giving people the earliest possible knowledge of a new computer product. Thus, reviewers are given a firm deadline date usually two to four weeks from assignment so we can meet our goal of being the first to publish a review on the final production version of the product.

Because we do not keep a large backlog of reviews, the completed review must be in the hands of your *InfoWorld* editor by the determined deadline. Failure to meet the deadline causes us many scheduling problems and may result in you forfeiting payment and losing your position on the Review Board. Unless prior arrangements are made, we will expect the deadline to be met.

9. Final checks. Before you turn in your article, remember to: finish and document technical support calls; incorporate lab report, if any; make screenshots; check outstanding questions with vendor

DEVELOPING TEST PLANS

In order to justify our scores and to prevent our overlooking key elements of products, we use detailed test plans for product comparisons and standalone reviews. By using extensive, written test plans that reflect users' concerns, we help mitigate the unavoidable subjectivity in evaluations and better serve our readers. We also help protect ourselves against complaints from readers or vendors that our critiques are random or unfair.

We contract with some reviewers to not only write a product comparison but to develop tests for it as well. These reviewers are cream-of-the-crop experts in the product category, often consultants or corporate users who have extensive knowledge of the particular hardware or software.

Reviewers who develop tests for us may share development chores with the *InfoWorld* lab or they may be assigned to create all the tests for a comparison. Typically, the *InfoWorld* lab will take responsibility for developing and conducting tests that involve quantifying speed, and the test-developing reviewer will write a performance test plan for evaluating all other, more subjective aspects of the products. *InfoWorld* conducts the speed tests on site, to ensure future platform consistency; the reviewer uses his test plan to evaluate other aspects of the product, off-site.

When you develop tests, you enter into *InfoWorld*'s product comparison work cycle at the planning stages. You help create the comparison from the ground up. Rather than an editor supplying you with a test plan from which to work, you create your own criteria, under the guidance of the *InfoWorld* lab and your editor.

We typically rely on a reader survey to tell us which products in a category to order for a comparison. In most cases, however, your editor can send you at least one or two products that we expect to be in the comparison so that you can begin your test development work as early as possible. Work on an *InfoWorld* comparison begins five months before the publication date. Following is a synopsis of the schedule from the test developer/reviewer's point of view:

Week 1: Planning meeting. The team discusses delegation of comparison tasks, including test development. Test developer/reviewer may be requested to participate via conference call.

Week 6: Test plan "reality check." The team meets to assess the progress of the test plan and determine the testing phase milestones, including test plan review date and start test date. Test plan development should be substantially underway. If not, the team determines the appropriate remedial action.

Following test plan completion: Test plan review. The team and reviewer do a thorough review of the test plan. The goals: to address any incomplete portions of the plan, review scoring criteria, discuss the comments of the outside technical reader, and ensure that the division of responsibilities is clear to everyone.

5 weeks prior to publication: Test results review. The team and test developer evaluate the data generated by testing. The goals: to catch errors and inconsistencies and to determine whether any additional testing is required beyond that already planned.

4 weeks prior to publication: Comparison text due to editor.

What test developers can expect from InfoWorld

Deliverables. Your team will work with you to clearly identify the portions of the testing and writing for which you are responsible.

Deadlines. The team will provide you with a complete list of the comparison deadlines and keep you updated on any changes.

Contact person. One of the team members will be designated as your primary contact person, who can provide you with information about the comparison and help you with problems concerning resources, vendor contacts, etc.

Meetings. Your team will keep you informed of meetings in which your participation (usually by speaker phone) is important. When your schedule doesn't allow you to participate, you'll be briefed soon afterward by your contact.

The test developer's responsibilities

Deadline awareness. When you think you may have a problem meeting a deadline, let your team contact know immediately. Otherwise, the project will be assumed to be on schedule.

Accessibility. There will be times when your team needs fast and reliable access to you. The team will work with you to decide the best (and least intrusive to you) method of communication.

PAYMENT AND WORD COUNTS

Our pay scale is:

Standalone hardware or software review: \$425

Product Comparison: \$1,500

Test Drive: \$75 to 125

Test development: \$1,800 (may vary).

We pay within six weeks (usually four) of publication. All reviews and product comparisons include a byline and short biography. We pay the full fee for an accepted article not published. We pay a kill fee of half the promised fee for an assigned article that is not accepted. We will reimburse reviewers for reasonable expenses (i.e. long-distance telephone charges) incurred in the course of writing the review.

Lengths

Depending on the product and space we have available, your editor may assign you to write to a slightly different length than those listed below. The review of a product whose report card has many performance categories will be longer. A particularly negative review may run shorter, on the assumption that readers spend less time reading a bad review than a positive one.

In the case of an exceptionally complicated product, we will open up more space, if warranted. If you believe your review will run long, please discuss this with the assigned editor in advance.

For word counts per review section or product comparison component, please see descriptions of Standalone Reviews and Product Comparisons.

Test Drive: 350-500 words

Standalone software review: 2,000 to 2,500 words Standalone hardware review: 1,250 to 1,500 words

Average software product comparison (four products and one sidebar): 12,000 to 13,000 words

HOW TO SUBMIT YOUR WORK

There are several ways you can send in a completed review. The Reviews & Testing department operates its own bulletin board service (BBS). We use Wildcat, and the number is (415) 358-1252. Parameters are 2400 baud, 8 data bits, no parity, and one stop bit.

You may also be able to communicate with your team via CompuServe, MCI Mail, or Internet.

If you review for us frequently, you may find it worthwhile to install cc:Mail, *InfoWorld*'s e-mail system of choice. *InfoWorld*'s Systems department will provide you with a copy of the remote version. Finally, we can always accept material on a mailed-in disk, though few reviewers choose this less expedient method.

APPENDIX C

TECHNICAL SUPPORT CALL FORM

You are required to make a minimum of two completed calls to technical support, if all goes perfectly well. If there are any problems, make at least 2 more completed calls for a total of 4 (you may have to make more to resolve problems to conclusion). If unable to reach tech support the required number of times, or problems are not resolved satisfactorily, advise your editor.

For each call, fill out Call Report including: Product, Date, Time of call (including incomplete calls), Phone number used, name you used, name of technician(s) with whom you spoke (full name if possible). Subject of call, the results; if there are any problems or criticisms, be detailed about results, problems, advice given. If follow-up call is needed, list results of follow-up.

This report may be submitted on paper, or sent electronically appended to the end of review, in either case following the format of the attached Call Report form. Accurate and timely maintenance of this form is a requirement for each review or product comparison.

Below is your technical support call form. Duplicate as necessary.

Phone number:

Date: Time: Time:

Name you used:

Name of technician:

Vendor and product:

Subject:

Results:

Follow-up results if needed: