

All CAT Systems are Not Alike

Advertising can make it seem that all Computer-Assisted Transcription systems are alike and that only price matters.

In fact, most CAT programs are passive systems which only match steno with English and leave to reporters the burden of editing out translation errors. Eclipse, however, is unique in very specific ways.

Eclipse is an active system that applies artificial intelligence to the translation process. The more you use it, the smarter it gets. Many reporters find it gives them the edge they need to pass the Certified Realtime Reporter examination. No wonder Eclipse users are so enthusiastic.

What is the acid test for any CAT system? Readability, how well steno translates into text, especially in realtime transcription. Here are a few sentences written as an average reporter might write them and translated using identical steno-English dictionary entries, first on other CAT systems, then on Eclipse. Which would you rather read?

Other CAT systems

Yes/yes,/,yes,/,yes , I/eye see/sea your/you're article/Article here/hear
*FPLT ing/I think it's/its indefendable. The/it exhibit number/Exhibit No. ?
It's/its MA*RK understand/-ed in exhibit number/Exhibit No. 3 hundred
and eighty 2 C. Is there/they're/there plan a/an PHO*ER
up to date/up-to-date version with it's/its fig/figure/Figure of 1 hundred
PH*L sixty 3 thousand forty 5 dollars and eighty THRAO*E cents
STPH* AZ createer of the cinematagraphy program, can you tell/cut STPH*
You should have/shove the/it figs/figures/Figures right/,right STPH*

Eclipse

Yes, I see your article here. I think it's indefensible. The exhibit number? It's marked in Exhibit No. 382C. Is their plan a more up-to-date version with its figure of \$100,063,045.83? As creator of the cinematography program, can you tell? You should have the figures, right?

What Makes Eclipse Unique?

1) Grammar-Based Conflict Resolution

Problem: Conflicts like “THR=there/their/they’re” are common for many reporters.

Other CAT systems sometimes claim artificial intelligence when they memorize phrases without learning grammar. Memorizing “is their plan” does not enable them to accurately resolve “there/their/they’re” when preceded by any word other than “is” or followed by any word other than “plan.” The burden of good realtime transcription is placed entirely on the reporter. So-called “**computer-compatible**” writing requires countless changes to steno technique, is more stroke-intensive, and harder on the hands.

Eclipse: When “their” is selected in the above example, Eclipse actively analyzes the underlying grammar. In this case “there/their/they’re” is preceded by a form of the verb “be” (as opposed to several other classes of verbs) and followed by one of several classes of nouns. Each conflict can learn dozens of grammar rules. Each grammar rule can resolve thousands of phrases. This is “**reporter-compatible**” software that minimizes the need for changes in steno technique. Eclipse’s intelligent conflict resolution is so reliable that reporters with “conflict-free” writing styles start creating conflicts to reduce editing time and achieve more perfect realtime transcription. Eclipse even resolves back-to-back and paragraph-straddling conflicts (e.g., WFRPBGTS=with[ANSWER]/[ANSWER]with).

Critical Points:

- ◆ Intelligent Conflict Resolution works in both realtime and deferred translation.
- ◆ Conflicts appear in user-definable color to alert user.
- ◆ Each conflict may learn dozens of grammar rules, on the fly.
- ◆ Each conflict’s grammar rules can be viewed and modified by the user.
- ◆ Punctuation conflicts like “yes/yes,/,yes,/,yes” resolve well.
- ◆ Stacking/shadowing conflicts like “toss/-s to” resolve well.
- ◆ Stylistic conflicts like “up to date/up -to-date” or “number/No.” resolve well.
- ◆ Conflicts involving prefixes/suffixes (e.g., TOD=to do/-ed to) resolve well.
- ◆ Back-to-back conflicts resolve well.
- ◆ Resolves paragraph-straddling conflicts (e.g., WFRPBGTS=with[ANSWER]/[ANSWER]with).

2) Intelligent Word Construction

Problem: Adding prefixes or suffixes often requires spelling adjustments.

Other CAT systems do not use a spelling dictionary during translation to verify word construction. Morphological analysis or proximity dictionaries fail because English is full of exceptions to spelling rules. Since it is assumed that spelling errors will be found during the editing process, long after translation, realtime transcription suffers.

Eclipse: During the translation process itself, a spelling dictionary of over 600,000 entries is used to make the proper adjustments to prefix, suffix, or root word. Since speakers often make up words, generic spelling rules are used only if no real word exists, thus ensuring the most logical spelling of coined words. Eclipse reporters spend

less time creating global entries for their steno dictionaries. Even so, steno dictionary size is unlimited.

Critical Points:

- ◆ Intelligent Word Construction works in both realtime and deferred translation.
- ◆ Conflicts involving prefixes or suffixes (e.g., TOD=to do/-ed to) resolve well.
- ◆ Unlimited Prefix/suffix table allows user to tailor program to personal writing style.
- ◆ “Insert Prefix/Suffix” command increases editing efficiency.

3) Automatic Number Conversion

Problem: The unnatural steno strokes and visualization required by so-called “realtime number writing techniques” distract reporters from writing numbers accurately and automatically.

Other CAT systems: So-called “automatic number conversion” tends to be limited to realtime translation only, with very unreliable results. For example, 6 billion 1 hundred dollars 2 cents has been seen to convert to \$61.20. Typically, extra strokes must be written to obtain number conversions. One cannot call such procedures automatic.

Eclipse: In both realtime and deferred translation, reporters can relax and write numbers the way they hear them. Regular words like dollars, Yen, pounds, grams, o'clock (the list is very long) are understood to imply specific number conversions. For most numbers the process is truly automatic, yet reporters can use extra strokes to force specific conversions. Eclipse automatic number conversion has no equal in the CAT industry.

Critical Points:

- ◆ Automatic Number Conversion works in both realtime and deferred translation.
- ◆ Regular words like million, dollars, o'clock, etc., trigger automatic conversions.
- ◆ No need for dictionary entries like <Num-Convert>[\$nnn,nnn,nnn,nnX.ON].
- ◆ No special strokes required to force conversion of telephone numbers.
- ◆ No special strokes required to force conversion of Social Security numbers.
- ◆ No special strokes required to support any mix of international currencies.
- ◆ Supports number bar, written out numbers (e.g., THRAOE), or any combination.
- ◆ Understands use of “and,” “point,” and other words within number strings.
- ◆ Automatically includes hyphen in singular compounds like “25-gram.”
- ◆ Supports user-defined automatic conversion formats (e.g., gun gauges, heights, etc.)
- ◆ All number conversions are also available as editing commands.
- ◆ Resolves conflicts involving number conversions, e.g., “-ed/dollars,” “am/a.m.”
- ◆ Automatic number conversion works even with translated misstrokes.

4) Intelligent Phonetics and Misstroke Translation

Problem: New words and terms occur all the time, and even the best reporters misstroke common words during heated proceedings. Raw steno is often unreadable.

Other CAT Systems: Typically a very limited phonetic table is used, without regard to any spelling dictionary. If “mile” were misstoked as PHAO*EUL, it would either appear as unreadable steno or as “mil.” Automatic number conversion would not be triggered.

Eclipse: Intelligent phonetics automatically consult the spelling checker's 600,000+ entries, looking for a word that has not yet been entered in the reporter's steno dictionary. If no match is found, Eclipse detects whether a writer has dragged or dropped letters from strokes that are defined in the reporter's dictionary. PHAO*EUL would translate correctly as “mile,” and would trigger automatic number conversion.

Critical Points:

- ◆ Intelligent Phonetics consult spelling dictionary of over 600,000 entries.

- ◆ Phonetics table allows user to tailor program to personal writing style.
- ◆ Misstroke Translation feature is unique to Eclipse, a technological breakthrough.
- ◆ For Misstroke Translation, easy setup of keys each reporter drags or drops.
- ◆ Suggested translations appear in user-definable color to alert user.
- ◆ Suggested translations which are conflicts resolve intelligently.
- ◆ Suggested translations which are number words trigger automatic conversions.

Again, readability is the acid test, especially when it comes to realtime transcription.

Steno: STA*EUT KWRAO*R TPHA*EUP APBDZ TKRES FPLT

Other CAT systems: Sta*it yao*r na*ip andz dres.

Eclipse: State your name and address.

5) Complete Dictionary Access, Intelligent Globalling Procedures

Problem: A reporter's steno-English dictionary is the heart of any CAT system. It is essential that global entries and variants be easy to create, modify, or remove. Reporters must be able to create or correct entries from the steno writer during realtime proceedings.

Other CAT systems: Highlighting steno and defining its meaning for the appropriate dictionary often take unnecessary steps. Variant entries for the common suffixes "ed," "s," and "ing" must be entered separately. Some systems offer limited access or no access at all to main steno-English dictionary during realtime transcription. Dictionary searches are often cumbersome. Creating or correcting dictionary entries from the steno writer is so stroke-intensive as to be totally impractical.

Eclipse: Pressing a single key just once is all it takes to highlight most steno sequences. Variant entries for tucked-in suffixes "ed," "s," and "ing" are proposed with their proper spelling adjustments. Variant entries are also proposed to handle consonant shifts from the end of one stroke to the beginning of another, e.g., PEUT AOE versus PEU TAOE. Every dictionary is completely accessible during realtime transcription. Instant dictionary searches by many criteria.

Creating or correcting dictionary entries from the steno writer takes minimal strokes, no matter how far back in the transcript. If "under the circumstances" is misstroked, it can be corrected and entered in a dictionary in as little as three strokes (first stroke finds error, second stroke corrects error, third stroke ends process and creates dictionary entry).

Critical Points:

- ◆ No limit to dictionary size.
- ◆ *Complete* access to any dictionary at any time, even during realtime transcription.
- ◆ All dictionary search and maintenance features available even during realtime.
- ◆ System proposes variant entries for tucked-in endings and stroke normalization.

Reporter's global: OK AOU PAOEU = occupy

Eclipse proposes: OK AOU PAOEU D = occupied

OK AOU PAOEU S = occupies

OK AOU PAOEU G = occupying

OK AOUP AOE U = occupy (and 3 variants)

O KAOU AOE U = occupy (and 3 variants)

O KAOU PAOE U = occupy (and 3 variants)

In this example, the Eclipse user can select only useful variants, press Escape to reject all variants or press one button to accept all 16 proposed globals. This is perfect for technical words that can be stroked in many ways.

- ◆ One-stroke application of phrase capitalization rules (e.g., Bank of the South).
- ◆ Easy to create or modify dictionary entries for editing from steno writer.
- ◆ Correct dictionary entry from writer, no matter how far back in document.
- ◆ Creation of long dictionary entry from writer in as few as three strokes.
- ◆ Spell in chunks for fast editing from writer, e.g., swirl ing (2 strokes instead of 8).
- ◆ Automatic spellcheck before globals are placed in dictionary.
- ◆ No “update” procedures required to incorporate globals into main dictionary.
- ◆ Impossible to accidentally create nonsense conflicts such as your/your/your/your.

6) LawBridge: Continuous Automatic Realtime Document Refresh

Problem: Realtime viewing software used by judges and attorneys displays a rough draft from realtime transcription. Computer-generated errors are constantly being corrected by reporters or scopists, especially during breaks or silences in proceedings.

Other CAT Systems: The only corrections which show up on judges' and attorneys' screens are those which the reporter had time to re-write from the steno machine after using delete strokes. The computers running CaseView, LiveNote, and other such programs offer nothing but very rough draft, sometimes just unreadable garbage. Global entries are no substitute for automatic realtime document refresh.

Eclipse: LawBridge, the free companion software to Eclipse, is unique because it offers continuous automatic realtime document refresh. Corrections *anywhere* in the realtime document are instantly reflected on the judges' and attorneys' screens. Reporters are shown at their best, not their worst, and can work under less stress. Judges and attorneys do not have to wait for refresh disks to obtain readable drafts of realtime proceedings.

Critical Points:

- ◆ Support for network or serial connections.
- ◆ LawBridge can accept CaseView input and can work with any CAT system.
- ◆ Continuous automatic realtime document refresh when used with Eclipse.
- ◆ No matter how far back in document, LawBridge screens are corrected by Eclipse.
- ◆ Even backward globals on Eclipse are refreshed on LawBridge screens.
- ◆ The basic version of LawBridge is free, and sufficient for most judges' needs.
- ◆ Powerful searches, issue codes, keywords, reports.
- ◆ Extensive password and security functions.
- ◆ LawBridge Gold (\$225) offers advanced multimedia and research tools.
- ◆ LawBridge Gold integrates spreadsheets, databases, scanned exhibits, etc.
- ◆ Full support for CADI (Courtroom Administrative Data Interchange).
- ◆ CADI allows reporter to send private messages to judge, attorneys, clerk, etc.

7) CADI (Courtroom Administrative Data Interchange)

Problem: Court administrators must run courts as efficiently as possible. If court reporters' computerized records can be meaningfully analyzed, court activity can be better understood and more efficiently administered.

Other CAT systems: Despite years of lip service, most CAT systems do not offer CADI support. Placing @ symbols or data marks at key points is not true CADI support.

Eclipse is the only system which offers full CADI support. This is an exceptionally flexible tool which Eclipse is eager to assist courts in implementing.

Critical Points:

- ◆ An unlimited number of courtroom events can be tracked.
- ◆ Sample events: examination, judge in/out, jury in/out, recess, exhibit admitted.
- ◆ CADI data can be included automatically in realtime or during subsequent editing.
- ◆ Eclipse can compile CADI data from multiple transcripts.

- ◆ CADI reports can be printed or exported as ASCII or RTF files for other programs.
- ◆ CADI info analysis offers administrators a unique insight into courtroom activity.
- ◆ Realtime CADI data can be transmitted to LawBridge stations for judge, clerks, etc.

8) Automatic Indexing

Problem: Indexing of court transcripts is a complex and time-consuming task. Some state formats defy automation by most CAT systems. Master Indexes for multi-volume transcripts are required. Meeting index requirements often delays transcript production.

Other CAT systems: Limited flexibility. Some systems place index pages at the end of transcripts; they must then be moved to their proper place. Others are thrown off by exhibits that are introduced out of order. Master indexes are a particular challenge.

Eclipse: Eclipse offer exceptional flexibility to comply with any format, including the production of master indexes.

Critical Points:

- ◆ Automatic production of master index of multiple volumes.
- ◆ Automatic detection of examining attorneys.
- ◆ Sorts alphabetically for easy production of witness index.
- ◆ Sorts numerically since exhibits are often presented out of order.
- ◆ Index pages can be placed at any point in document or automatically separated.
- ◆ Index preview.
- ◆ Easy editing, correction or regeneration of index pages, if necessary.
- ◆ Form fields expedite description of exhibits for automatic indexing.

9) Form Fields (Fill in the Blanks)

Problem: Filling in title pages, appearance pages, and certificate pages can be unnecessarily time-consuming.

Other CAT systems: After names are typed, spaces must be inserted or removed to maintain column alignment in case captions. Unused lines do not automatically delete. Most systems do not provide for “pick lists” to automate insertion of months, attorney names, firm addresses, etc.

Eclipse: Form fields simplify production of title pages, etc. Alignment is maintained where necessary. Unused lines or spaces can delete automatically. Fields can be set to right justify, capitalize automatically, or remember information like names and dates. Fields can point to automatically sorted “pick lists” of unlimited size.

Critical Points:

- ◆ Form fields can be set to preserve alignment or delete extra space or unused lines.
- ◆ Form fields can be set to right justify entered text.
- ◆ Form fields can be set to fully capitalize entered text.
- ◆ Form fields can bring up sorted “pick lists” of unlimited size.
- ◆ “Pick lists” simplify including information like client names and addresses.
- ◆ Form fields can remember information like names or dates.

10) Editing Efficiency

Problem: Taking testimony is just the beginning of a reporter's job. Each hour of testimony typically requires more than an hour of editing. This does not include proofreading time. Logical, efficient editing features promote rapid transcript production.

Other CAT systems: Speedkeys for menu commands tend to be hard-coded. Some systems require the use of a mouse to activate functions when a key command would be much faster. Limited slots for rolling multiple steps into one-button macro commands. Magic Keys or their equivalent typically require use of spacebar and are not case sensitive. Typically, documents are saved at timer-dependent intervals. In the event of a power failure, many pages of editing can be lost.

Eclipse: Every function is accessible by speedkeys, by menus, or by mouse. Eclipse comes with an excellent set of Hyperkeys which users are free to customize. Macros are unlimited in number. Eclipse has a long list of editing conveniences that simply do not exist on other CAT systems. RTF/CRE conversion utilities facilitate working with reporters and scopists on other CAT systems. High fidelity audio/video synchronization is standard with Eclipse; there are no hidden charges.

Eclipse saves to disk each time the cursor moves out of a paragraph. In case of a power failure, the current paragraph is not lost, only the few changes that were "just in memory."

Multiple scopists can work on the same realtime proceedings simultaneously, as is done at the Canadian Senate. Every 10 minutes (or any interval a user prefers), a copy of the last segment of realtime proceedings is automatically placed on the network where it is available for the scoping team. In the Oklahoma City bombing trials, Eclipse more than proved its mettle, never crashing in more than 35,000 pages of realtime transcription.

Critical Points:

- ◆ Paragraph-based autosave, not timer-dependent.
- ◆ If power fails, only **changes** to current paragraph are lost.
- ◆ All functions accessible by menus, mouse, speedkeys, or Hyperkeys.
- ◆ Extensive default setup of Speedkeys and Hyperkeys, fully customizable.
- ◆ 96 case-sensitive Hyperkey slots available.
- ◆ No spacebar or activation key necessary to engage Hyperkey functions.
- ◆ Unlimited macro commands.
- ◆ Create or modify macro commands anytime, even during realtime transcription.
- ◆ Editing can begin as soon as first steno stroke translates.
- ◆ Even last stroke of realtime steno can be globalled, without need for "flush" stroke.
- ◆ Speaker Table instantly corrects misidentified speakers from anywhere in transcript.
- ◆ Automatic by-lines (e.g., Q. (BY MR. JONES) or QUESTIONS BY MR. SMITH)
- ◆ Conditional page breaks (e.g., keep EXAMINATION and first question together).
- ◆ "Insert Prefix/Suffix" command.
- ◆ Centered paragraphs automatically re-center if text is added or deleted.
- ◆ Autoreplacements for fast, accurate typing (e.g., hte=the, tlc=The Light Company).
- ◆ High fidelity audio/video synchronization is standard. No hidden charges.

- ◆ Complete control of automatic timestamping.
- ◆ RTF/CRE conversions for working with reporters/scopists on other CAT systems.
- ◆ Read-along spellcheck allows online proofreading.
- ◆ Spellcheck finds both spelling errors and transcript anomalies in one pass, not two.
- ◆ Realtime printing can give five-page delay while online proofreading occurs.
- ◆ Automatic copying of realtime transcript segments for networked team of scopists.

What Makes Advantage Software Unique?

1) Continuity of Ownership

Since 1987, Advantage Software, the maker of Eclipse, has always been reporter-owned, debt-free, and enjoyed ever-increasing sales. There are now over 8,000 Eclipse users in the United States and Canada. Greg Seely and Portia Seely, the founders of Advantage Software, are themselves Registered Professional Reporters. Greg comes from a family of reporters and has been designing PC-based CAT programs since 1980.

Advantage Software's solidity is particularly impressive in view of CAT industry trends. Since 1987 Stenograph has had at least seven presidents and three different development groups. When Heico Holdings purchased the troubled Stenograph and Xscribe operations, it was in order to achieve a monopoly on steno machine (ProCAT's Flash writer depends on Stenograph parts). These same years also saw a distressed StenoCAT acquired by Gigatron. Cheetah's TurboCAT is a good program, but the company's financial and legal problems are so great that it will be amazing if they survive. Eclipse is the only major CAT system continuously owned and managed by American court reporters.

2) Continuity of Programming

Few products have the long development and enhancement history that Eclipse has enjoyed. Jeremy Thorne has been director of design and development of Eclipse since its inception 12 years ago, a long time in the world of PC software. Continuity is fundamental to Eclipse's success. Some companies make each new edition of their software look and feel fundamentally different in order to justify the practice of reselling to their existing customer base. Eclipse has taken the opposite approach and gives all updates and upgrades as part of software support.

Again, industry practice is revealing. Since 1989, at least four Stenograph systems and three ProCAT systems have succeeded each other. Despite such facelifts, there is often very little innovation in many companies' products. Customers must relearn software but may not gain much in productivity. In these same years, Eclipse users have had to learn the program only once and have received more than six major upgrades, with many technological breakthroughs like automatic number conversion and misstroke translation. Even total rewrites of Eclipse are fully covered by the support program and preserve familiar key commands.

3) Continuity of Support

Dave Seibert has been director of technical support at Eclipse since 1987. The technical staff have a deep understanding of the product right back to its early versions. Again, this is remarkable in an industry known for high turnover.

Eclipse takes pride in its responsiveness to customers. There is only one level of support: 24 hours a day, 7 days a week. Customers' calls are answered by a receptionist, not a cascade of phone mail prompts. Typical response time ranges from immediate to a few minutes, rather than a few hours. Court officials calling during breaks receive priority response. The Internet is used to supplement unlimited toll-free

telephone support, not replace it. Each month sees new features added and available for downloading.

Eclipse

Redefining the State of the Art

Advantage Software - (800)800-1759 - www.eclipsecat.com