Automated Litigation Support

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Michael A. Battle
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Managing Editor
Jim Donovan

Program Manager
Nancy Bowman

Internet Address
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Automated Litigation Support Roadmap

Rick Sumrall
Litigation Support Program Manager
Executive Office for United States Attorneys
Washington, DC

I. Introduction

Twenty-five years ago, very few people were familiar with the term "personal computer" and even fewer had ever seen or used one. Today, it is impossible not to be aware of personal computers. Automated Litigation Support (ALS) did not exist ten years ago and, during the decade since, U.S. Attorneys' offices have undergone an absolute ALS transition.

II. Historical roadmap

Summer 1994. Two systems managers began a pilot project for the Executive Office for United States Attorneys (EOUSA) to develop an automated courtroom system, to include the ability to annotate real-time video. The system was completed in 1995 and used successfully in many trials to present evidence more clearly to the jurors.

1996. ATTView, an add-on to Microsoft Access, was licensed to allow databases to be image-enabled. This allowed prosecutors to search for a document by date, Bates number, or other field, and view the scanned document. The software was difficult to use, but it met a need, and several offices used it.

1996. The Systems Manager in Nevada (Rudy Ferrara) developed the Transcript Presentation Manager, which was a computer program that provided instantaneous redaction capabilities and displayed the transcript on a large screen while the tapes were played for the jury.

Summer 1996. Two issues of the *U.S. Attorneys' Bulletin* were published on ALS. These issues focused on trial techniques, which utilized automated litigation support software and hardware. These issues further validated the value of ALS to prosecutors.

1996. The systems managers for several U.S. Attorneys offices used the previously developed automated courtroom system to present evidence before Congress during the Waco hearings. They utilized the Transcript Presentation Manager to present numerous transcripts, as well as the video annotation feature of the courtroom system, to help the Department of Justice (Department) present expert testimony about the Forward Looking Infrared (FLIR) video of the Waco fires.

1999. The ATTICUS portable courtroom system was developed for offices needing automated courtroom support. The system was about four feet tall and weighed several hundred pounds, but contained everything needed to wire a courtroom for an electronic trial.

Summer 2000. EOUSA licensed the Sanction trial presentation software and had the same company develop the replacement for Transcript Presentation Manager. Advanced Transcript Presentation Manager removed the limitations contained in the previous transcript program and added the ability to display two simultaneous languages and video transcripts.

April 2001. EOUSA released a detailed design document on ALS. The document listed standard hardware and software recommendations for ALS. Offices without ALS systems used the described standards to set up ALS.

Summer 2001. CaseMap and TimeMap were licensed by EOUSA as an integrated suite of applications for capturing key facts, dates, and events, for investigations. This was the first integrated trial preparation software made available to both civil and criminal AUSAs.

Summer 2001. The Terapin audio and MPEG-1 video CD recording appliance was used. This made it relatively easy for anyone to convert video tapes into digital format for use in the Sanction trial presentation software.

Summer 2001. The Advanced Information Technology in Litigation and Investigation seminar was held at the National Advocacy Center (NAC). This was the first ALS class offering a full week of hands-on training for ALS

applications. The class was in high demand as it included training on the following.

- Organizing and analyzing information through data capture.
- Working with large format exhibits.
- Capturing audio and video.
- Capturing images.
- Courtroom preparation and presentations.
- Electronic courtroom presentations using ATTICUS.
- Advanced Transcript Presentation Manager (ATPM).
- CaseMap (organizes facts, people, issues, and documents).
- Corel QuattroPro.
- Corel Presentations.
- TimeMap (creates time lines and other chronology graphs).
- PaintShop Pro (for photographic capture and adjustments).
- Sanction Trial Presentation software.

January 2002. The Automated Litigation Support Symposium was held at the NAC with members from the technical, legal, support, and administrative staffs of U.S. Attorneys' offices. Participants met for three days to determine requirements and assist the EOUSA with the roadmap for the future of litigation support.

Spring 2002. A massive electronic discovery review was undertaken by the Eastern District of Virginia to examine over 165,000 FBI 302 documents related to the Moussaoui case. EOUSA set up the LibertyNet Web server, allowing over 300 AUSAs from all ninety-four districts and other Department litigating components to begin a round-the-clock review of the documents. The Department successfully completed the review by the court-imposed deadline.

Summer 2002. TextMap was added as an application for managing transcripts and linking transcript information directly to the CaseMap fact database.

Fall 2002. IPRO and Concordance were selected as the applications that U.S. Attorneys' offices would use to manage their growing case loads. These two software packages provided the basis of U.S. Attorneys' offices document-management platform for litigation support.

Spring 2003. The Imaging and Document Management Class, held at the Information Technology Education Center (ITEC) in Columbia, S.C., provided hands-on training in the use of IPRO's Scan-IT software to scan and publish documents, as well as the use of the Concordance application to build searchable databases. Students were able to scan some documents in-house for small to medium-sized cases after attending this course.

Fall 2004. The first national ALS Conference was held at the NAC. Attendees spent four days immersed in training on the latest ALS software and hardware.

2005 and 2006. The JCON IIa rollout brought new servers and upgraded Windows in all offices. Users' PCs were upgraded to Windows/XP and the latest ALS software applications. The new servers provided increased capacity and performance, which was and is needed due to the growing demand for storage resources.

Winter 2005. The Direct Attached Storage (DAS) engineering was completed for a new storage subsystem that would provide 1.6 terabytes of disk storage for ALS and other case-related files. This is the equivalent of fifty million scanned pages or 1.2 million floppy disks. A limited number of sites are scheduled for DAS deployment in 2006.

III. In this issue

Over the past decade, U.S. Attorneys' offices have steadily moved from processing cases using traditional paper-based methods to utilizing electronic evidence and document images. This move was necessitated by changes in the way businesses operate. Paper is no longer the only type of business documentation available for review. The proliferation of electronic documents, e-mail, and new government reforms, such as Sarbanes-Oxley, has resulted in companies providing large amounts of electronic discovery materials. According to the Socha-Goldman 2004 Electronic Discovery Survey, electronic data discovery (EDD) growth is expected to exceed 60 percent in 2005 and just less than 60 percent in 2006. *Available at* http://www.sochaconsulting.com/Publications/LawTechnologyNews%20Article%208.04.pdf. Diana Wong's article on

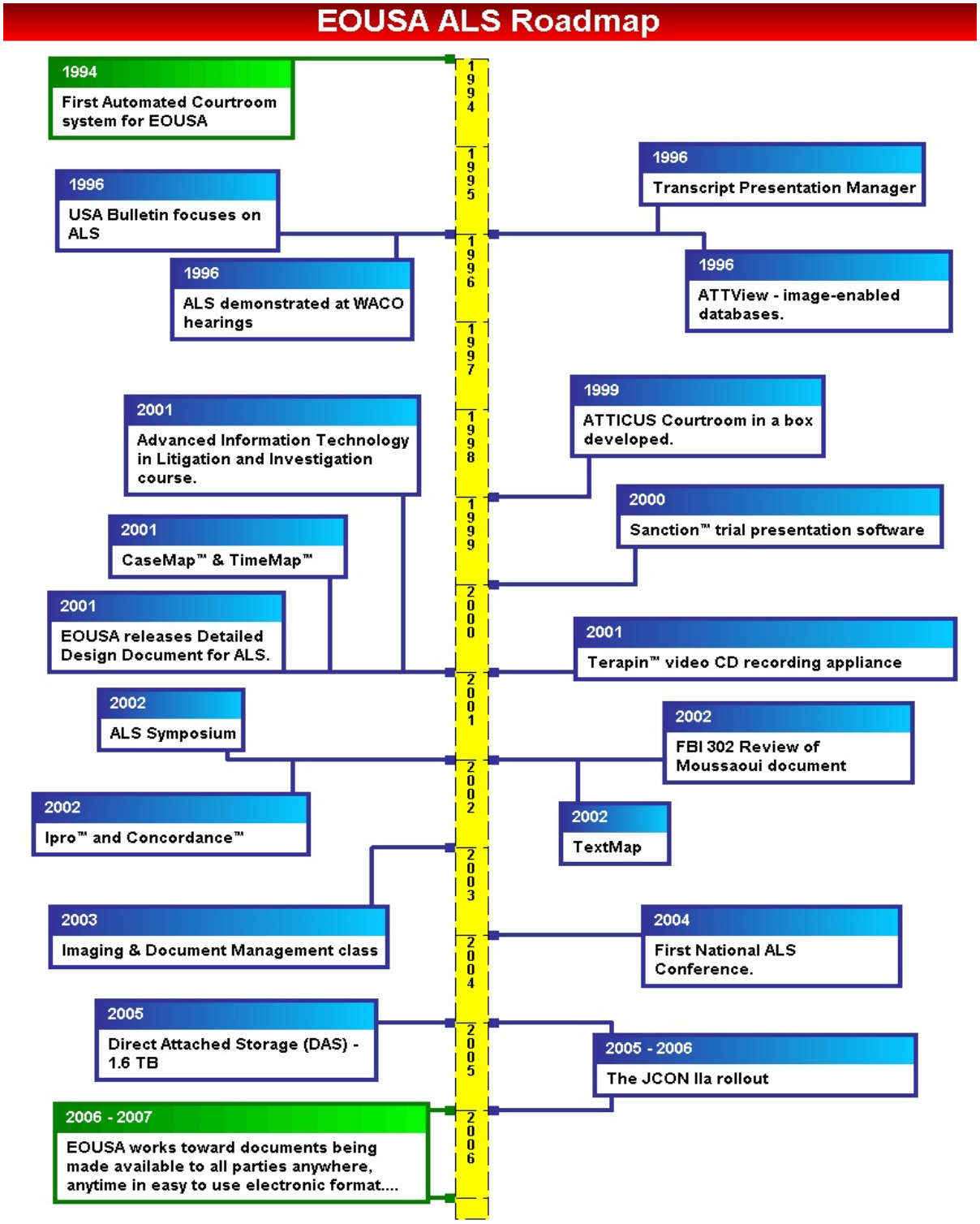
Electronic Discovery and eScan-IT in this issue gives a glimpse into the future and how it will be possible to manage large amounts of EDD in the future. eScan-IT is expected to be available during the summer of 2006.

There are several useful articles included that alert the readership to what is happening today in the ALS field. Rob Moore's article gives an overview of the Cyber Crime team's training evolution and also the training that is planned for 2006. Three articles are dedicated to the techniques used to devise courtroom presentations using PowerPoint and Sanction. Two districts teamed up to share CaseMap experiences and to show how other districts can effectively use these two software packages. Several articles deal with preparing a case for scanning and making important decisions, such as Bates numbering schemes and the documents to scan. The intent of all the articles is to help make the best use of the trial team's time and to increase efficiency.

EOUSA is researching electronic means that will allow collaboration among federal law enforcement agencies on large document reviews. EOUSA's vision for the future is that documents will be scanned once, stored, and made available to everyone that needs access to them. The original document can be safeguarded until introduced at trial. ❖

ABOUT THE AUTHOR

❑**Rick Sumrall** previously served as Systems Manager in the Middle District of Louisiana and in the Western District of North Carolina. During his work in Louisiana, Rick had a fully functional electronic courtroom system up and running in 1995. Prior to working with the United States Attorneys' offices, Rick was Information Technology Manager of a large law firm in southern Louisiana. Rick currently serves as the Litigation Support Program Manager for EOUSA. ✠


EOUSA ALS Roadmap
1994
First Automated Courtroom system for EOUSA
1996
USA Bulletin focuses on ALS
1996
ALS demonstrated at WACO hearings
1996
Transcript Presentation Manager
1996
ATTView - image-enabled databases.
1999
ATTICUS Courtroom in a box developed.
2000
Sanction™ trial presentation software
2001
Advanced Information Technology in Litigation and Investigation course.
2001
CaseMap™ & TimeMap™
2001
EOUSA releases Detailed Design Document for ALS.
2001
Terapin™ video CD recording appliance
2002
ALS Symposium
2002
FBI 302 Review of Moussaoui document
2002
Ipro™ and Concordance™
2002
TextMap
2003
Imaging & Document Management class
2004
First National ALS Conference.
2005
Direct Attached Storage (DAS) - 1.6 TB
2005 - 2006
The JCON IIa rollout
2006 - 2007
EOUSA works toward documents being made available to all parties anywhere, anytime in easy to use electronic format....
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Automated Litigation Support Training

Robert M. Moore
Assistant Director
Office of Legal Education

Over the past ten years, there has been a significant shift from the traditional means of communication to more visually compelling multimedia. It is important that attorneys litigating cases on behalf of the government have an understanding of the various electronic litigation tools available and incorporate them into their cases. Whether it is a grand jury hearing, deposition, or trial, research has shown that evidence is more clearly understood when technology is utilized to clarify and enhance a presentation.

Effectively communicating a particular message involves advanced planning, deciding what points need to be made, and working with the trial team to use the appropriate applications to clarify the key points in the best way and at the right moments.

In light of the increased use of multimedia, automated litigation training for attorneys and support staff personnel has dramatically increased at the National Advocacy Center (NAC). Over the past five years, beginning with FY 98 and ending with FY 03, 965 participants have attended the Information Technology in Litigation and Investigations course. This course was primarily designed to expose participants to the technology that was available. A limited amount of time was allocated for hands-on training.

In FY 01, in an effort to standardize software applications across districts, the Executive Office for United States Attorneys (EOUSA) purchased the site license for Sanction®, Advanced Transcript Presentation Manager®, CaseMap®, and TimeMap®. EOUSA sponsored eight Advanced Information Technology in Litigation and Investigations seminars during FY 02 to train personnel from each district to use these new tools. The seminars were specifically designed for Litigation Support Specialists and Managers from United States Attorneys' offices who had extensive experience with courtroom presentation and litigation support applications. The courses included hands-on training of Sanction, Corel Presentations, and Advanced Transcript Presentation Manager.

In FY 02, EOUSA purchased the site license for IPRO and Concordance to fill the need for document imaging and management software. EOUSA sponsored eight Imaging and Document Management seminars in FY 03 to train administrative personnel from each district who were tasked to perform automated litigation support. The courses included hands-on training of IPRO, Concordance, and Integrating IPRO and Concordance with CaseMap and Sanction II.

The Information Technology in Litigation and Investigations course was replaced with the Automated Litigation Support (ALS) 101 and 201 courses in FY 04. The ALS 101 course focused on courtroom presentations using Sanction II and PowerPoint and the ALS 201 course concentrated on document imaging, document management, and case management using eScan-IT, IPRO, Concordance, CaseMap, and TimeMap. Both of these courses were primarily hands-on training with a limited amount of classroom lecture. During FY 04 and FY 05, 446 participants attended ALS 101 and 342 participants attended ALS 201. Beginning in FY 04, automated litigation training was included as a hands-on lecture in the Criminal and Civil Trial Advocacy courses. Students had access to laptop computers that were loaded with their case files so they could prepare electronic presentations during the mock trial.

The Automated Litigation Support (ALS) team at the NAC also conducted two Instructor Certification courses on IPRO, CaseMap, and Concordance in FY 04. These certified instructors are the faculty members for the automated litigation training that is conducted at the NAC.

The Courtroom Presentation and Evidence Management for Litigators course was added to the calendar in FY 05. This course offers the unique opportunity for an AUSA and a support staff employee, from the same district, to train together as a team and develop the basic

familiarity with computer technology used at all stages of civil and criminal cases. Participants bring documents, photographs, audio tapes, and/or video tapes from an active case to work on during open lab time. At the end of the course, the teams create a CD-ROM for their actual case, to take with them so that they can continue the automated process. We also conducted the first Automated Litigation Support Specialist seminar during FY 05.

The automated litigation training process was changed in FY 06 because of comments made on course evaluations. The ALS 101 and ALS 201 courses have been replaced with the Document Imaging course, the Document and Case Management course, and the Courtroom Presentations course.

The Document Imaging class focuses on imaging documents using eScan-IT and employing IPRO to view documents and produce discovery CD-ROMs. The Document and Case Management class is the second series of document management classes, and Concordance and CaseMap software is taught. The Courtroom Presentation class is dedicated to teaching participants Sanction II and PowerPoint for courtroom presentations. These curriculum changes will allow us to spend more time on the litigation software packages that EOUSA has provided to each district.

In the past, participants were allowed to take the automated litigation training classes in any order they wished. The NAC is now requiring students to take the seminars in the scheduled order. This will give the district personnel a greater understanding of the automated litigation process.

Over the past year, the ALS team has worked extensively with the teams that manage the Criminal and Civil Trial Advocacy courses for the NAC, to include more time for training on the automated litigation tools that are available to AUSAs. In FY 06, the allotted time for automated litigation training has doubled in both of these courses.

High tech courtrooms are here and will multiply in the future. Using technology will enhance jurors' interest and understanding, thus significantly advancing the cause of justice. Careful training and practice are a must. Jurors and judges expect the lawyer to be able to use the technology efficiently and effortlessly, just as they expect coherent and effective questioning and arguments. Remember, what jurors hear, they forget. What they see, they remember. What they see and hear, they understand.❖

ABOUT THE AUTHOR

❑**Robert M. Moore** is the Assistant Director of the Cyber Team for the Office of Legal Education and is responsible for designing the automated litigation courses held at the NAC. Prior to joining OLE, he served in the U.S. Army for twelve years in the legal career field.✠

PowerPoint: Recipe for Success

Ronald Lee Oliver
Litigation Support Specialist
United States Attorney's Office
Southern District of California

I. Introduction

What would chocolate cake be without the icing? It would still be chocolate cake, and depending upon the skill of the chef, something one could swallow without much difficulty. Put the finishing touch of rich, dark, chocolate icing

on the cake, however, and it becomes a memorable, mouth-watering treat! The use of PowerPoint in a trial is like the icing on a cake. It can be an indispensable ingredient used to strengthen a trial attorney's opening and/or closing presentation. The correct combination of graphic style and intellectual substance can engage an audience (the jury) and help illustrate and clarify complex concepts, which reinforce the story of the case. Using graphical elements and animation helps make people, places, and things, more tangible and less abstract. On the other hand, a PowerPoint presentation may distract the jury when they should be listening to the attorney, or it can be a dry dissertation with boring blocks of text or "bullet points" used only as a crutch by a presenter who lacks oratory confidence. Tips from this article will help trial attorneys prepare engaging, informative, and professional presentations using PowerPoint.

II. The basics

Remember these basic rules when creating your PowerPoint presentations.

- Follow graphic design principles.
- Incorporate people, places, and things.
- Use animation judiciously.
- Use the flexibility of PowerPoint.
- Establish a visual and conceptual theme.

III. Follow graphic design principles

The attorney or support staff personnel tasked with creating PowerPoint presentations should have graphic design training or adhere to the basic graphic design principles. If poorly done, the presentation may make the attorney appear incompetent. A presentation created by a knowledgeable staff member will result in a more organized and effective visual aid.

There are several principles of good graphic design to follow when using PowerPoint to produce trial presentations.

- Never use more than three fonts.
- Use complementary color schemes.
- Do not make the jury strain to see the presentation.
- Do not crowd the screen.
- Use drop shadows to give depth to fonts and objects.

The use of more than three typefaces gives a subtle feel of clutter and incoherence and must be avoided. Font selections for courtroom presentations should be fairly sedate. Times New Roman, Courier, and Arial (or others of this type) are good choices. An exception to this rule is when a titling font or other eye-catching font is used to emphasize or "sell" a point in the presentation. Even these should be professional in appearance.

Complementary colors and color harmony in the presentation creates a professional look and feel that commands respect. Colors can be used as recurring visual cues in backgrounds, borders, and fills, to represent certain concepts, issues, or parties to the case. Color also provides variety and visual interest. Color psychology, especially the use of red, employed sparingly and carefully (to avoid objections), can flag objects and text with loaded emphasis.

All objects and text within a presentation should be large enough to see and read easily. View the presentation from the jurors' vantage point to test its clarity. Increase the font size so that it is comfortable and easy to read, especially if the presentation will be displayed on television monitors. This may require simplifying the design or using more than one slide per concept. This method is better than making the monitor appear cluttered and difficult to read.

A crowded screen is displeasing and will alienate, rather than capture, the audience's attention. Simple, well-designed graphics and animation do not have to be excessive to convey the concept. An uncluttered slide with legible type, color harmony, use of color cues, and balanced compositional space, will help a juror understand complex concepts. Effective use of drop shadows, for both text and objects in slides, gives depth and brings them "off the page."

IV. Incorporate people, places, and things

Include photographs or renderings of people, places, and things in the presentation to capture and hold the jury's attention. Faces and photographs of people and places are much more interesting and tangible than names and text descriptions. They also provide a framework for

memory of the key elements in the presentation. Do not try to slip the most unfavorable and unflattering photo of an opposing party or defendant into a presentation. Opposing counsel will raise a sustainable objection on the grounds that it is prejudicial. Photographs obtained from state drivers' license databases are adequate. On the other hand, a nice sympathetic photo of your client or party to the matter at hand (especially in civil cases) is perfectly acceptable and can foster sympathetic feelings in the viewer. Photographs, illustrations, and clip art representations of cars, weapons, or other devices involved, as direct or circumstantial evidence in the case, can help the jurors remember and focus on those elements.

V. Use animation judiciously

Animation is a distraction unless it serves a purpose. Overuse of animation can be a presentation killer. Flying bullet points are distracting and make it easy for the presenter to get out of sync. The best practice is to place all the bullet points for a slide on slide-entry. This allows the speaker to control the pace and keep on topic until ready to advance to the next slide. The indiscriminate use of animating arrows and objects is bad practice. The animation may capture the jury's attention, but detract from the point the attorney is attempting to make.

Full screen graphics containing motion graphics or animations should be independent, complete graphics and convey a concept at the conclusion of the animation, just as if the graphic was printed and displayed. This is especially helpful when printing the entire show for presentation to opposing counsel for stipulatory review. At times, due to the time-based nature of animation and PowerPoint's animation and layering capability, animations must be built across multiple slides and elements will be "hidden" from the printer. With the new "motion paths" feature of PowerPoint, this is less of a problem than before. To avoid this, the user can screen capture portions of the animation, which when printed, will reveal these elements for the review process. Multiple slides based on the same animation sequence (for example, showing the flow of money from person-to-bank-to-person), can become boring and repetitious. The first slide in a sequence should have each element of the animation advance at a slower rate and "on click," while later slides using the same animation concepts should advance automatically and quickly to avoid boring the jury with established patterns. Animations that move too slowly can hinder the pace of the presentation. Keep them lively and do not make the speaker or audience wait.

VI. Use the flexibility of PowerPoint

PowerPoint is much more than a slide show. It can be a multimedia experience. Many types of media and file formats can be embedded into the PowerPoint presentation or hyperlinked from within PowerPoint.

- Video and audio can be played from within PowerPoint and, when the file is completed, the presenter can carry on with the rest of the presentation by advancing to the next slide.
- Excel spreadsheets can be embedded in PowerPoint and charts made from the data can be formatted and manipulated inside PowerPoint.
- Flash animations can be run from within a slide in PowerPoint.
- Artwork from Adobe Illustrator files can be converted into Microsoft drawing objects and manipulated using PowerPoint's drawing tool set. The drawing tool set can also be used to create some fairly sophisticated illustrations using the transparency settings and by grouping and ungrouping objects for use with animation settings.
- The "Motion Paths" feature of PowerPoint makes it easier to create more complex and customized animations.
- Image files such as .tiff, .jpg, .bmp., and even .pdf, can be inserted or embedded using the "Insert Object" file menu item in PowerPoint.

The flexibility of PowerPoint is one of its strong points. It can be so much more than just screen after screen of bullet points.

VII. Establish a visual and conceptual theme

Bullet points are useful and condense concepts and thoughts into memorable sound-bites. However, they are boring if used exclusively or too often. Each element of graphic design mentioned in this article should be used in tandem to make the presentation as complete and

well supported as possible. A recap of the four elements of creating a meaningful presentation follows.

- Employ good graphic design, including thoughtful and consistent typeface selections, use of complementary colors, color themes, and color cues.
- Make tangible references to the players and elements of the case, consisting of photographs and illustrations which lend visual interest, increase understanding, and hold attention.
- Support the presentation with interesting and functional animation that serves the purpose of increasing comprehension or illustrating complex concepts.
- Use the flexibility and power of multimedia embedded within your presentation.

Check the setup of the slide show to ensure that the four elements for creating a professional presentation were employed. Finally, before saving the file, set the slide transitions (the way the slides change from one to the next). Consider a group of slides that pertain to a particular topic, within the presentation, as sentences in a paragraph and set the same transition for all. Set the next group of slides with a consistent, but different, transition. This process indicates to the audience that a new topic or concept is presented. The choice of transition and the speed at which the slide show progresses may have a psychological connotation which can be used to advantage.

The "edge" achieved in a well-organized case consists of, among other things, good oratory, evidence organization, and trial strategy. Mixing these ingredients in good measure and following the recipe given, the PowerPoint presentation will hold the jurors' attention and focus them on the salient points. It might even be the "icing on the cake" that makes this version of the case the one the jury remembers.❖

ABOUT THE AUTHOR

❑**Ronald Lee Oliver** is a litigation support specialist for the U.S. Attorney's Office in the Southern District of California at San Diego. Before coming to the Department of Justice, Ron provided litigation support in the private sector, where he assisted in the creation of multimedia trial presentations, video, graphics, animations, and databases. Ron has provided consultation and support, including PowerPoint trial presentations, for high-profile cases resulting in awards and settlements in the hundreds of millions of dollars. As a volunteer, Ron also teaches courses in litigation technology and presentations at the National Advocacy Center in Columbia, South Carolina.✠

Sanction II.8–Weapon of Mass Presentation

Milton Hooper
Automated Litigation Support Specialist
United States Attorney's Office
Middle District of Georgia

I. Introduction

In an old, rustic, and historic courtroom in Columbus, Georgia, a pro se defendant is standing in front of the jury questioning one of the government's witnesses. He pauses for a moment and comments on the name of the trial presentation software the government is using in prosecuting his case. "I don't think I like the name of that Sanction software," he said. "Sanction means to punish someone." Incidentally, the defendant had much more to worry about than the name of the software being used in his

prosecution. *United States v. Eddie Milton Garey* 5:03-CR-83-CDL (M.D. Ga. Dec. 7, 2004).

Regardless of the defendant's misconception about the use of Sanction, the purpose of Sanction trial presentation software is not designed to punish, but rather to present a case seamlessly and effectively to the jury. Sanction is available to United States Attorneys' offices (USAOs) nationwide for the presentation of documents, photos, audio, and video evidence. Over the years, there have been many software applications used for courtroom presentation, but none with the flexibility and the ability to handle many types of media within one program. When Sanction was introduced, the USAOs finally had a case organization and presentation tool to use in litigation. Courtroom presentation had officially evolved from the easel writing pad and foam boards to the electronic display of evidence.

II. Life in the digital world

We live in a media-driven world. Compact Discs (CDs), Digital Video Discs (DVDs), MPEG-1 Audio Layer-3 (MP3) players, and the Internet, are now common forms of media in our society and they have made previous versions virtually obsolete. The digital world has also filtered into the legal office and law enforcement community. Investigative agencies are constantly increasing their use of digital media, such as CDs for audio recordings, DVDs for videos, and Joint Photographic Experts Group (JPEG) files for photographs. In the "old" days, courtroom presentation of audio and video material required a cassette tape player and a videocassette recorder. Photographs had to be developed at a photo lab. The media evolution made it necessary for the USAOs to acquire software to organize and manage the many forms of evidence in use. Sanction is installed on all USAO network computers, and it gives more flexibility and organization to this type of evidence.

Every document in a case can be stored and organized in Sanction. Each can be prepared to be immediately accessible with a few mouse clicks or by entering the exhibit number. Sanction also works with every major litigation support software tool and document viewing program so that one can view all file types.

III. Why do we need Sanction?

Many AUSAs and support staff are familiar with using PowerPoint presentations for opening statements and closing arguments. However, PowerPoint has limited flexibility and cannot maintain the pace that a courtroom setting demands. AUSAs know that is impossible to stick to a set script in court presentations. The flow of the trial and presentation of the evidence is affected by witness testimony, judicial rulings, and other legal situations. Making an impression on a jury and impeaching witnesses are areas that require a reliable presentation tool to maintain the flow of the presentation.

Sanction is not just some neat little toy that only the high-tech, savvy attorneys use. Rather, it is a tool that, when used properly, can effectively present a case to the jury. There is always some concern that using technology such as Sanction will make the government look too slick or fuel the argument from defense counsel of the "vast resources of the federal government." In reality, the jury expects the government to be prepared and smooth in presenting the case to them. They already know that the government has resources. AUSAs should not "dummy" down their presentations. Instead of giving the impression that the government has vast resources, the use of Sanction makes the USAO look like the organized and professional law firm that it is.

USAOs are capable of prosecuting cases in court without Sanction, but there are cases that can be significantly enhanced in their presentation by using Sanction. Consider these examples:

- Bank fraud cases–These cases involve many bank documents such as checks, bank statements, and reports, among others. These documents need to be shown and explained to the jury. The AUSA may want to direct the jurors' attention to a specific place on some of the documents.
- Conspiracy drug cases–Usually there are undercover audio recordings of drug transactions and possibly video recordings. The AUSA can play the audio/video tapes in court by synchronizing the text with the recordings and display it on the computer screen. Sanction will highlight each line as it is being spoken. The jury can see all the information on the screen, rather than searching through a notebook.

- Terrorism cases–These cases may involve photos, documents, and surveillance videos, and other types of media. Sanction may be used to play videos, as well as display photos and documents, including bank transactions.
- Bank robbery cases–In these type cases, the AUSA may wish to present a floor plan layout of the bank, a surveillance tape from the bank, and photograph stills made from the video.

There are no limits to the use of Sanction in government cases. The software can be used in a simple or a complex case. In the beginning, many AUSAs prefer to use Sanction in a simple case to become familiar with implementing the technology in their courtroom practice. Courses offered at the National Advocacy Center (NAC) are an excellent way to become familiar with Sanction. The only way to get comfortable with using Sanction is to use it.

IV. Sanction basics for the technically challenged

Technically challenged AUSAs do not need to fear using Sanction. AUSA Alan Dasher from Albany, Georgia, used Sanction for the first time in a trial of a public official in June 2005. "I would agree that I am as technically-challenged as they come. However, with the assistance of a helpful information technology specialist, any AUSA, no matter how computer phobic, can successfully use the Sanction program in the courtroom," said Dasher. "The key is involving the specialist as early as possible in the trial preparation process." Dasher, who integrated the use of video and audio synchronized transcripts in his initial use of Sanction, also encourages other AUSAs to take advantage of training offered at the NAC. "There are plenty of prosecutors who panic at the idea of touching anything more complicated than a flip-chart during a trial. I am one of them. Those of us who fall into that category should probably be encouraged to step outside our comfort zones to attend seminars of this nature." Interview with Alan Dasher, AUSA, in Albany, Ga. (June 2005).

Although AUSAs may initially need some assistance from their Information Technology (IT) staff or Automated Litigation Support Specialist (ALS) representative, the operation of Sanction can be as smooth as typing an exhibit number and pressing the enter key. Sanction can even be programmed for use with a bar code reader. The first step in using Sanction is to determine what evidence exists and digitize it, which means to convert it to a format that can be used in the computer. Paper documents and photographs will be scanned and converted to .tif (Tagged Information Format File) and .jpg (Joint Photo Expert Group) format, respectively.

To convert an audiotape, connect a tape player to a computer equipped with audio capturing software such as Sound Forge or Audio Magix. The audio will be converted to a .wav file. Videotapes are converted by connecting a VCR to a computer with video capture software (Pinnacle or Dazzle, for example) and saved in an .mpg format. Essentially this is dubbing the audio and/or video into the computer. Maintain the originals, but place a digital copy of the exhibits into Sanction for effective presentation of the exhibits.

V. Organizing the case with Sanction

In addition to using Sanction as a presentation tool in the courtroom, the case folder can be organized electronically. Open the Sanction software and create the case file by typing the case caption. Notice that the screen is separated into three panes. Sanction is ready for the exhibits to be inserted. *See* Figure 1.

The tree view, seen in the left pane, is very similar to looking at files on the computer using Windows Explorer or My Computer. This view is the main organizational structure of Sanction. It is also important to understand that the items placed in Sanction will be shortcuts to the files. For instance, if a document is dragged and dropped into Sanction, the document will actually be saved in the original location. To avoid this confusion, try to get into the practice of saving the exhibits in the case folders created. All .tiffs, .jpegs, .wavs, and so forth, should be saved into in the case folder.

From the **Tree View,** an AUSA can add items, organize presentations, print, and view an entire case with just one click. The **List View,** seen in the center pane, is a detailed listing of the items in the Tree View. Each page of a multipage document can be seen in the List View. List View makes it possible to see more details of the items added to the case folder. The **Viewing Window** gives a preview of selections in the List View. When the AUSA selects a document, image,

video, transcript, or other exhibit in the list view, it will automatically display in the Viewing Window. *See* Figure 2.

The case folder has several categories created to store the digitized items into the computer. Scanned documents are placed in the documents folder. Photos are stored in the images folder. Videos will store both audio and video files. The transcripts folder will hold the transcripts created in Transcript Manager. The other exhibits folder may contain bullet lists, time lines, text clips, screen captures, and other application file types. Adobe Acrobat files, Microsoft Word, Excel documents, and HTML pages may be added.

To add descriptive information, notes, and exhibit numbers to the material in the case folder, select the desired item in Tree View, right click on the individual page in List View, and choose Edit Selected Item. The following screen shot gives a visual depiction of this process. *See* Figure 3.

Changes to these fields may be made at any time. This procedure allows entering the exhibit number in presentation mode to display the material in the courtroom. For a more structured and organized presentation, drag the items to the presentation folder. Choose the method that works best. The practices of entering the exhibit number or using bar code readers are the most widely used methods.

VI. Searching transcripts

The Transcript Search feature in Sanction provides a quick and easy way to find various information in transcripts. One or multiple transcripts may be searched for specific words or phrases. When the testimony is located, a litigation team member can create text clips, media clips, or bookmarks, with a right-click of the mouse. Printing selected transcript pages is also possible.

To search a transcript(s), select the transcript(s) from the list by clicking the check box by the transcript name. Enter the search term in the Search Text box. Click the Search button to run the search. When the hits are found, click the selected hit in the Search Hit window. The transcript will automatically jump to the indicated page and line in the Transcript window. *See* Figure 4.

Several options are available once the transcript is found.

- **Bookmark**–Places an electronic bookmark that can either be stored for later use or shared with the rest of the trial team.
- **Create Media Clip**–If the transcript has been synchronized, the highlighted portions of the transcript can be added as a new clip.
- **Create Text Clip**–Creates an image file of the selected text for presentation especially when there is no video for a deposition.
- **Show Previous/Next Page**–Shows the previous or next page in the display window.
- **Append to Text File**–Creates a running file of selected text for review at a later time.
- **Show Media Clip In Presentation**–Immediately plays the highlighted section from the transcript in Presentation Mode. (Be careful using this option. If a transcript is not synchronized properly it might inadvertently show unwanted portions of the media file.)
- **Show Text Clip In Presentation** –Immediately displays the highlighted text from a transcript in Presentation Mode.
- **Send to CaseMap**–CaseMap is another litigation support tool on the network computer. The highlighted text can be sent from a transcript into a CaseMap database.

Obviously, there are many ways to organize transcripts in Sanction. Instead of searching through a trial notebook or boxes of documents, Sanction can locate pertinent text from a transcript and display it quickly.

VII. New and improved Sanction

The newest release of Sanction builds more flexibility in the database capabilities. Sanction II.8 features a customizable coding database that allows users to customize fields or templates for storing, organizing, and retrieving data for presentation. Also included with the newest release is the ability to import and view TimeMap files, bookmark transcripts, and one search function for the entire Sanction database. The exhibit numbering feature now supports using alpha characters as exhibits numbers.

The new coding capability with user-defined fields and custom-form views makes the latest release of Sanction a more flexible tool for use in case organization. The new aspects of the software allow AUSAs to use Sanction as a document database, as well as a courtroom presentation tool. The AUSA can define and enter the fields of information that are needed from the document collection. For instance, if the AUSA wants to be able to search by date, name, or document type, the database can be built to enter this information. Document-level coding may be performed so that the AUSA can browse pages of a document while updating only the first page. There is also a new find/query tool, which allows for searches across tables.

Verdict Systems has significantly improved the ability to code documents in Sanction, which gives the trial team increased ability to use it for further organization of the case. The coding feature allows entry of data into fully customizable fields for searching and queries. Fields can be added, deleted, or modified, from the default settings. Coding templates may be created for use within the current case or multiple cases.

Coding is specific information pertaining to each document in the database. For instance, to search for specific documents based upon a document type or date, it is necessary to create a field which shows that information for the document. Thus, if a letter shows March 1, 2005 as the date, a field with that date can be created, making it possible to search that document later. Otherwise, it will be necessary to manually page through the images to find that particular document. There is a lot of up-front work to prepare each document, but once it is done, this a wonderful feature of the software. The example attached shows what a typical coding template might contain. *See* Figure 5.

To search the database, click the Search button on the toolbar and enter the criteria for the search. The example shown depicts a search for all the letters dated 3/1/2005. To set up this search, check the Documents box and enter "Where is the document type (i.e. doc_type)?" The Condition shows the parameters of the search. In this example, the Condition will be "equals" because it needs to match. The criteria is the type of document, which is a letter. The use of the Boolean operator "AND" indicates that there is an additional search connected with this query. In this connector, enter the document date (doc_date) in the Where box. The condition will be "equals" and the criteria will be "3/1/2005" which is the date specified to appear in the results. To simplify the process explained here, the database is told to search for all document types coded as a letter and to display only those letters with the date of 3/1/2005. Once the query is set up, press the Run Query button. The results will appear in the lower left corner. To display the letter, double-click on it and it will appear on the right side replacing the find/query boxes. *See* Figure 6.

Another convenient feature is the capability to save the queries that are run frequently. To save a query, click the Save button and enter a name for the query. Keep in mind that the query, not the search results, will be saved.

This process may seem complicated, but mastering the art of setting up the information in the find/query boxes makes the process run much more smoothly. The important thing to remember is that once the information is coded correctly, it will not have to be coded again. If it is coded, the AUSA will find it. The documents are not misfiled and time is not wasted retrieving the information.

Coding the Sanction case database may seem like a lot of work, but consider the fact that an issue about a document that was not included as an exhibit may come up in the courtroom. A quick search of the database will find the document and allow the AUSA to add it to the exhibit list.

VIII. Closing argument

Sanction can be a powerful tool in organizing and presenting cases. To maximize its potential, AUSAs should use and implement it as part of their exhibit preparation and presentation.

Sanction is only as useful as the evidence that is placed into it. Once the evidence is in the case folder, the AUSA has a powerful tool on his side to organize and present the case.

"I was very impressed with the Sanction program and would recommend its use to other prosecutors," said AUSA Dasher. "I do believe that Sanction insures that you are squeezing every last drop of probative value from a particular piece of evidence." Interview with Alan Dasher, Assistant United States Attorney, in Columbus, Ga. (June 2005).❖

ABOUT THE AUTHOR

❑**Milton Hooper** is the Automated Litigation Support Specialist for the U.S. Attorney's Office, Middle District of Georgia. He has been with the Department of Justice for fourteen years and a contributing writer for *Law Office Computing* magazine. Milton served in the U.S. Air Force where he worked with the Air Force Office of Special Investigations. ✠

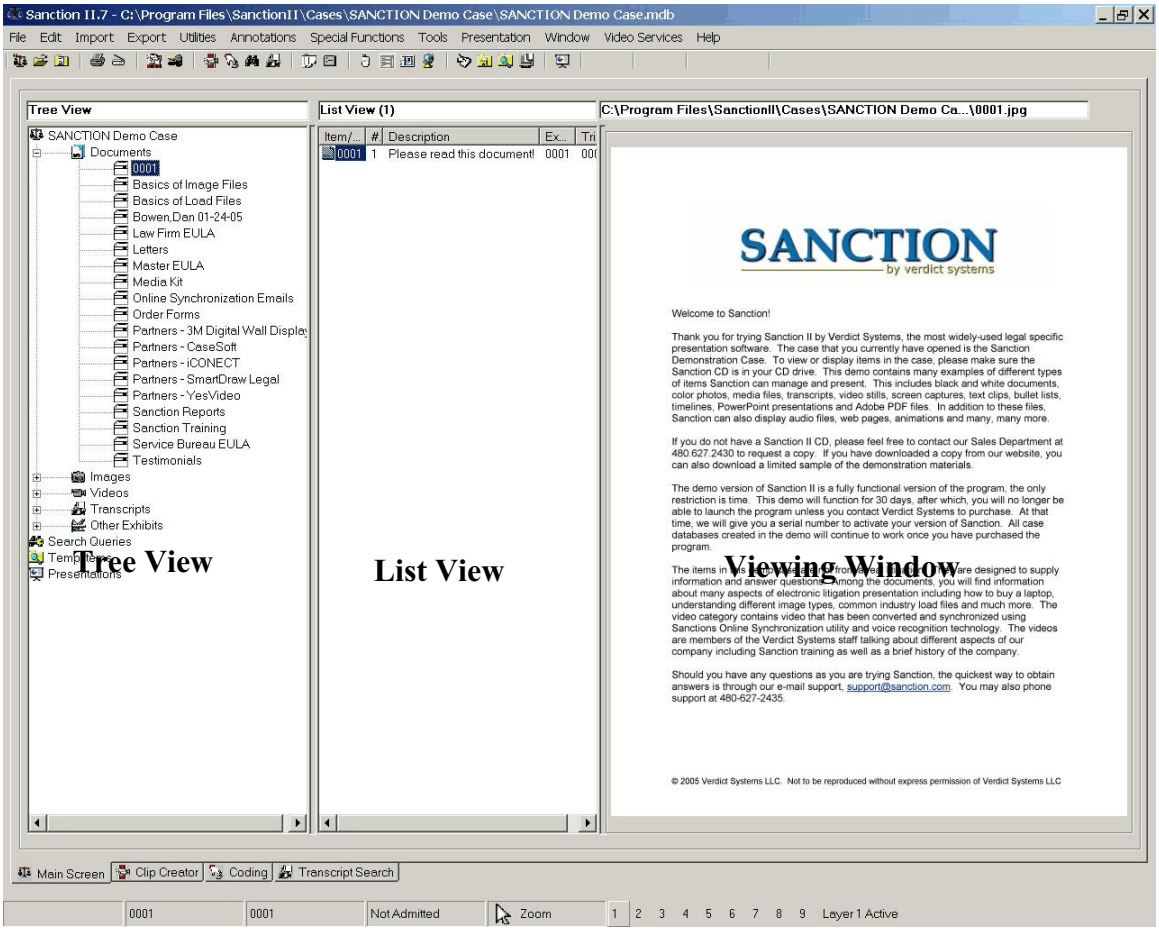


Figure 1

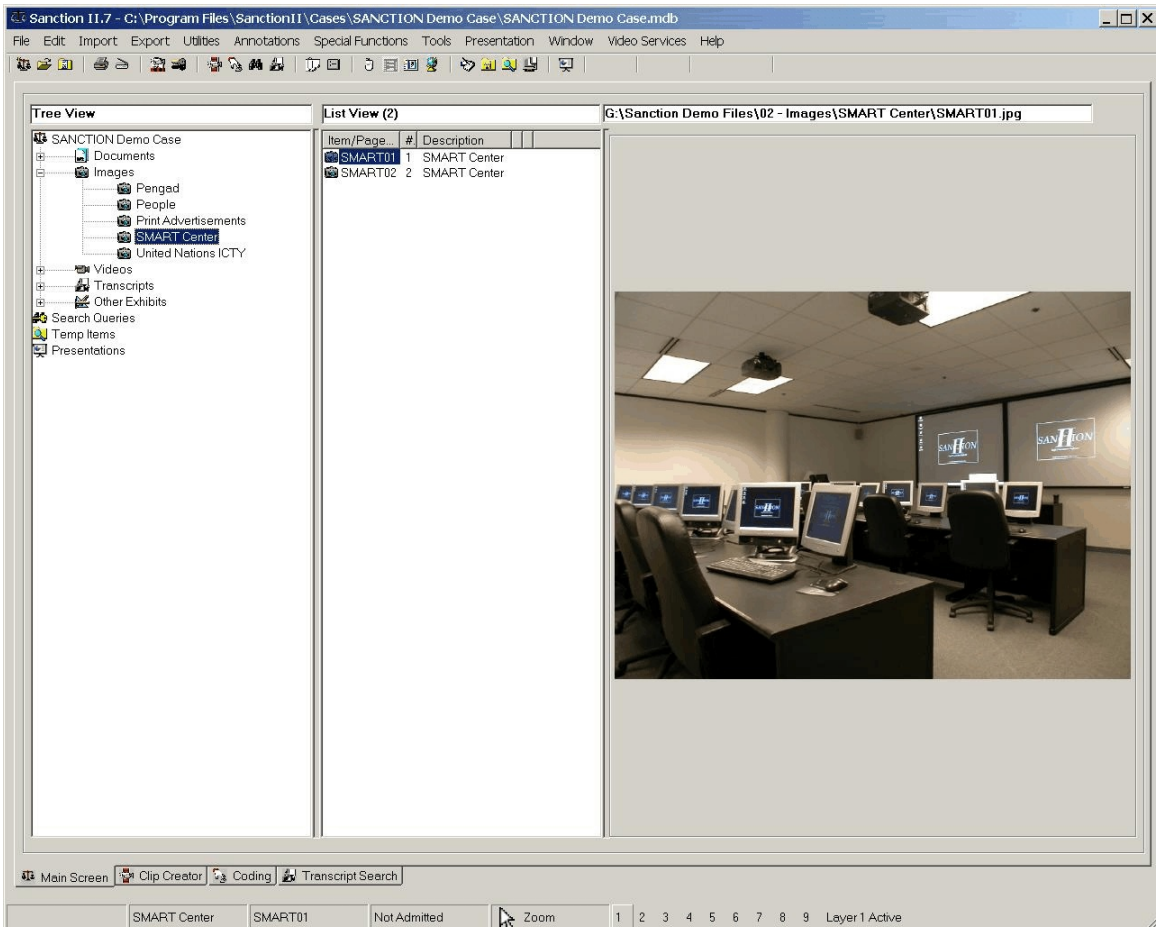

Sanction II.7 - C:\Program Files\SanctionII\Cases\SANCTION Demo Case\SANCTION Demo Case.mdb
File Edit Import Export Utilities Annotations Special Functions Tools Presentation Window Video Services Help
Tree View
List View (2)
G:\Sanction Demo Files\02 - Images\SMART Center\SMART01.jpg
SANCTION Demo Case
Documents
Images
Pengad
People
Print Advertisements
SMART Center
United Nations ICTY
Videos
Transcripts
Other Exhibits
Search Queries
Temp Items
Presentations
Item/Page...
#
Description
SMART01 1 SMART Center
SMART02 2 SMART Center
Main Screen
Clip Creator
Coding
Transcript Search
SMART Center
SMART01
Not Admitted
Zoom
1 2 3 4 5 6 7 8 9
Layer 1 Active

Figure 2

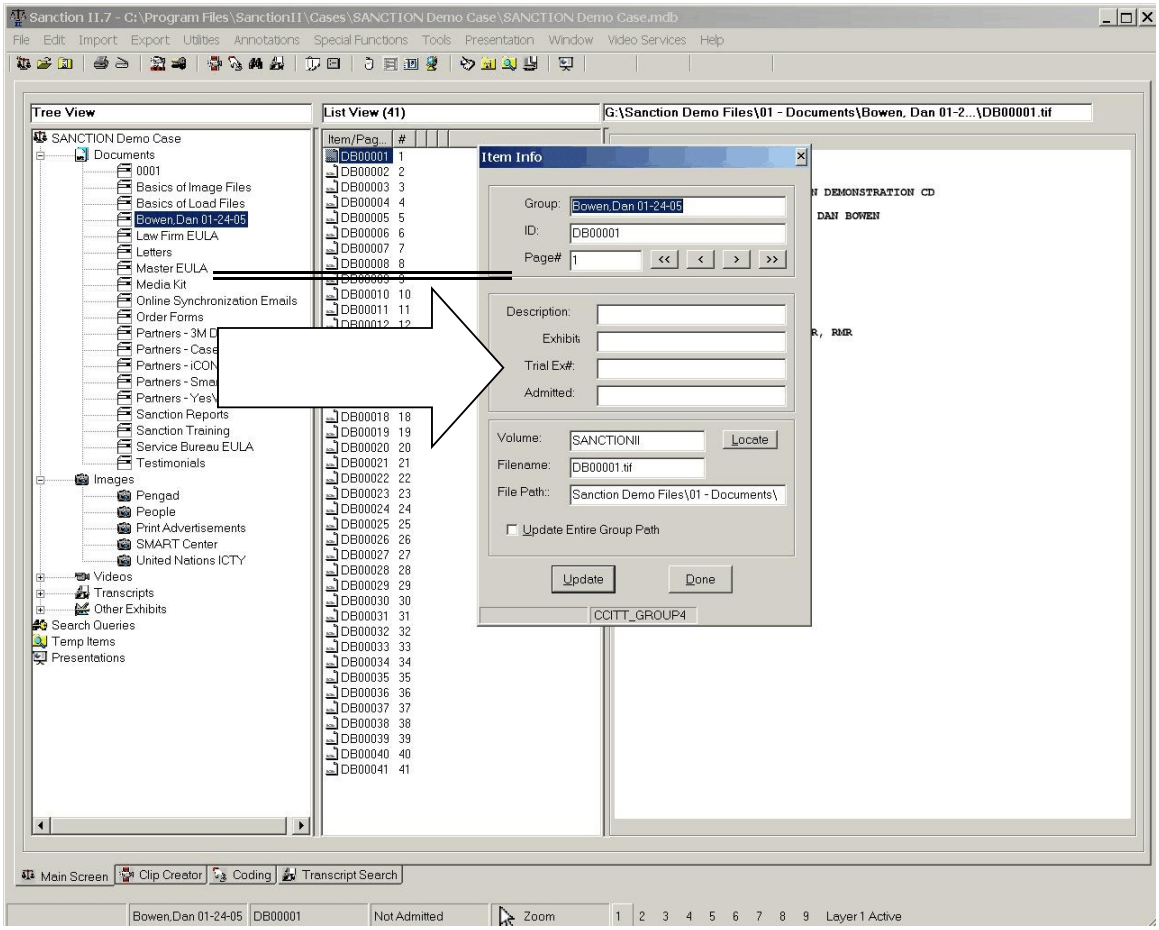

Sanction II.7 - C:\Program Files\SanctionII\Cases\SANCTION Demo Case\SANCTION Demo Case.mdb
File Edit Import Export Utilities Annotations Special Functions Tools Presentation Window Video Services Help
Tree View
List View (41)
G:\Sanction Demo Files\01 - Documents\Bowen, Dan 01-2...\DB00001.tif
SANCTION Demo Case
Documents
0001
Basics of Image Files
Basics of Load Files
Bowen,Dan 01-24-05
Law Firm EULA
Letters
Master EULA
Media Kit
Online Synchronization Emails
Order Forms
Partners - 3M D
Partners - Case
Partners - iCON
Partners - Sma
Partners - Yes\
Sanction Reports
Sanction Training
Service Bureau EULA
Testimonials
Images
Pengad
People
Print Advertisements
SMART Center
United Nations ICTY
Videos
Transcripts
Other Exhibits
Search Queries
Temp Items
Presentations
Item/Peg...
#
DB00001 1
DB00002 2
DB00003 3
DB00004 4
DB00005 5
DB00006 6
DB00007 7
DB00008 8
DB00009 9
DB00010 10
DB00011 11
DB00012 12
DB00018 18
DB00019 19
DB00020 20
DB00021 21
DB00022 22
DB00023 23
DB00024 24
DB00025 25
DB00026 26
DB00027 27
DB00028 28
DB00029 29
DB00030 30
DB00031 31
DB00032 32
DB00033 33
DB00034 34
DB00035 35
DB00036 36
DB00037 37
DB00038 38
DB00039 39
DB00040 40
DB00041 41
Item Info
Group: Bowen,Dan 01-24-05
ID: DB00001
Page# 1
<< < > >>
Description:
Exhibit:
Trial Ex#:
Admitted:
Volume: SANCTIONII
Locate
Filename: DB00001.tif
File Path:: Sanction Demo Files\01 - Documents\
Update Entire Group Path
Update
Done
CCITT_GROUP4
N DEMONSTRATION CD
DAN BOWEN
R, RMR
Main Screen
Clip Creator
Coding
Transcript Search
Bowen,Dan 01-24-05
DB00001
Not Admitted
Zoom
1 2 3 4 5 6 7 8 9
Layer 1 Active

Figure 3

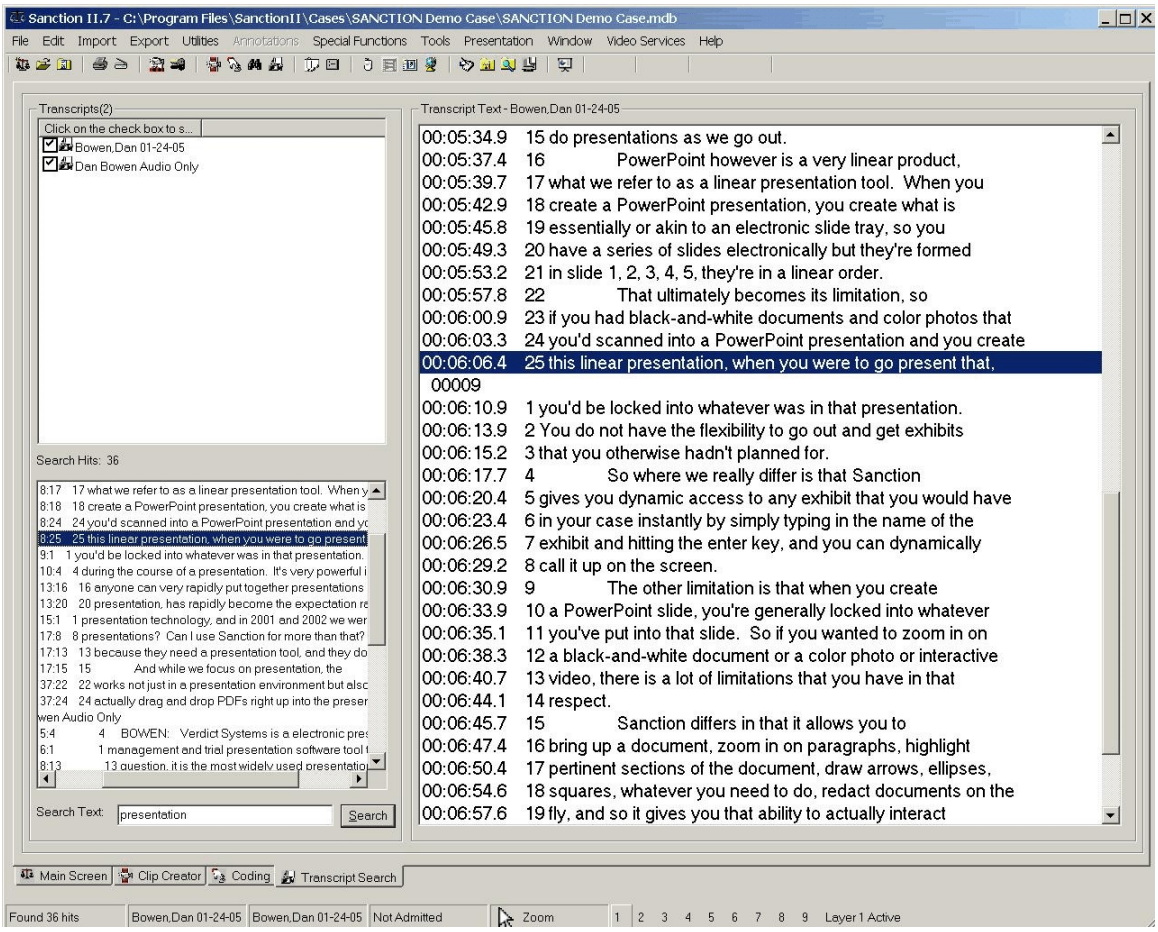

Sanction II.7 - C:\Program Files\SanctionII\Cases\SANCTION Demo Case\SANCTION Demo Case.mdb
File Edit Import Export Utilities Annotations Special Functions Tools Presentation Window Video Services Help
Transcripts(2)
Click on the check box to s...
Bowen,Dan 01-24-05
Dan Bowen Audio Only
Search Hits: 36
Search Text: presentation
Search
Transcript Text - Bowen,Dan 01-24-05
00:05:34.9 15 do presentations as we go out.
00:05:37.4 16 PowerPoint however is a very linear product,
00:05:39.7 17 what we refer to as a linear presentation tool. When you
00:05:42.9 18 create a PowerPoint presentation, you create what is
00:05:45.8 19 essentially or akin to an electronic slide tray, so you
00:05:49.3 20 have a series of slides electronically but they're formed
00:05:53.2 21 in slide 1, 2, 3, 4, 5, they're in a linear order.
00:05:57.8 22 That ultimately becomes its limitation, so
00:06:00.9 23 if you had black-and-white documents and color photos that
00:06:03.3 24 you'd scanned into a PowerPoint presentation and you create
00:06:06.4 25 this linear presentation, when you were to go present that,
00009
00:06:10.9 1 you'd be locked into whatever was in that presentation.
00:06:13.9 2 You do not have the flexibility to go out and get exhibits
00:06:15.2 3 that you otherwise hadn't planned for.
00:06:17.7 4 So where we really differ is that Sanction
00:06:20.4 5 gives you dynamic access to any exhibit that you would have
00:06:23.4 6 in your case instantly by simply typing in the name of the
00:06:26.5 7 exhibit and hitting the enter key, and you can dynamically
00:06:29.2 8 call it up on the screen.
00:06:30.9 9 The other limitation is that when you create
00:06:33.9 10 a PowerPoint slide, you're generally locked into whatever
00:06:35.1 11 you've put into that slide. So if you wanted to zoom in on
00:06:38.3 12 a black-and-white document or a color photo or interactive
00:06:40.7 13 video, there is a lot of limitations that you have in that
00:06:44.1 14 respect.
00:06:45.7 15 Sanction differs in that it allows you to
00:06:47.4 16 bring up a document, zoom in on paragraphs, highlight
00:06:50.4 17 pertinent sections of the document, draw arrows, ellipses,
00:06:54.6 18 squares, whatever you need to do, redact documents on the
00:06:57.6 19 fly, and so it gives you that ability to actually interact
Main Screen
Clip Creator
Coding
Transcript Search
Found 36 hits
Bowen,Dan 01-24-05
Bowen,Dan 01-24-05
Not Admitted
Zoom
Layer 1 Active

Figure 4

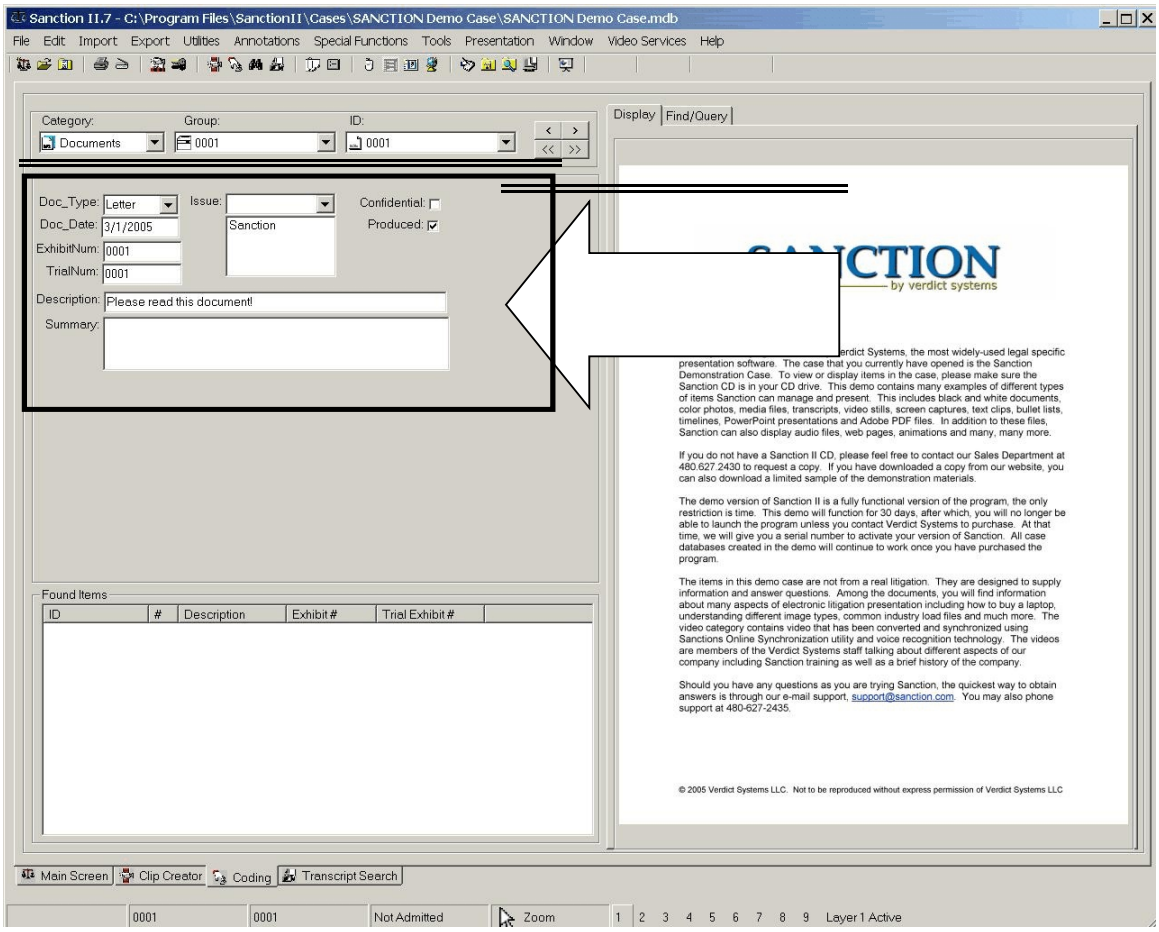

Sanction II.7 - C:\Program Files\SanctionII\Cases\SANCTION Demo Case\SANCTION Demo Case.mdb
File Edit Import Export Utilities Annotations Special Functions Tools Presentation Window Video Services Help
Category: Documents
Group: 0001
ID: 0001
Doc_Type: Letter
Doc_Date: 3/1/2005
ExhibitNum: 0001
TrialNum: 0001
Issue:
Sanction
Confidential:
Produced:
Description: Please read this document!
Summary:
Found Items
ID # Description Exhibit # Trial Exhibit #
Display Find/Query
by verdict systems
presentation software. The case that you currently have opened is the Sanction Demonstration Case. To view or display items in the case, please make sure the Sanction CD is in your CD drive. This demo contains many examples of different types of items Sanction can manage and present. This includes black and white documents, color photos, media files, transcripts, video stills, screen captures, text clips, bullet lists, timelines, PowerPoint presentations and Adobe PDF files. In addition to these files, Sanction can also display audio files, web pages, animations and many, many more.
If you do not have a Sanction II CD, please feel free to contact our Sales Department at 480.627.2430 to request a copy. If you have downloaded a copy from our website, you can also download a limited sample of the demonstration materials.
The demo version of Sanction II is a fully functional version of the program, the only restriction is time. This demo will function for 30 days, after which, you will no longer be able to launch the program unless you contact Verdict Systems to purchase. At that time, we will give you a serial number to activate your version of Sanction. All case databases created in the demo will continue to work once you have purchased the program.
The items in this demo case are not from a real litigation. They are designed to supply information and answer questions. Among the documents, you will find information about many aspects of electronic litigation presentation including how to buy a laptop, understanding different image types, common industry load files and much more. The video category contains video that has been converted and synchronized using Sanctions Online Synchronization utility and voice recognition technology. The videos are members of the Verdict Systems staff talking about different aspects of our company including Sanction training as well as a brief history of the company.
Should you have any questions as you are trying Sanction, the quickest way to obtain answers is through our e-mail support, support@sanction.com. You may also phone support at 480-627-2435.
© 2005 Verdict Systems LLC. Not to be reproduced without express permission of Verdict Systems LLC
Main Screen Clip Creator Coding Transcript Search
0001 0001 Not Admitted Zoom 1 2 3 4 5 6 7 8 9 Layer 1 Active

Figure 5

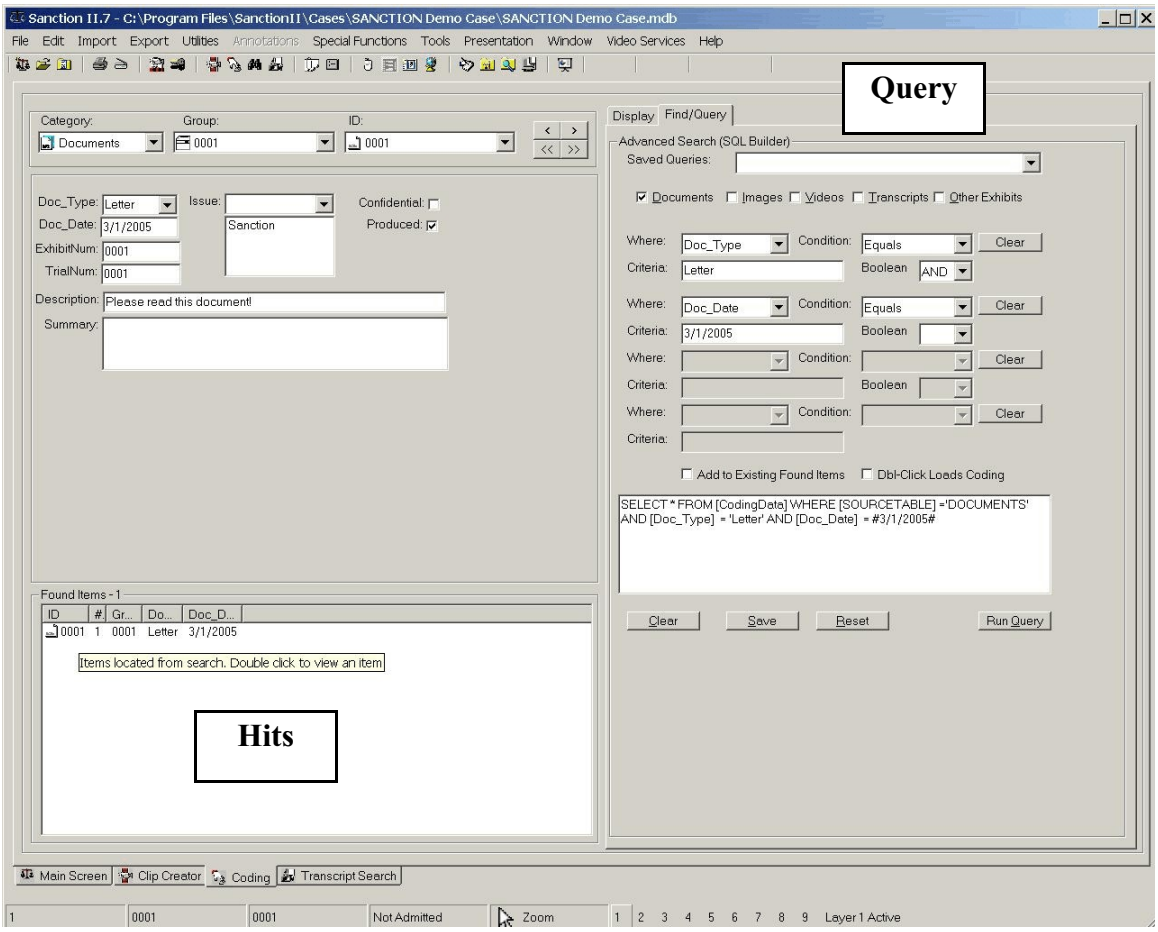

Sanction II.7 - C:\Program Files\SanctionII\Cases\SANCTION Demo Case\SANCTION Demo Case.mdb
File Edit Import Export Utilities Annotations Special Functions Tools Presentation Window Video Services Help
Query
Category: Documents
Group: 0001
ID: 0001
Doc_Type: Letter
Doc_Date: 3/1/2005
ExhibitNum: 0001
TrialNum: 0001
Issue:
Sanction
Confidential:
Produced:
Description: Please read this document!
Summary:
Display Find/Query
Advanced Search (SQL Builder)
Saved Queries:
Documents Images Videos Transcripts Other Exhibits
Where: Doc_Type Condition: Equals Clear
Criteria: Letter Boolean AND
Where: Doc_Date Condition: Equals Clear
Criteria: 3/1/2005 Boolean
Where: Condition: Clear
Criteria: Boolean
Where: Condition: Clear
Criteria:
Add to Existing Found Items
Dbl-Click Loads Coding
SELECT * FROM [CodingData] WHERE [SOURCETABLE] ='DOCUMENTS' AND [Doc_Type] = 'Letter' AND [Doc_Date] = #3/1/2005#
Clear
Save
Reset
Run Query
Found Items - 1
ID # Gr... Do... Doc_D...
0001 1 0001 Letter 3/1/2005
Items located from search. Double click to view an item
Hits
Main Screen
Clip Creator
Coding
Transcript Search
1
0001
0001
Not Admitted
Zoom
1 2 3 4 5 6 7 8 9
Layer 1 Active

Figure 6

Sanction II.8–Presentation Mode or "Putting on the Show"

Rick Paugh
Automated Litigation Support Specialist
United States Attorney's Office
Southern District of Indiana

I. Introduction

Presentation Mode is exactly what its name implies, a vehicle to present your digital case in court. It is arguably the "payoff" for all the time spent in preparing for a digital trial.

The Presentation button starts Presentation Mode from the Main Screen (it may also be started by selecting **Presentation** from the Menu bar). Presentation Mode opens to a black screen with a toolbar at the bottom. The toolbar has been made as unobtrusive as possible so as not to detract from the displayed exhibit. In the event the judge dislikes the toolbar, its default may be set so that it appears only when the mouse pointer is moved over it. The toolbar is not needed to run a presentation, however, presentations will flow more smoothly if it is used. *See* Figures 1 and 2.

II. Screen panels

Presentation Mode has five panels available for displaying exhibits. These are selected by clicking on the small panels in the center of the toolbar. The selected panel will turn green to give a visual clue for that selected panel. *See* Figure 3.

The left (square) panel selects Full Screen, placing the exhibit in the center of the screen. The two figures below are representative examples of a document and a photo displayed in Full Screen. *See* Figures 4, 5, and 6.

Full Screen gives the largest screen area and is probably the best view for any single exhibit.

The left and right panels must be taken together because they create two display areas on the screen to allow two exhibits to be displayed simultaneously. This side-by-side display allows a witness to compare or contrast two instances of the same document. It is also useful to display two consecutive pages of a multipage document to maintain a linear flow from point-to-point (as in a contract). Another common use of the left/right display is for opening and closing arguments. The counts of an indictment may be displayed in the left panel while arguments are rotated through the right panel. The left/right panel is best suited to portrait orientation. *See* Figures 7, 8, and 9.

The last two display options are Top and Bottom, and must be discussed together. The top/bottom configuration splits the presentation screen into top and bottom panes. The top/bottom view is better suited to landscape oriented exhibits.

One of the best uses of the top/bottom display is the presentation of bank checks. During a trial, the presentation of checks usually involves both sides of the checks. The figure below displays the two sides of a check simultaneously so that jurors can see all of the information at a glance.

This two-pane landscape view would also be helpful to display two sections of a financial spreadsheet (or two versions of the same spreadsheet section). *See* Figures 10, 11, and 12.

Customizing the view (panels) for each exhibit helps to keep all the players on the same page. Consider the following advantages.

- Support staff do not need to prepare witness folders (time saver).
- It is unnecessary for jurors to search through binders for correct documents (time saver).
- Likewise, it is unnecessary for opposing counsel to search through binders for documents. (time saver).
- The AUSA does not need to find documents in witness folders (time saver).

Once the trial team becomes proficient with setup and presentation, it will save the AUSA, the litigation staff, and the court valuable time and money.

III. Presentation folders and presentation items

The first portion of this article discussed how exhibits can be displayed to the court. The following sections will discuss how exhibits are digitized. Presentation folders may, for example, be set up by witness (i.e. Smith_John). Each presentation folder contains the exhibits to which that witness is expected to testify.

The drop down box at the far left of the toolbar shows the list of presentation folders. (Note that the default presentation cannot be deleted.) Selecting a presentation activates the next drop down box, Presentation Items. *See* Figure 13.

This drop down shows all the exhibits entered into the presentation in the order in which they were added. This may be changed in List View. Click on an item to show that exhibit on the presentation screen.

Ideally, the items in the presentation folder should be organized in the order in which they will be presented. If that is the case, select the first item and it will appear on the screen (assuming a full screen view). *See* Figure 14.

Having selected the first item, document **VS0005** is displayed on the screen. Assuming that all the exhibits are in the order in which the AUSA expects to call them, this gives him the ability to step through the exhibits.

To the right of the Presentation Item drop down are two arrows pointing left and right. These arrows are used to navigate to the Previous Item and Next Item. The use of either arrow steps the AUSA sequentially through the Presentation Items in the current order. The last item in the list will remain on the screen.

Assume that the Smith_John presentation mentioned above has progressed smoothly from exhibit **VS0005** through exhibit **VS0031.** The AUSA is about to finish with his witness when he realizes that he can tie everything together by referring back to exhibit **VS0009**. The previous/next buttons become rather cumbersome in this example. Using the previous button, in this case, would be rather like handing the witness the previous five exhibits one at a time. One solution is to click the Presentation Item drop down and click on the desired exhibit. This is a workable solution if the list of exhibits is fairly short. A better solution is to employ a "blind search." The blind search allows the AUSA to pull up any exhibit by typing the exhibit identifier and pressing the enter key in the search field. This will display any exhibit entered in the Sanction case, even if it is in a presentation folder.

IV. Other exhibit display options

Notice the use of the term "exhibit identifier" in the previous example. Exhibits may be identified in Sanction by ID (for example, imported Bates number), Exhibit Number, Trial Exhibit Number, or Description. Presentation Mode may be set to search on any of these fields. Ensure the exhibits are entered consistently and in the order the AUSA wishes to refer to them during trial. If Sanction is set to search for Trial Exhibit Number and the AUSA inserts the Bates number, the search will fail. It is generally not recommended to search on the Description field. The searches take longer and the results can be ambiguous.

Sanction also supplies a means to jump to any page in a multipage exhibit. This feature can be particularly helpful when there is one exhibit number for a large document (contracts, mortgages, and financial statements, for example). If a particular page in a (displayed) document is needed, simply type a period (.) and the page number. Inserting ".12" will find and display page twelve of the current document. Keep in mind that "page number" refers to the sequential page in the exhibit, not necessarily the actual document page number.

An increasingly popular way to display exhibits is by bar code. An identifier (ID, Trial Exhibit, or any of the above mentioned items) is chosen to retrieve the image in Presentation Mode. A bar code is then generated for each exhibit. For example, the ID number of **CS0001** generates the following bar code. The AUSA will have a printout of the bar codes for each presentation. The bar code for each exhibit is read with a bar code reader and the exhibit appears in Presentation Mode. *See* Figure 15.

Many AUSAs prefer the bar code selection because it minimizes their interaction with the computer. The AUSA can present exhibits by bar code, and can generate Presentation Mode Bar codes for the commonly used presentation tools such as those below. *See* Figure 16.

It is possible to conduct an entire trial and only touch the computer to turn it on and off. Note: Turn the beeper on the bar code reader off.

V. Commonly used tools

Sanction contains several useful tools for manipulating exhibits in the Presentation Mode. The Tool buttons are located on the right side of the toolbar and may be added or removed depending on the AUSA's requirements. Thirty five buttons are available, however, it is not advisable to crowd the toolbar with nonessential buttons. The most commonly used tools are shown here. *See* Figure 17.

From left to right the tools are:

- Zoom (default).
- Magnify.
- Highlight.
- Arrow.
- Freehand line.
- Straight line.
- Hollow rectangle.
- Auto Delete.
- Clear Panel.
- Full Screen.

Zoom, Magnify, and Highlight are the most commonly used tools for working with exhibits.

A. Zoom

Zoom is useful to make a portion of a document easier to read or to focus the witness on a specific portion. Click and drag a box around an area to enlarge it. The second paragraph of the document shown has been selected and appears below. *See* Figures 18 and 19.

The main document disappears and the selected portion appears on the screen. This is a useful option to employ to when the AUSA wants to avoid confusion between the original and the area in question.

B. Magnify

Magnify operates in a similar fashion to enlarge a selected portion of the screen, however, the original exhibit remains in the background. The figure below is an example of Magnify.

Magnify differs from Zoom in two other important ways. First, the selection may be placed anywhere on the screen by clicking and dragging it to the desired position. Second, eight magnified areas may be selected and displayed on the screen simultaneously. *See* Figure 20.

In both Zoom and Magnify, double-click to remove the selection from the screen. The selected areas of Zoom and Magnify share the ability to scroll. Click inside the selected area then use the cursor arrows on the keyboard to scroll up and down.

C. Highlight

Highlight is another one of the most commonly used tools. Highlight is used to highlight portions of an exhibit in Presentation Mode. Click and drag an area on the exhibit and it will highlight in the selected color. Six colors are available to highlight, however, the colors black and white will actually mask (cover) the selected area and are more suited to redacting on-the-fly.

Highlight can be very effective when used in conjunction with Zoom and Magnify. A good technique is to introduce the exhibit, highlight the desired area, then Zoom or Magnify that same area.

This technique focuses on the exact portion of the exhibit that needs attention and keeps that highlight in the enlarged area. This helps maintain a context for the enlarged area of the exhibit. *See* Figures 21 and 22.

Screen Capture is another function of Sanction II.8. Screen Capture is often used in conjunction with Magnify (and to a lesser extent with Zoom) to record the screen image for the record. When the image is on the screen, depress the F7 key to capture it. The whole screen (including annotations) will be saved to the Other Exhibits/Captures category. This function may be useful in appeals by showing the appellate court exactly what was displayed in the original trial.

A time saving use of Screen Capture is to highlight and magnify portions of an exhibit

beforehand, then capture them for use at trial. This allows the AUSA to be very precise in what he wants to present to the court.

D. Other annotations

The figure below shows how Arrows, Lines, and Rectangles may be used on an exhibit in Presentation Mode. The litigation team will need to experiment with these tools to find the optimum use for presentations. *See* Figure 23.

The Hollow Rectangle tool is useful for marking large areas of the exhibit. Highlighting tends to become obtrusive as you approach 60% to 70% coverage of the exhibit. The Hollow Rectangle is more useful than Highlight when selecting areas of a photograph.

The Straight Line tool is useful where underlining may be more appropriate than highlighting.

The Auto Delete button allows selective deletion of annotations on exhibits. Click the Auto Delete button, then move the cursor to the annotation then click again. The keyboard combination of Ctrl + Delete will clear all annotations on the selected pane. *See* Figure 24.

The final two buttons on the toolbar are Clear and Full Screen. The Clear button removes any image from the currently active panel. The Full Screen button changes any active panel to Full Screen. *See* Figure 25.

VI. Media

Up to this point, static exhibits such as documents and photographs have been discussed. One of Sanction's most powerful features though, is the ability to present dynamic evidence. Not only may audio and video files be played in Presentation Mode, but text transcripts may be synchronized to display along with the audio or video (much like closed captioning).

The synchronized text feature of Sanction helps to eliminate pesky problems such as video/audio players and transcript binders.

The figure below is an example of text synchronized with video. As the video plays, the text scrolls and highlights the current line (or lines). *See* Figure 26.

This keeps the jury focused on the video and the correct portion of the transcript at the same time. This technique works just as well with audio only (wiretap). As the audio plays, everyone is focused on the highlighted transcript. (The AUSA has the ability to place photos of the participants above the transcript in audio synchronization, to help the jury put faces with voices.)

VII. Some operational tips

Throughout this article, it has been emphasized that the AUSAs have these wonderful capabilities and can present a highly effective case. In reality, the AUSA is not alone.

Most AUSAs will benefit by having a member of the litigation team run the Sanction presentation in court. This frees the AUSA to concentrate on his case, not on running the computer. The member of your team who is tasked with Sanction presentations should be involved at the earliest possible time in the trial preparation. The more knowledgeable that person is about the case and the Sanction setup, the easier it will be for them to "keep up" in court. Legal assistants, paralegals, and case agents run Sanction successfully every day.

That is not to say that the AUSA cannot run Sanction alone. Many attorneys with relatively simple cases go it alone. An AUSA can conduct a bank robbery trial (a few photographs and a video) very well by himself. The IT staff can provide a wireless mouse/presentation control for the computer, which will allow the AUSA to run the presentation from anywhere in the courtroom.

VIII. Sanction in a no-tech courtroom

All of this sounds great, but how is it possible in a courtroom that is not set up for the technology? How can the AUSA use Sanction in this setting?

The items listed below are needed for the basic presentation.

- Projector.
- Laptop.
- Projection screen.
- RGB cable.
- Surge protector.

- Gaffer's tape.
- External speaker cable (if audio is used).

Make sure that the projection screen is positioned so that the jurors can clearly read what is projected on the screen. A laptop will be connected to the projector and the laptop will be on the AUSA's table. The AUSA may choose to operate Sanction or may feel more comfortable if someone else takes care of this. The most important thing to do in preparing to use Sanction in the courtroom is to practice. This cannot be emphasized enough. The presentation may look great in the office on a computer monitor, but it can be different when using a projector. Go into the courtroom before the trial and set up the equipment as it will be during the trial. This will allow adjustment of the viewing angles, monitor resolution, and other arrangement that may not be anticipated in the office.

IX. Conclusion

Sanction II.8 contains many tools for the organization and presentation of your cases. Presentation folders allows organization of exhibits in a logical manner for efficient retrieval at trial. Five different display options allow the AUSA to tailor the display to the type of exhibit.

Sanction permits the AUSA to show exhibits with speed and efficiency. Paper documents are not needed. Witness examinations will go more smoothly, evidence will be shown more effectively, and the trial will probably be shorter for the effort.

Try Sanction on a small case. Put in a few documents. Try each view. Make some annotations. Try it out in the privacy of the office. Practice, practice, practice. See the difference.❖

ABOUT THE AUTHOR

❑**Rick Paugh** is the Automated Litigation Support Specialist for the U.S. Attorney's Office, Southern District of Indiana. He has been with the Department of Justice for three years and has taught several PowerPoint and Sanction II classes at the National Advocacy Center. Rick is retired from the U.S. Air Force where he held a Master Instructor rating and earned an Instructor of Technology degree from the Community College of the Air Force.✠

Figure 1

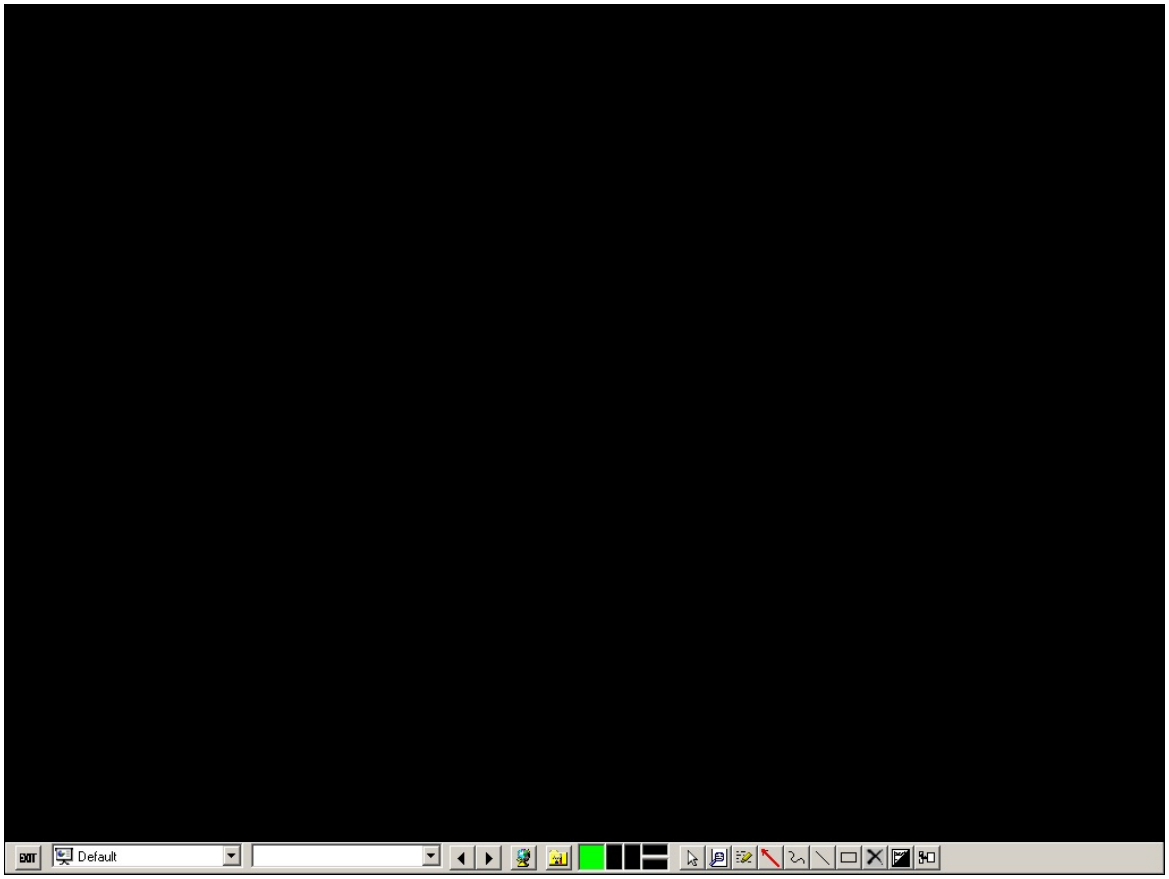


Figure 2

Figure 3

Figure 4

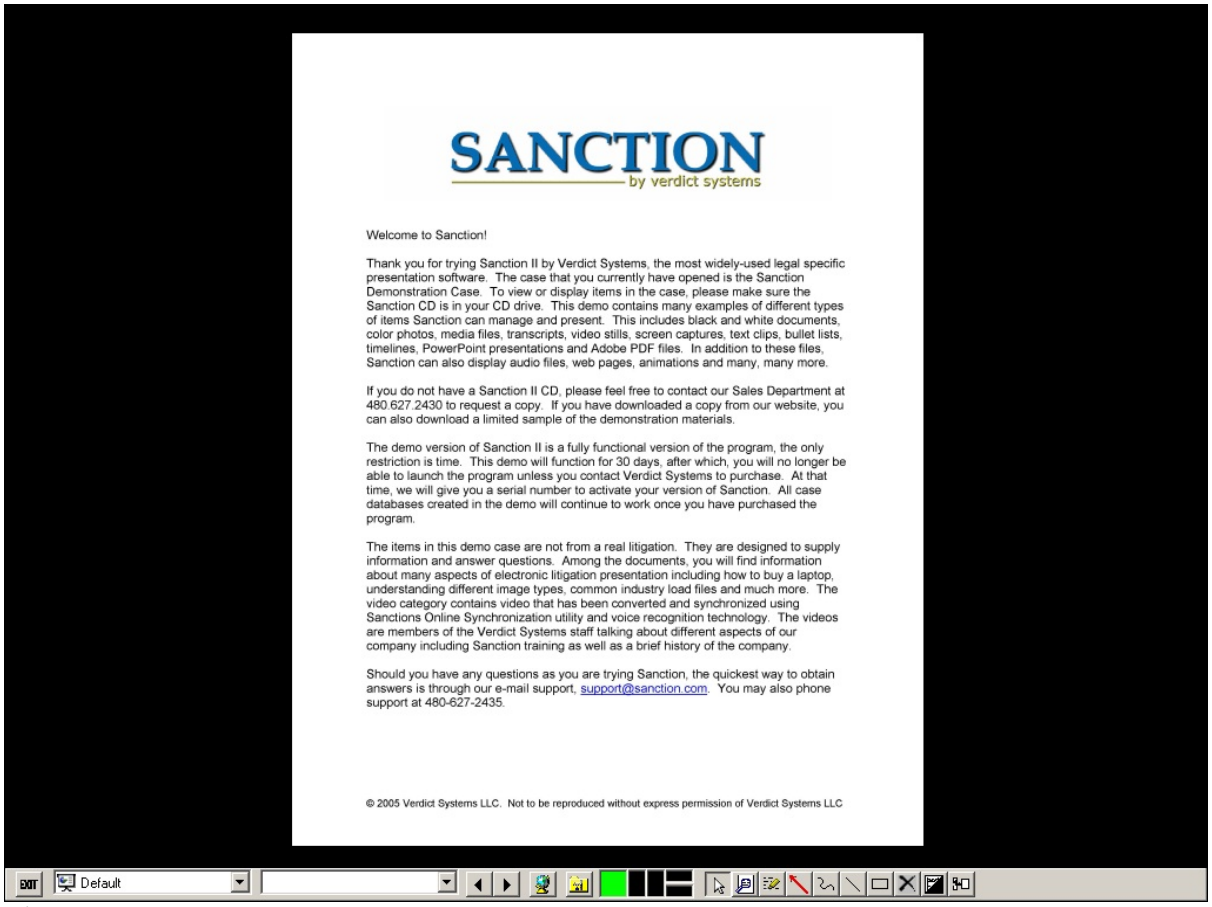


Figure 5

Figure 6

Figure 7

Figure 8

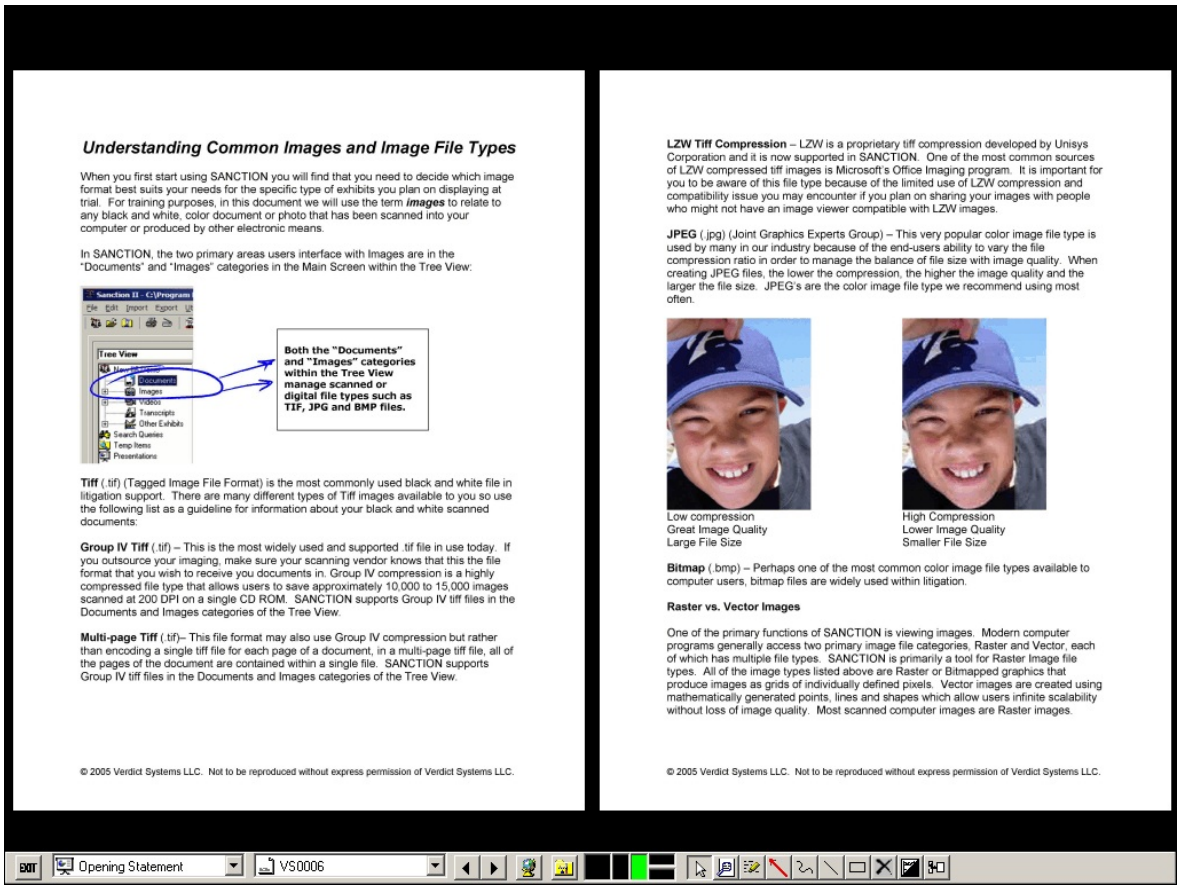


Figure 9

Figures 10 and 11

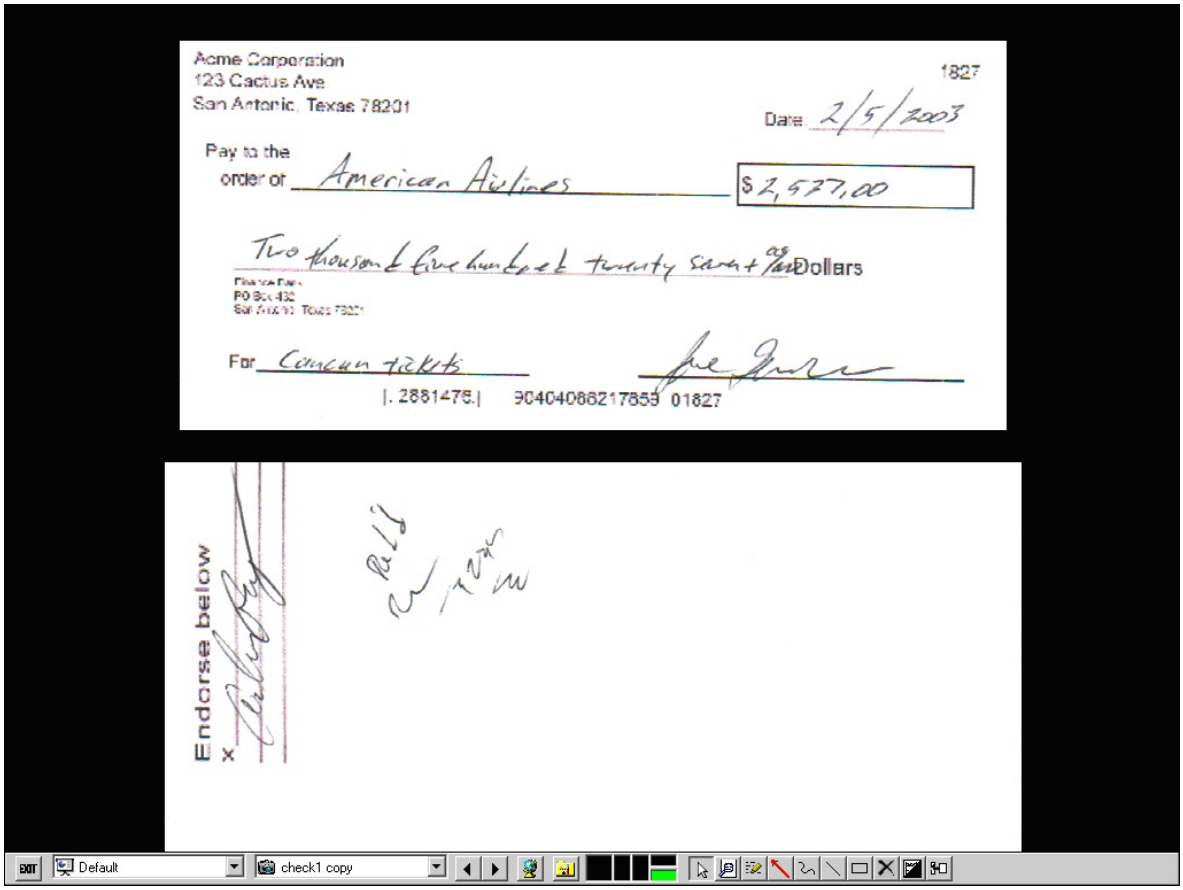


Figure 12

Figure 13

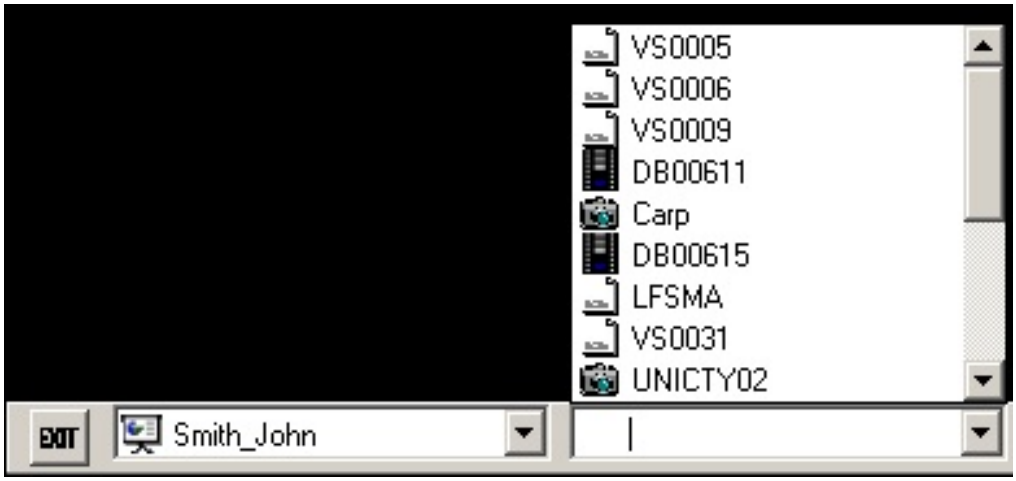
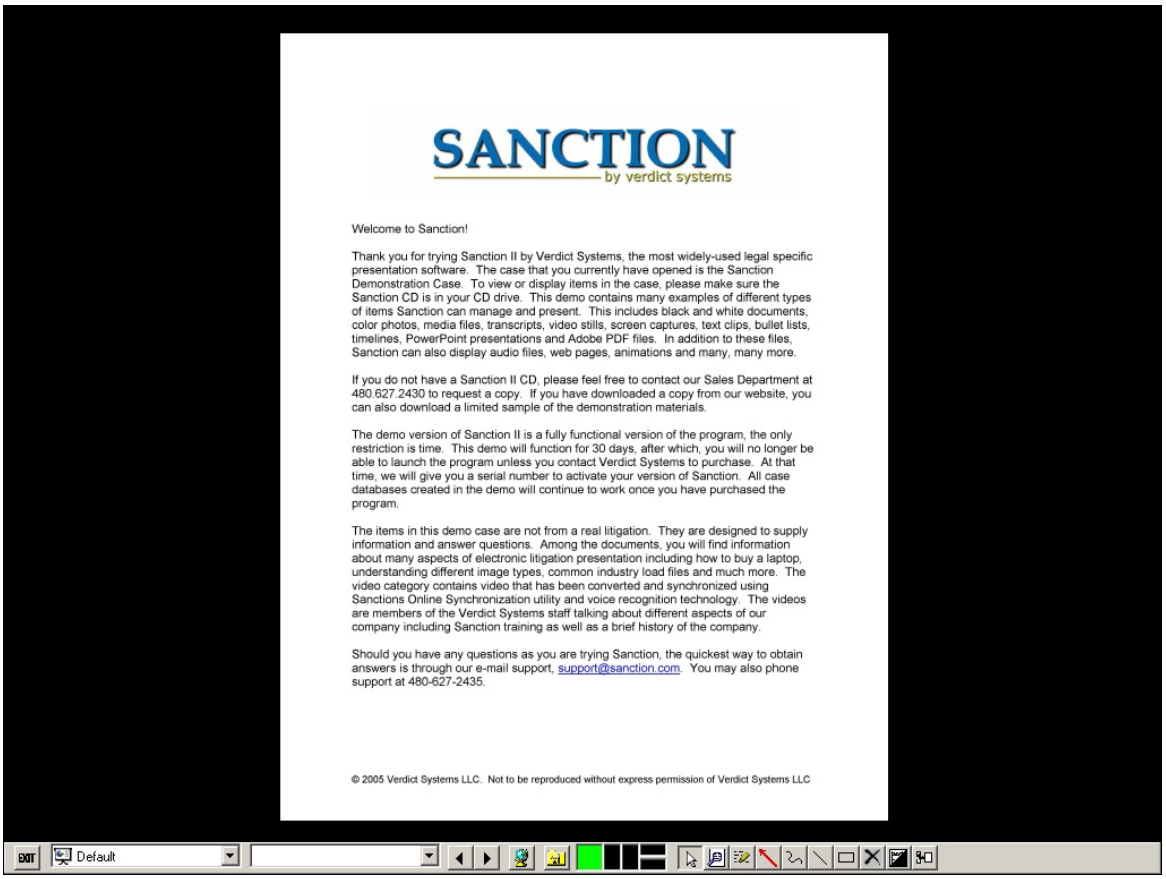


Figure 14

Figure 15

Figure 16

Figure 17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EXIT
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Figure 18

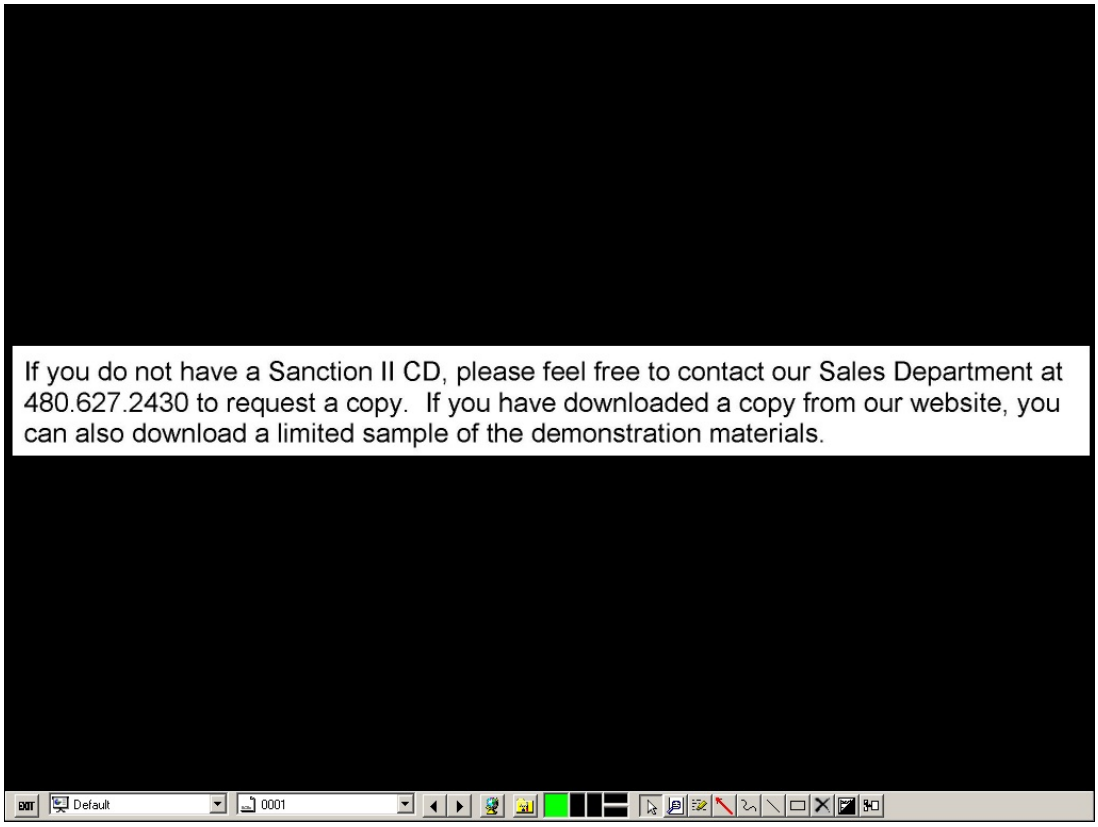
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Figure 19

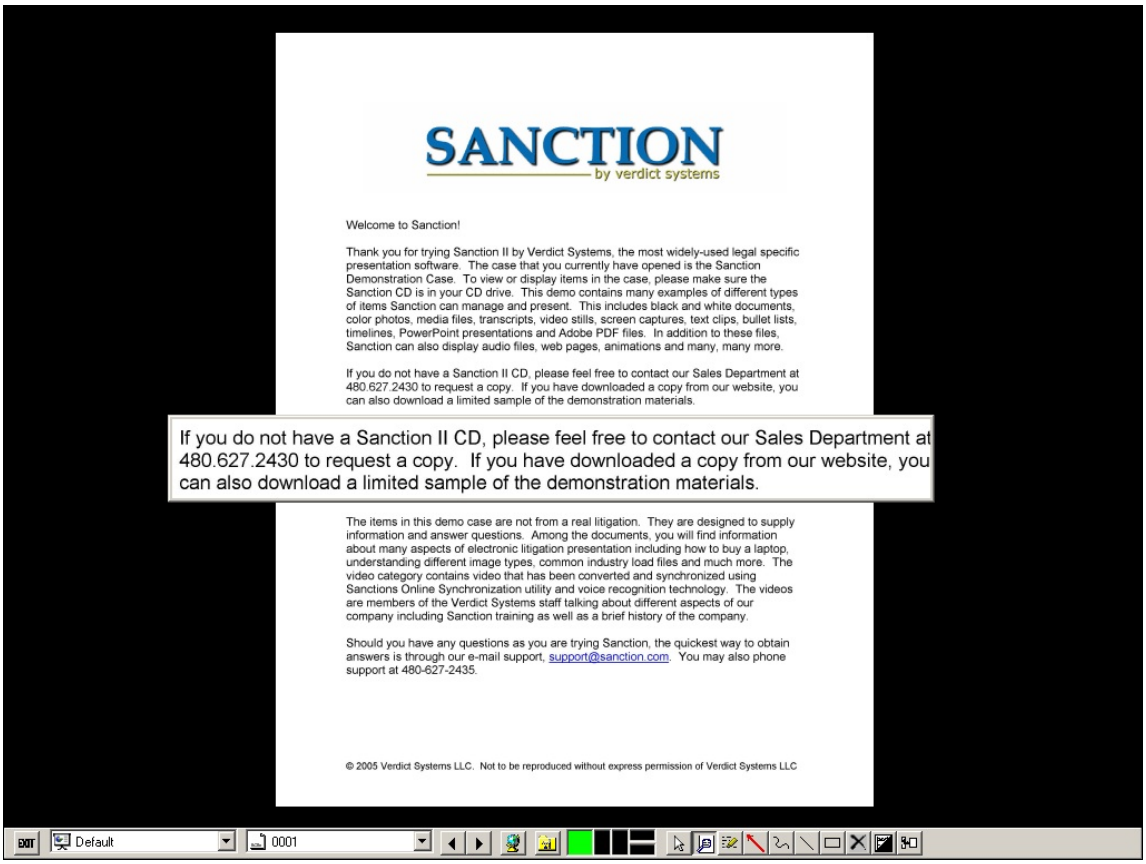
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Figure 20

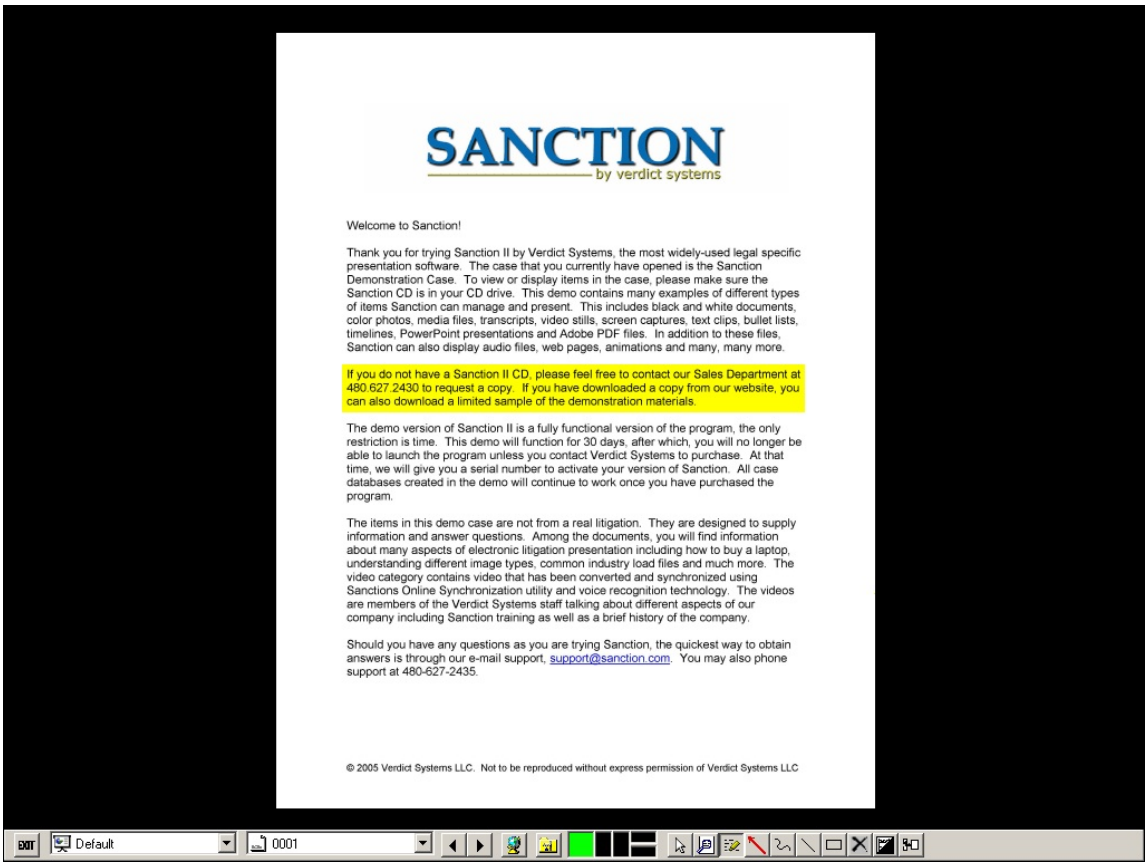
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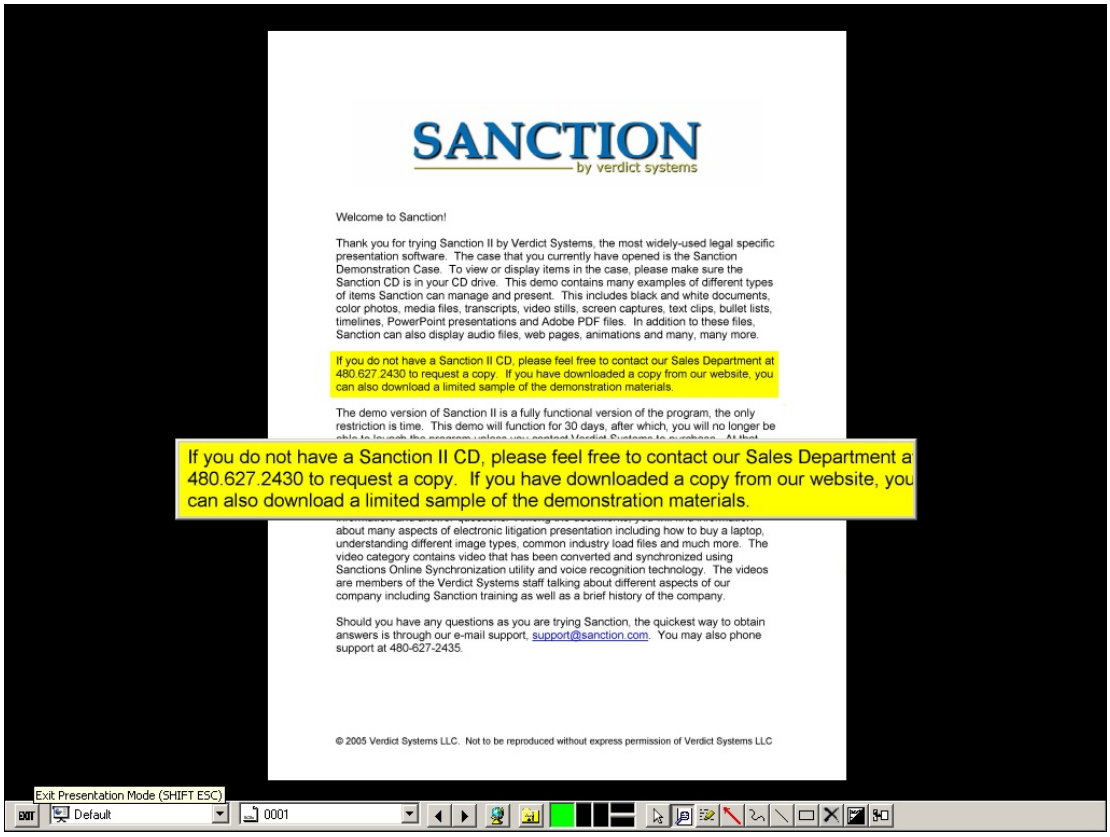
Figure 21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Exit Presentation Mode (SHIFT ESC)
EXIT
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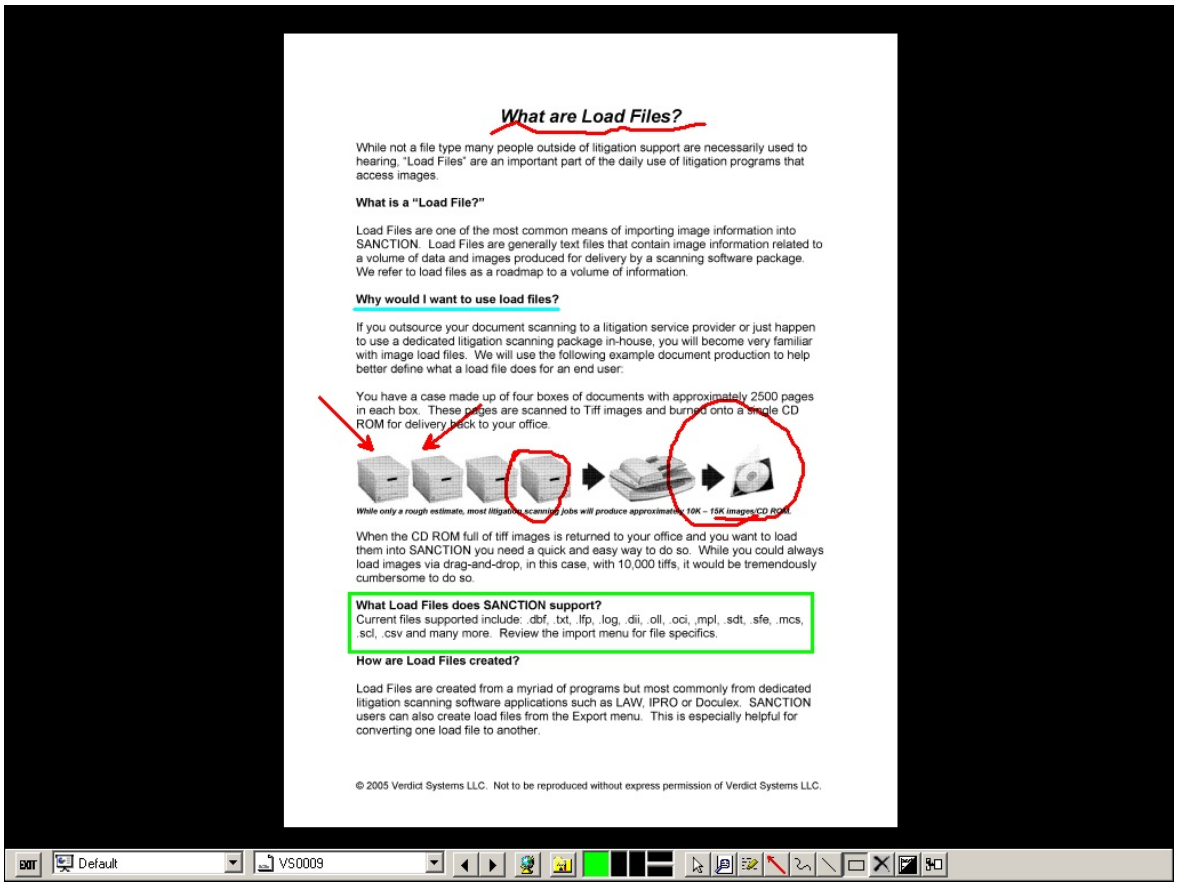
Figure 22


What are Load Files?
While not a file type many people outside of litigation support are necessarily used to hearing, "Load Files" are an important part of the daily use of litigation programs that access images.
What is a "Load File?"
Load Files are one of the most common means of importing image information into SANCTION. Load Files are generally text files that contain image information related to a volume of data and images produced for delivery by a scanning software package. We refer to load files as a roadmap to a volume of information.
Why would I want to use load files?
If you outsource your document scanning to a litigation service provider or just happen to use a dedicated litigation scanning package in-house, you will become very familiar with image load files. We will use the following example document production to help better define what a load file does for an end user:
You have a case made up of four boxes of documents with approximately 2500 pages in each box. These pages are scanned to Tiff images and burned onto a single CD ROM for delivery back to your office.
While only a rough estimate, most litigation scanning jobs will produce approximately 10K – 15K images/CD ROM.
When the CD ROM full of tiff images is returned to your office and you want to load them into SANCTION you need a quick and easy way to do so. While you could always load images via drag-and-drop, in this case, with 10,000 tiffs, it would be tremendously cumbersome to do so.
What Load Files does SANCTION support?
Current files supported include: .dbf, .txt, .lfp, .log, .dii, .oll, .oci, .mpl, .sdt, .sfe, .mcs, .scl, .csv and many more. Review the import menu for file specifics.
How are Load Files created?
Load Files are created from a myriad of programs but most commonly from dedicated litigation scanning software applications such as LAW, IPRO or Doculex. SANCTION users can also create load files from the Export menu. This is especially helpful for converting one load file to another.
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EXIT
Default
VS0009

Figure 23

Figure 24

Figure 25

Figure 26

What Is CaseMap?

Charlene Tallman
Litigation Support Specialist
United States Attorney's Office
District of Vermont

Phil Samson
Automated Litigation Support Specialist
United States Attorney's Office
District of Massachusetts

I. Introduction

CaseMap is a relational database which is specifically designed for legal and trial-related applications. It has been optimized to make organizing and evaluating facts, people, research, and issues easy. All aspects of a case may be sorted and/or searched, and the relationships between these items are preserved. For example, Microsoft Access or LIONS are other relational databases, used in U.S. Attorneys' offices, containing data tables (such as an Excel spreadsheet or WordPerfect table) which can be searched, sorted, or linked together.

Unlike Microsoft Access or LIONS, however, CaseMap's user interface is designed to be intuitive and ready to use by the legal professional without extensive training. It is formatted with preset tables that are organized around the typical structure of a case. In most situations, there is little if any need to call upon Systems to set up a case, customize the fields for data entry, design reports, or run queries. Rather, the trial team (composed of AUSAs, investigators, paralegals, secretaries, and interns) can perform all of these functions. Users are generally comfortable with CaseMap within twenty minutes. They can perform basic data entry, view and sort previously entered data, and print basic reports.

With a fundamental understanding of CaseMap, a user can employ it as a knowledge repository for all aspects of a case. It can be used to create dynamic chronologies, witness lists, and document indexes (exhibit lists). Many of the documents that are traditionally stored as separate WordPerfect files can be combined in Casemap and are collectively much more powerful and useful.

II. Why use CaseMap? Why not keep using WordPerfect?

- **CaseMap** easily sorts all events in a case by date (or various other criteria) with just a right click. Such sorting can be done across multiple data fields.
- **CaseMap** easily filters many individual events or documents to narrow the desired view to a specific time period, author, or issue.
- **CaseMap** easily prints reports and WYSIWYG–What you see is what you get. Printed reports appear to be the results from run queries, filters, or sorts. They can be printed or saved as Adobe Acrobat files to be shared with other members of the trial team.
- **External data** can be imported and linked. Other database programs, such as Concordance or IPRO, can be used to send linked, referenced quotes from viewed documents or images.
- **CaseMap** exports to TimeMap, which is a sister program to CaseMap, and easily creates chronological visuals in a case. Using the Send To function, data from CaseMap can be sent to TimeMap to generate easy-to-read time lines.
- **CaseMap** links allow the user to automatically link events, supporting documents, research, and supporting witnesses, to the indicted counts.
- **CaseMap** can be used to create exhibit lists which can be exported in WordPerfect format.
- **CaseMap** supports concurrent users on the same database and automatically saves all changes, whereas a WordPerfect document can only be opened by one user at a time. Additionally, CaseMap has a replication function which allows one user to work on the database off-site while other users continue to work on the networked copy. When the replica database is returned to the office, it can be synchronized with the master copy, incorporating all changes, so that the work done off-site is merged with the master database.

III. Deciding whether to use CaseMap, Concordance, or IPRO

IPRO is a graphical image database that is designed to replace the original, physical documents produced during the discovery process and/or during an investigation (for example, as a result of a seizure) with scanned images. It obviates the need to continually look through boxes of paper. CaseMap has the ability to function as an index of these documents (with links to the scanned images), but it will not replace the documents themselves. Accordingly, CaseMap and IPRO can work together very nicely.

Concordance is a full-text, searchable database designed to index large numbers of documents, allowing users to search through the text contained in those documents. It links to IPRO in order to display the associated scanned image of the page being searched in Concordance. Concordance is virtually limitless in the number of documents it can index and search whereas CaseMap is limited to 20,000 documents. Therefore, Concordance is well suited for cases that are document intensive. CaseMap, on the other hand, is ideal for smaller cases in which there are fewer documents.

IV. What are the nuts and bolts of CaseMap?

CaseMap consists of multiple tables (spreadsheets).

The fact table is the master chronology of case facts. The table outlines the time sequence of the events in the case. The information contained in the fact spreadsheet need not be limited to facts, but can reference people, documents, allegations, rumors, and other things. *See* Figure 1.

The object table is broken down into the following multiple, smaller tables. *See* Figure 2.

- **The people table** is used to manage names and information about all the participants in the trial. As users enter a person's name, character descriptions can be added and then assigned to groups (for example, defendant, fact witness, law enforcement, and others). These groupings can be sorted and filtered in order to view only what may be deemed relevant to the task at hand.
- **The documents table** is the index of all documents in the case. A document description and a link to a scanned image of the document can be included.
- **The other evidence table** is used to log and track any physical evidence, such as audio tapes, drugs, and guns.

The issues table contains an outline of the legal issues in the case. The issue linker allows users to easily review the facts and objects in the case and link them to the relevant issues. *See* Figure 3.

V. Linking it all together

CaseMap links all the data from these tables together using shortnames. This feature is based on the idea that each object in the database should always be mentioned using the same name and that the name should be unique.

The user is required to enter a shortname for data entered into CaseMap. This shortname will automatically serve as the key to all future references to this item of data. Additionally, using a single shortname is essential for the effective operation of CaseMap. A user can enter multiple shortnames, however, this would defeat the purpose of having one, single reference for each specific data entry.

For example, a person named William Smith could be referred to as Bill Smith, William Smith, Mr. Smith, Billy, Willy, or Smitty. The user would have to search all the tables for each and every variation of the name in order to be certain that all occurrences concerning this person were captured. If a shortname (for example, WSMITH) is entered into the CaseMap database, all references to William Smith will be located in all the database tables.

VI. How is CaseMap being used? A study of two districts

A. District of Vermont

Vermont is a small district and for most cases, the majority of the features that make CaseMap so powerful are not being fully used. The software, however, is used extensively to compile document indexes. The litigation team uses the following steps to create a document index.

- New documents are scanned by legal assistants and uploaded into IPRO for viewing. This is usually done in conjunction with a tight discovery deadline, so no coding is done.
- The Bates begin and Bates end numbers of each document are imported into the document field.
- Agents, support staff, and AUSAs flesh out a document index using the Bates numbers.
- Privileged documents are marked with a checkbox.
- Discovery CD's are produced in IPRO using a list generated from CaseMap of nonprivileged documents. If multiple batches of discovery will be produced, then discovery dates or recipients are entered into CaseMap.
- Administrative records and exhibit lists are generated using CaseMap. If particular formatting is required, the list is exported into WordPerfect for the final touches.

B. District of Massachusetts

Massachusetts is a large district and has many active investigations and cases that are classified as document intensive. Accordingly, this district employs Concordance and IPRO as the primary organizational tools for such cases and investigations. The litigation teams do, however, use CaseMap to review the documents uncovered in the Concordance/IPRO searches. Primarily, CaseMap is used as a repository for trial exhibits and miscellaneous notations (for example, privileged or redacted). Furthermore, it is extensively used to create and export, or print, the exhibit list as a trial date becomes imminent.

VII. Popular CaseMap features

- **Instant Document Access** enables users to work with IPRO and CaseMap simultaneously. They can work on their documents and fact chronologies and instantly access the original scanned document in IPRO. Agent reports created using Word, digital pictures, WordPerfect documents, and any other electronic documents that accumulate in a case, can be linked into CaseMap for instant access.
- **The Issue Linker** is enabled by selecting View >Issue Linker. If a user chooses to employ this feature, an outline of the legal issues appears on the right side of the screen. As facts, evidence, and documents are reviewed, the user can check boxes to link them to the issue to which they relate. Later, the user can go to the issue linker table and view and/or print lists for any desired issue.
- **Customizability** allows CaseMap to be custom-tailored to any case with ease. New fields can be created to log unique data, which may be entered without specialized knowledge about database design.
- **Ease of Use** is another outstanding feature. CaseMap is ideally designed to be used and maintained by lawyers, legal assistants, agents, and paralegals. Its tables and tools are intuitive to legal professionals and can be learned in a very short period of time.

VIII. Getting help from CaseMap

Typically, users can teach themselves to use CaseMap by employing the help menu. However, if additional help is needed with the basic operation of the program, a tutorial is included in the software. To access the tutorial, click **Start > Programs >CaseMap 5 >Help >CaseMap 101 Tutorial.** The tutorial will guide the user step-by-step through the basics of CaseMap in four easy lessons.

IX. What new features are in CaseMap 5?

- **Rich Text Format** allows formatted information to be entered into a CaseMap table, (for example, text attributes such as **bold**, *italic,* colored, and multiple fonts are accepted). This is an important feature if the user copies text from a document and pastes it into the CaseMap database.
- **ReportBooks** creates specialized, preformatted reports that can be set up in advance. Even though the data in a CaseMap database may be dynamic and is continually being entered or updated, the report format remains consistent and will reflect changes in the database each time it is run.
- **Title Pages for Reports** creates customized title pages for all reports.

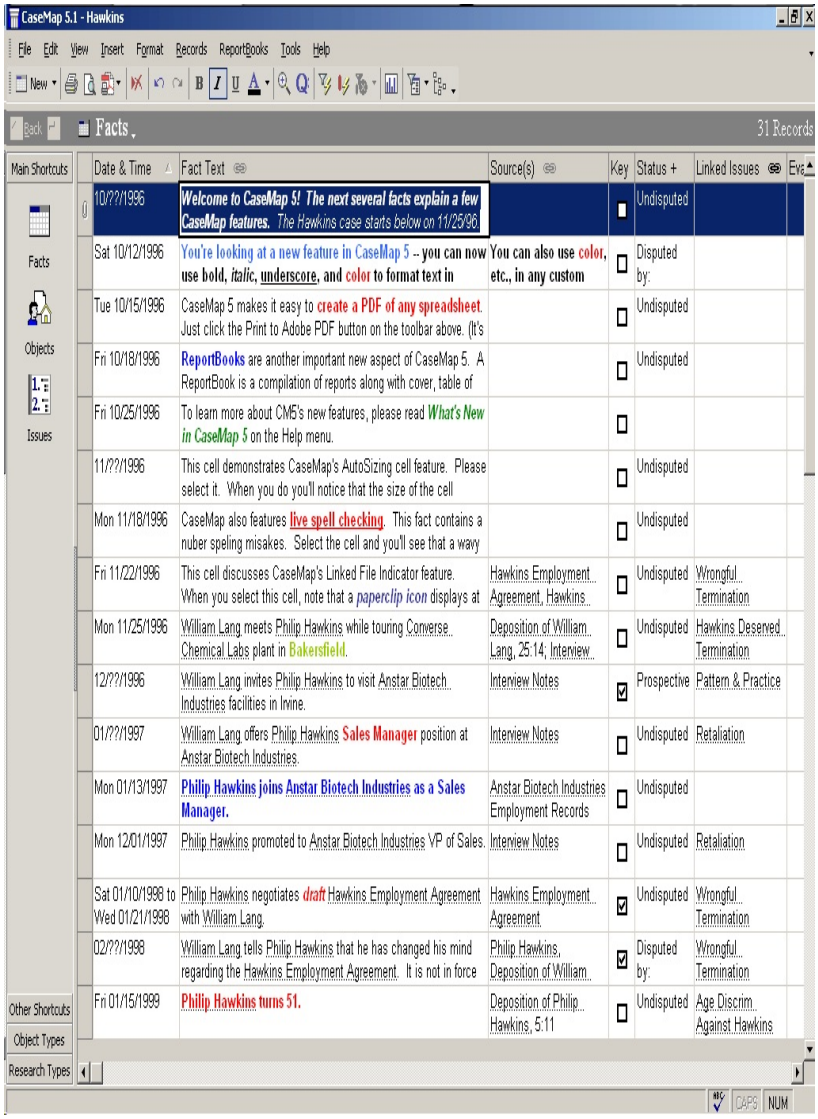
- **PDF Bulk Importer** allows a user to link a number of PDFs simultaneously, rather than individually, if IPRO is not being used to view scanned documents. Additionally, it is programmed to recognize new documents added to the directory which contain PDF files and to update the links for these documents, which avoids duplicate entries and links.
- **Bulk Issue Linker** enables the user to link multiple data items to a single issue with a few mouse clicks, rather than marking each one individually.
- **Send to WordPerfect in Table View** sends data directly to WordPerfect (avoiding the need to export the data and import it into WordPerfect).
- **Customizable Link Windows** is available in CaseMap5 and allows the user to customize and sort shortname lists. The software automatically creates a list of each time the shortnames are used in specific fields. In version 4, a user could create a list of each of those references, but could not customize or sort. Version 5 now allows a user to customize such lists and sort them as desired.

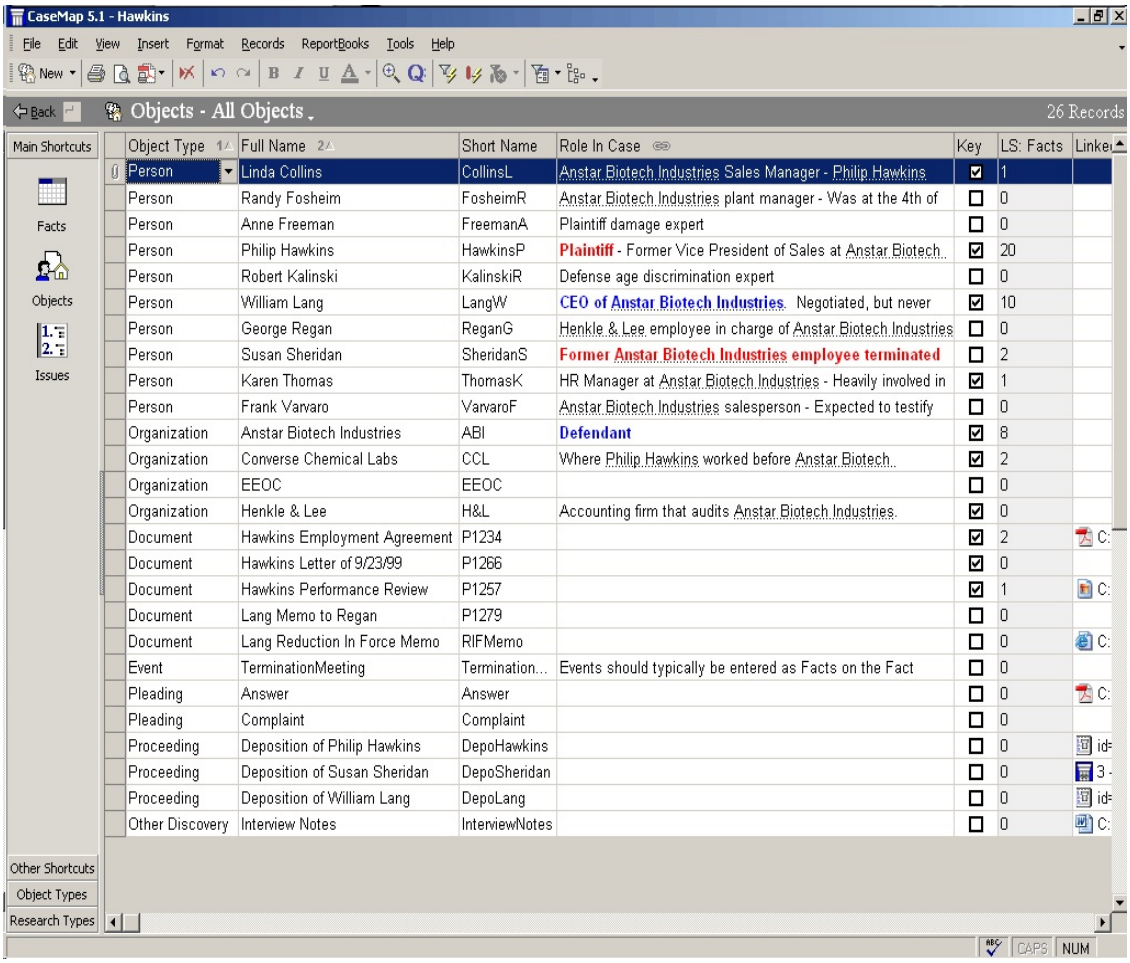
These new features can be real time savers!❖

ABOUT THE AUTHORS:

❑**Charlene Tallman** is the Litigation Support Specialist for the U.S. Attorney's Office, District of Vermont. She has been with the USAO for six years.✠

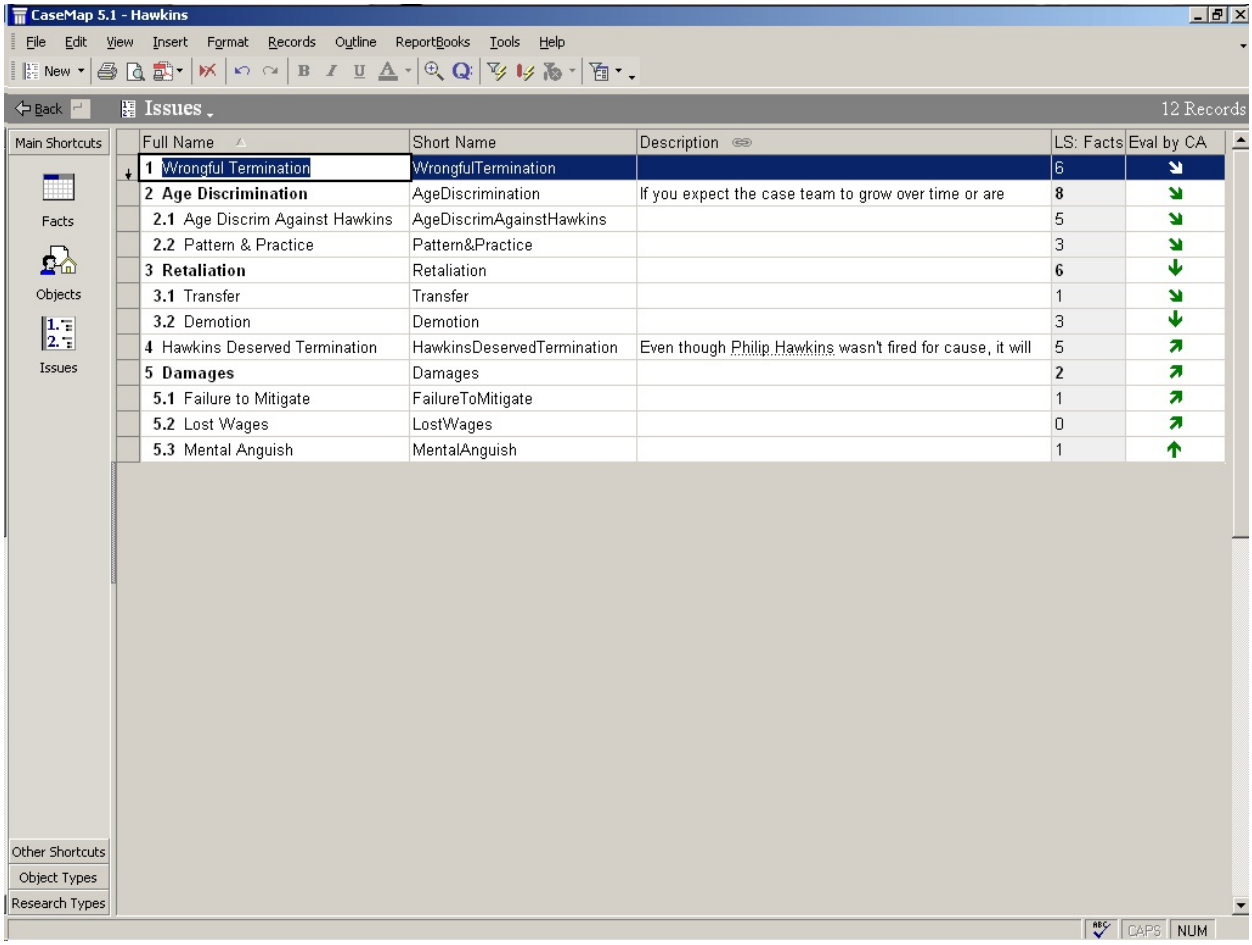
❑**Phil Samson** is one of two Automated Litigation Support Specialists for the U.S. Attorney's Office, District of Massachusetts. He has been with the USAO for five years and is a licenced attorney in Illinois, the 7th Circuit Court of Appeals, and the Northern District of Illinois.✠


CaseMap 5.1 - Hawkins
File Edit View Insert Format Records ReportBooks Tools Help
New
Back
Facts
31 Records
Main Shortcuts
Facts
Objects
Issues
Other Shortcuts
Object Types
Research Types
Date & Time
Fact Text
Source(s)
Key
Status +
Linked Issues
Evs
10/??/1996
Welcome to CaseMap 5! The next several facts explain a few CaseMap features. The Hawkins case starts below on 11/25/96.
Undisputed
Sat 10/12/1996
You're looking at a new feature in CaseMap 5 -- you can now use bold, italic, underscore, and color to format text in
You can also use color, etc., in any custom
Disputed by:
Tue 10/15/1996
CaseMap 5 makes it easy to create a PDF of any spreadsheet. Just click the Print to Adobe PDF button on the toolbar above. (It's
Undisputed
Fri 10/18/1996
ReportBooks are another important new aspect of CaseMap 5. A ReportBook is a compilation of reports along with cover, table of
Undisputed
Fri 10/25/1996
To learn more about CM5's new features, please read What's New in CaseMap 5 on the Help menu.
11/??/1996
This cell demonstrates CaseMap's AutoSizing cell feature. Please select it. When you do you'll notice that the size of the cell
Undisputed
Mon 11/18/1996
CaseMap also features live spell checking. This fact contains a nuber speling misakes. Select the cell and you'll see that a wavy
Undisputed
Fri 11/22/1996
This cell discusses CaseMap's Linked File Indicator feature. When you select this cell, note that a paperclip icon displays at
Hawkins Employment Agreement, Hawkins
Undisputed
Wrongful Termination
Mon 11/25/1996
William Lang meets Philip Hawkins while touring Converse Chemical Labs plant in Bakersfield.
Deposition of William Lang, 25:14; Interview
Undisputed
Hawkins Deserved Termination
12/??/1996
William Lang invites Philip Hawkins to visit Anstar Biotech Industries facilities in Irvine.
Interview Notes
Prospective
Pattern & Practice
01/??/1997
William Lang offers Philip Hawkins Sales Manager position at Anstar Biotech Industries.
Interview Notes
Undisputed
Retaliation
Mon 01/13/1997
Philip Hawkins joins Anstar Biotech Industries as a Sales Manager.
Anstar Biotech Industries Employment Records
Undisputed
Mon 12/01/1997
Philip Hawkins promoted to Anstar Biotech Industries VP of Sales.
Interview Notes
Undisputed
Retaliation
Sat 01/10/1998 to Wed 01/21/1998
Philip Hawkins negotiates draft Hawkins Employment Agreement with William Lang.
Hawkins Employment Agreement
Undisputed
Wrongful Termination
02/??/1998
William Lang tells Philip Hawkins that he has changed his mind regarding the Hawkins Employment Agreement. It is not in force
Philip Hawkins, Deposition of William
Disputed by:
Wrongful Termination
Fri 01/15/1999
Philip Hawkins turns 51.
Deposition of Philip Hawkins, 5:11
Undisputed
Age Discrim Against Hawkins
CAPS
NUM
Figure 1



Object Type	Full Name	Short Name	Role In Case	Key	LS: Facts	Linke
Person	Linda Collins	CollinsL	Anstar Biotech Industries Sales Manager - Philip Hawkins	☑	1	
Person	Randy Fosheim	FosheimR	Anstar Biotech Industries plant manager - Was at the 4th of	☐	0	
Person	Anne Freeman	FreemanA	Plaintiff damage expert	☐	0	
Person	Philip Hawkins	HawkinsP	**Plaintiff** - Former Vice President of Sales at Anstar Biotech	☑	20	
Person	Robert Kalinski	KalinskiR	Defense age discrimination expert	☐	0	
Person	William Lang	LangW	**CEO of Anstar Biotech Industries**. Negotiated, but never	☑	10	
Person	George Regan	ReganG	Henkle & Lee employee in charge of Anstar Biotech Industries	☐	0	
Person	Susan Sheridan	SheridanS	**Former Anstar Biotech Industries employee terminated**	☐	2	
Person	Karen Thomas	ThomasK	HR Manager at Anstar Biotech Industries - Heavily involved in	☑	1	
Person	Frank Varvaro	VarvaroF	Anstar Biotech Industries salesperson - Expected to testify	☐	0	
Organization	Anstar Biotech Industries	ABI	**Defendant**	☑	8	
Organization	Converse Chemical Labs	CCL	Where Philip Hawkins worked before Anstar Biotech.	☑	2	
Organization	EEOC	EEOC		☐	0	
Organization	Henkle & Lee	H&L	Accounting firm that audits Anstar Biotech Industries.	☑	0	
Document	Hawkins Employment Agreement	P1234		☑	2	C:
Document	Hawkins Letter of 9/23/99	P1266		☑	0	
Document	Hawkins Performance Review	P1257		☑	1	C:
Document	Lang Memo to Regan	P1279		☐	0	
Document	Lang Reduction In Force Memo	RIFMemo		☐	0	C:
Event	TerminationMeeting	Termination...	Events should typically be entered as Facts on the Fact	☐	0	
Pleading	Answer	Answer		☐	0	C:
Pleading	Complaint	Complaint		☐	0	
Proceeding	Deposition of Philip Hawkins	DepoHawkins		☐	0	id=
Proceeding	Deposition of Susan Sheridan	DepoSheridan		☐	0	3 -
Proceeding	Deposition of William Lang	DepoLang		☐	0	id=
Other Discovery	Interview Notes	InterviewNotes		☐	0	C:

Figure 2


CaseMap 5.1 - Hawkins
File Edit View Insert Format Records Outline ReportBooks Tools Help
New
Back
Issues
12 Records
Main Shortcuts
Facts
Objects
Issues
Other Shortcuts
Object Types
Research Types
Full Name
Short Name
Description
LS: Facts
Eval by CA
1 Wrongful Termination
WrongfulTermination
6
2 Age Discrimination
AgeDiscrimination
If you expect the case team to grow over time or are
8
2.1 Age Discrim Against Hawkins
AgeDiscrimAgainstHawkins
5
2.2 Pattern & Practice
Pattern&Practice
3
3 Retaliation
Retaliation
6
3.1 Transfer
Transfer
1
3.2 Demotion
Demotion
3
4 Hawkins Deserved Termination
HawkinsDeservedTermination
Even though Philip Hawkins wasn't fired for cause, it will
5
5 Damages
Damages
2
5.1 Failure to Mitigate
FailureToMitigate
1
5.2 Lost Wages
LostWages
0
5.3 Mental Anguish
MentalAnguish
1
CAPS
NUM
Figure 3

Scanning a Solid Base to Build a Strong Case

Larry Gniewek
Information Technology Specialist
United States Attorney's Office
Northern District of New York

Overview

What is the value in using IPRO Scan-IT to convert hard copy evidence to an electronic version? Scan-IT allows a solid case foundation to be built quickly, providing value-added attributes, such as high speed scanning with the addition of Bates numbering ID, underlying coding, and searchable text versions of evidence. Scan-IT is an important tool, as the electronic images will be the easiest to transport, research, markup, and reference. In addition, it allows the coordination of activities by all team members that have access to the same evidence, either by a shared set of computer-stored files or on copies that can be taken out of the office, worked on, and returned along with any work accomplished off-line. This aids in case investigation, organization, and also allows easy migration of all work accomplished by the trial team directly into trial presentation software. An added benefit is that if the case needs to be transferred to another attorney, this format allows the new attorney to get up to speed quickly, as all information built into the case stays with the electronic version.

The scanning of case documents, images, and photographs, in preparation for a future trial can be likened to building a foundation for a home. If time is taken to build a solid base with quality materials and with the professionalism of a craftsman, the house will stand rock solid and the chances that cracks will surface later in the process are minimized. The worst case scenario is that poor quality work is performed when workers prepare the foundation. Without a good structure supporting the load, no matter how well the rest of the home is constructed, the house will inevitably show cracks and faults or even tumble into a pile of disparate pieces. At that point, the owner's choices are to start over or pick up the pieces and try to salvage whatever is useable from the disaster. However, time undoubtedly will be in short supply. The same holds true for preparing a solid foundation for cases.

The danger inherent with scanning is that it is perceived to be a low key series of operations that many may tend to pass over quickly or ignore completely. Scanning comes well before the highly visible portion of trial construction begins and is most often out of sight and out of mind. Short suspense tasks or other case workloads in the forefront may lead to inattention of the scanning process and, as a result, it is not employed as part of strategic case management from the start. Taking a start-to-finish tour of the scanning process will provide a better understanding of the ideal electronic case progression and the important part that quality scanning provides. The post-scanning analysis tools can be employed to build rock-solid case foundations by the trial team as they assist the AUSA in the construction process of the case.

I. Stage 1: Initial case meeting

The attorney stands to gain critical information that will determine the overall approach to the case and subsequent workload by involving the Information Technology (IT) staff from the beginning. By becoming familiar with the IT requirements, the attorney will understand the real-world factors that can impose limitations on efforts and affect case preparations. The first and easiest step in the process is to invite the IT staff to initial meetings to discuss the requirements of the case. An open dialog will serve to let everyone know the attorney's overall game plan. Consequently, the IT staff can impart the technological obstacles that may spring up at a later time and cause unnecessary distractions to the effort. For instance, determining the Bates numbering schema can appear to be an innocuous task. If it is not applied in a meaningful way, however, and results in duplicate or unclear document numbering, case data can be confusing, or even worse, nowhere to be found when needed.

During the initial case review, issues to consider from an electronic case standpoint should include the following items.

What are the time frames involved with the effort? There may be voluminous evidence relevant to the case, but if there is not enough time to scan it and make sense of it, it will amount to nothing more than wasted effort. Making impossible demands does not change the fact that some tasks are time and labor intensive and understanding those limitations can determine where to concentrate the team's efforts for the best return. For instance, if other Automated Litigation Support (ALS) tools such as synchronized playback of audio/video transcripts are to be utilized, the attorney needs to be aware that the conversion of analog tapes to digital form cannot be "fast forwarded." The process occurs in real time. One hour of tape requires at least one hour for conversion to digital form. The subsequent merging of the transcript and the time stamping for synchronized playback may consume all the IT staff's time. This leaves little or no time to scan documents or adequately prepare them for use.

What are the human factors? The attorney may have a relatively small amount of evidence to scan, but there may be other trial preparations or IT related efforts or problems that consume the IT staff's time. If the office is short-staffed in the IT discipline, life occurrences such as vacations, illnesses, or family emergencies, can take the staff away from devoting time and talent to the effort.

What are the technology factors? The IT staff knows the hardware that is available and the capabilities of the software tools. Limiters can be the lack of hardware, such as high-speed scanners with automatic document feeders (ADF) to speed the scanning process, or ones that can scan both sides without requiring human intervention to flip the document. Another example is a case that requires a large amount of evidence to be digitized. If there is no space available on the network servers, additional time and money may have to be expended to make the evidence available through the office network. Alternatively, it may be necessary to work on a stand-alone system and manually move the files, which is a time-consuming operation. The quality of a scan can add to scanning time as higher quality images scan at a slower pace. Quality can also affect later operations such as Optical Character Recognition (OCR) and the overall file space required to store case data.

What is the evidence, in what condition is it, and how much of it is there? The preparation and scanning of documents can be complicated by inconsistencies in paper size, such as checks versus letters, and condition of the documents, whether it is single, two-sided, or a combination of both. The more variations in the physical nature, the more time and effort required to process it. Physical grouping can play a factor in the scanning process, as documents may be bound by paper clips, rubber bands, staples, binder clips, or in folders.

How is the evidence to be physically and logically organized? It requires time to adequately prepare documents bound in various means, and it needs to be determined if those bindings contribute to the substance of the evidence and if they must be retained in the evidence's electronic form. Logical paper dividers, called "prep sheets," are used to tell the scanner what the physical boundaries are and the logical association of the material being scanned. This requires manual insertion of various sheets that also tell how to return the physical documents to the original groupings or bindings. Decisions need to be made concerning the evidence, which will affect its organization. For example, a document may have a cover sheet that can be viewed as an unrelated document or one that deserves its own unique ID because of its relevance. Once separated, it may be difficult to recall the association to the attached document. If the underlying document is later referenced through the initial one, recalling that underlying document can be made unnecessarily difficult. A folder may have notations that make the folder change in status from a "binder" to a piece of evidence that provides valuable information by itself.

What Bates numbering schema will be applied and what is its importance? If an identification system does not clearly provide a unique identifier that remains consistent throughout the case for each document, it can be likened to dumping all the physical documents into a large box and mixing them. By determining and applying a Bates numbering system, the trial team can quickly navigate and investigate the evidence as they understand the naming conventions used and how it is organized electronically. The Bates numbering ensures that the evidence can be found, viewed, or printed, with unique identifiers. The end result is that any piece of evidence can be recalled on a computer by its Bates number and quickly displayed, along with its preceding or following pages.

Is Optical Character Recognition to be used? Optical Character Recognition (OCR) is the conversion of the scanned documents from an image file that can only be viewed, to a searchable, editable text document that will be invisibly connected to the document's image. By providing the ability to search documents by key words or groups of words, case intricacies that may otherwise go unnoticed can be discovered by searching OCR'ed documents. The quality of the documents and the resolution of the scan will affect the accuracy of the image-to-text conversion.

What data coding and other document information will be useful later and should be added after scanning the evidence? The ability to add coded information to the documents to organize them better and provide important information relative to the case is available. By coding it with the document, the data does not need to be rediscovered each time it is needed by team members. Searchable fields can be incorporated that provide document dates, condition, type, or any other case-related information that is needed. The IT staff can make these easy to apply and assure that all team members populate these fields consistently. For instance, a subject can be identified by name, initials, nicknames, or aliases. A location may be referred to in documents by various names as well, but if coded properly, all instances of both examples can be recalled. Proper coding can tie all instances together with consistent identifiers to avoid confusion and make research more productive.

What are the quality control issues? Quality control responsibilities may need to be considered if non-skilled personnel are used for the scanning operation. The case material may contain errors in organization or completeness that subsequently affect all following efforts. For instance, if documents are scanned upside down and not correctly oriented, the OCR is useless as all characters are unrecognizable. If the document feeder is misfed and it goes undetected, key documents or segments may be omitted from the electronic version.

The attorney and trial team can gain levels of efficiency and coordination not otherwise possible, if these issues are considered early in the trial preparation. The entire trial team can better understand the requirements and the tools that are available to make efforts more productive, if they consult with the IT staff at the beginning of preparation. Early involvement will also help clarify how scanning and other ALS tools fit into the investigative stage and preparation for trial.

II. Stage 2: Document preparation for scanning

The hard copy evidence needs to be turned into image files, which are nothing more than a series of pictures of the documents. This is the most tedious and time-consuming part of the operation, however, the benefits will be reaped tenfold in later efforts that use the electronic versions. Ideally, a high-speed scanner with an ADF attachment is used. The scanner may be black and white, or a more expensive color capable one. The important thing is that a stack of documents can be placed in the feeder and not loaded manually, one at a time. Documents can be checks, letter-sized, legal, or any other size imaginable, and can be stapled, folded, dog-eared, single-sided, double-sided, fuzzy, and crooked. They can also be in boxes, folders, rubber banded, or paper-clipped.

Preparation for scanning will include the removal of all physical binders while retaining the documents' organization, as that may be as important as the evidence itself. Printed "prep sheets" (sometimes referred to as slip sheets) are used to separate evidence into logical groupings that the scanner can understand, such as boxes, folders, "parent" documents, and "children," which are attachments to the parents. The prep sheets are often color coded so that they are easily found and removed, if necessary. Notations are made on the prep sheets as necessary to help the staff reassemble the physical bindings after the scanning is completed. Scan-IT reads the prep sheet and applies the appropriate boundaries and can be programmed to omit the prep sheet as part of the scanned document, and skip it as an image to be scanned.

III. Stage 3: Scanning software preparation

The IPRO software allows the user to operate the scanner from the connected personal computer (PC). It is also used to set up the project and edit the settings to the options needed. Additional information can be added to the case at a later date, if it is organized by projects.

Groups of documents are scanned together and are called "batches." Batches are limited to the number of documents that will fit into a standard banker's box, which is approximately 2,500 pieces of paper. This allows multiple operators to work on the same case and avoid overlapping numbering errors, or continuity problems which can occur if the batches are scanned during multiple work shifts. Each operator's work is identifiable and if the quality of the scan becomes an issue, efforts to correct problems can be more focused.

Scan-IT options include automatic generation of image keys, which is the Bates numbering schema chosen in the planning stages. A prefix is added to help uniquely identify each page and the numbering is automatically incremented as the images are scanned. This becomes the means to identify each page. The images can be "linked" to a viewer, which allows the trial team to view, search, annotate, and tag documents as needed.

The power of electronic case management will become more evident in this next step. By using Scan-IT to create a "project," information about each document can be added by "coding" that information for future use. Common coding fields are the date of the document, type (fax, letter, check, invoice, receipt), document condition (poor, contains handwritten notations, original, or copy), source or author of the document, or any other characteristics the trial team deems important. Coding is discussed in Stage 6.

IV. Stage 4: Scanning

Once the documents are prepped and the project is set up in the Scan-IT software, the documents are loaded in the ADF and the scanning is initiated. If multiple scanners are available, dividing the scanning workload will speed the process and the staff will not be overwhelmed.

Scanners can be used in "flatbed" mode, however, this method requires manual placement of each document into the scanner and can be quite time consuming. This should only be used for irregular-sized documents that will not feed properly through the ADF. Most ADF scanners can scan checks or standard-sized photographs. The IT staff can experiment with irregular-sized documents if the team members are unsure of the capability.

The quality of the scan is important. Three hundred Dots Per Inch (DPI) is the setting used to capture a clearer image. Please remember that the larger the DPI, the larger the electronic version of the file becomes. There are other scanning options that can be applied to the documents.

- Despeckle (cleans small random dots from poor quality images).
- Deskew (automatically straightens crooked images).
- Remove Border (ignores bands of black common on photocopied documents).
- Rotate Image (corrects orientation of document when wider landscape printouts are to be scanned).

The documents are scanned in .tif format, which stands for Tagged Information File. The operator can either prep more documents or reassemble previously scanned documents while scanning is in process. This should be done near the scanner so that problems with the scanning are noticed and corrected immediately. Scan-IT allows the operator to correct problems by deleting a portion of the batch, rescanning pages, or inserting or appending pages to the batch as needed. The Bates numbering will be temporarily out of sequence, if inserted or deleted pages are required. Scan-IT allows for quick correction of the entire batch with a renumbering option or allows a prefix, such as the case name, to be applied to the schema after the scan is complete.

During the scanning process, the document boundaries defined by the prep sheets are applied and visible as icons, next to the image's Bates number. A box, document, or paper clip, define the container, "parent" and "child" documents. These boundaries are easily changed or removed if the associations are not defined correctly.

V. Stage 5: Optical Character Recognition

It is important to understand that the electronic documents are image files, in essence just a "picture" of the document. Optical character recognition can now be applied to the documents. Computer software "reads" the image and makes an editable plain text file (.txt extension). This text file is electronically connected to the image file. The OCR words can be searched and the original image can be

displayed. The text can also be cut and pasted into word processing software or used by other software, as needed. However, OCR technology is not perfect. It is usually 95% correct. The accuracy depends on the condition of the scanned document and the clarity of the text used in the image. If the original image is a poor-quality copy or extremely small text, complicated by markings, handwriting, or fancy fonts, this will hinder the accuracy of the OCR conversion.

The OCR operation is simple to initiate. It is selected and run against the batch or smaller subsets of documents. OCR conversion only takes a few minutes to complete. An addition to the creation of the text version of the document is the ability to create "load" files for other applications. More powerful case management tools, such as Concordance, are available in later stages. If other case management software is to be used to analyze the case data, the created load files allow all the images and OCR text to be exported within seconds.

VI. Stage 6: Coding

Coding allows the scanned documents to have detailed information accompany the electronic version by adding the desired information to descriptive fields that are set up as part of the project. The coding can force fields to be completed in a consistent manner, such as the date format. It is easier to find all documents or information needed from a particular date if only one date format, such as MM/DD/YYYY, is used. Also, "pick lists" can be set up so that the information used by all individuals coding remains consistent. For example, if the originating organization of a document is captured, it could be manually coded several ways, making the coding less useful in locating the documents. If documents from the Department of Justice were in the batch, the organization could be referred to as the Department, DOJ, Dept. of Justice, Justice Department, USDOJ, and so forth. The pick list forces the coders to select the agreed upon name and does not allow any variants to be entered. In addition, fields can be made mandatory. Scan-IT checks for missing fields and reports errors at the validation and export part of the process. The operator notes the errors and quickly returns to those documents and completes the required fields.

Useful fields that can be added to aid the investigations conducted by the attorney and trial team include the following.

- Source–The organization or location where the document was created.
- Document Type–The person coding can be forced to select a document type which will aid in future searches. Common types include: letter, check, invoice, fax, handwritten note, folder, cover sheet, agenda, report, or whatever the document types in evidence dictate. Types can vary between cases, and may include medical records, legal proceedings, or financial documents.
- Document Title–Consider manual entry of this field to record document-specific information.
- Document Date–Coders can add the numbers and Scan-IT will add the slashes as required, once the format of the date is decided. For instance, an entry of 012000 is converted to 01/20/2000.
- Condition–The condition of the original, whether it is a copy or poor quality, for example, is described.
- Characteristics–The documents may contain handwritten notes, signatures, or other important features.
- Author–This will specify the originator of the documents.
- Recipient–This will identify the receivers of documents.

Excessive coding fields slow down the coding operation. Decide upon the most useful information to be coded, which will allow the team to code quickly. Pick lists will speed the coding process, rather than manually entering the data. Manual fields should be restricted in length to prevent excess information coding.

VII. Stage 7: Validation and export

This stage is the final error check of coded information by Scan-IT and automatically generates the files that are used by other operations to "see" all the images and the accompanying, underlying coded information. Validation consists of selecting the mandatory coded fields and the Scan-IT program will check to make sure they are complete. Validation can be

done anytime during the batch creation process. It should be noted that validation does not check for factual errors. The process does not care if a field contains an incorrect date, or was given the wrong document type or description. The process should be part of a final quality control check and a responsible team member should spot check scanned documents for correctness. Errors of omission or conflicting numbers are reported on the screen after validation and allow the operator to correct them and rerun the process until all errors are eliminated. Validation does check to make sure that the overall project does not have any conflicting Bates numbers when the batch being validated is merged with the rest of the scanned documents.

The export portion generates the image files in the format required, such as single page .tif and .jpg files. Export also creates the files that contain all the coded information and links between the documents and the data. Load files are also created, as needed, to load the images and data into other applications such as the IPRO Viewer, Concordance, and Sanction trial presentation software. The IT staff can determine the load files required, based on the programs that will be used by the trial team.

VIII. Stage 8: Using the IPRO viewer

IPRO View is a separate utility that gives the AUSA and trial team members the results from all the effort added throughout the scanning and coding process. The documents can be quickly accessed via a powerful viewing program that has additional features designed specifically for reviewing and building a case. Features include the ability to view, zoom, scroll or navigate, mark up with various annotations and notes, provide "tags" to further identify key documents, and to query the coding and OCR text to hit all significant documents regardless of the search criteria. Printing allows documents to be printed with or without team members' markups. IPRO View allows multiple team members to view and markup documents simultaneously, if the program is loaded on the network. In addition, discovery can be produced for opposing counsel without annotations except those that may be desired, such as redactions. Numerous review tools are also available to the team.

- Navigation through the documents can be aided by allowing the reviewer to move page-by-page or select another boundary level-like document. A tree view is available to make jumping around possible via a hierarchical structure instead of viewing in a linear fashion. Graphic icons on toolbars can be used to migrate through the documents (for example, next box, next folder, next document, next attachment). The user can also see the viewed document location in relation to the rest of the document, (page 1 of 5) or the entire batch (Box 2 of 7, Document 99 of 1000, page 1 of 5).
- Specific images can be enlarged as necessary for viewing and the zoom window can be made a separate floating window, if the reviewer desires, once the images are located. Images can be rotated as needed during the viewing process.
- The boundaries assigned during the scanning process may be incorrect. The reviewers have the capability to change those designations as needed. Note that advanced reviewing features can be turned on or off, depending on the preference of the case leader.
- Annotations include the ability to redact portions of images. They are made by clicking and dragging the mouse on the documents image. Text labels can be added to the redaction for further identification. Multiple colors are available for the annotations, and are used for highlighting the freehand mark-ups that can be added.
- Sticky Notes give the trial team the ability to add annotation boxes filled with text. The notes are indicated by a small icon on the document and can be opened by clicking on the icon. This provides a handy way to convey messages about the documents or relevant information without marking up the image.
- Clips can be attached to documents that, when selected, launch other applications to display related materials, such as a recorded call, or perhaps a picture or video clip. When launched, the clip is displayed without shutting down the viewing program and allows the reviewer to return to the documents quickly.
- More basic embedded text can be added as well (added text that displays on the document when viewed). Note: All

annotations and markups can be removed while leaving redactions in place.

- Documents can be tagged with a series of tags that are created specifically for each case. The reviewer uses tags to identify documents to query and locate documents as needed. Examples of tags are confidential, hot document, signed, or whatever else the trial team deems important.
- Querying uses the data created in all the previous steps to allow the reviewer to look for specific, pertinent information. Queries can be used to find simple things such as sticky notes, or more complex subsets like all hot documents that contain specific words or phrases. One is only limited by imagination when searching the documents for important information or relationships contained within. Keyword searches allow the reviewer to find words, parts of words, or phrases, that contain the search criteria. The resulting listing links to the documents and highlights the keywords to make locating them a snap. Queries can be saved so that the information can be recalled quickly by re-executing the query. Query results can also be quickly printed so that the information is in hand.
- Subsets of the project can be made and copied to CDs. This allows the team members and/or opposing counsel to have a set to work with, and can include the viewer, if needed. Note: Do not give the opposing counsel the trial teams' annotations.

IX. Summary

The scanning process makes it possible to move from a paper-intensive world to an electronic one. The electronic version of evidence is coupled with the analytical review and collaboration tools to provide an efficient method for the case to evolve. Efforts are no longer disparate, rather, they are shared and build on the efforts of all members involved. The strong foundation produced during the scanning phase is a critical factor in determining the strength of the case.❖

ABOUT THE AUTHOR

❑**Larry Gniewek** is the Information Technology Specialist in the United States Attorney's Office for the Northern District of New York. For three years, he has been tasked with Systems Management as well as providing direct ALS Support in trials. Prior to that, he was a Computer Specialist/Project Manager for an Advanced Technology Directorate in a U.S. Army cannon factory. He routinely provides ALS training and demonstrations to law enforcement organizations on request.✠

IPRO

Marcia Pelick
Litigation Support Specialist
United States Attorney's Office
Middle District of Tennessee

Montie Ruffner
Litigation Support Specialist
United States Attorney's Office
District of Nebraska

I. Introduction

The original documents pertaining to a trial must be on hand for use as evidence. However, the transportation, organization, and searching for exhibits, has become dramatically easier. Today, the trial team may bring a laptop that contains all scanned documents needed during the trial. These documents can be searched, tagged by predefined levels of relevance, and cross-referenced to the many boxes of evidence brought to court. This process is carried out in advance of the trial. The technology available in every United States

Attorneys' office (USAO) makes trial preparation much easier.

If the case is going to trial, a short meeting with the office trial staff lays the foundation for all actions that follow. In the meeting, the decision is made concerning the information that will be captured from each document (coding), who will have access to these documents, and so forth. As the documents are received, they are scanned and electronically stored on the office computer system (whether a stand-alone computer or located on the server). Everyone involved with the trial has immediate access to all documents involved in the case, if the files are stored on the server. Discovery documents can be copied to a CD which includes the IPRO viewer file, allowing the defense to view the documents and print, as needed. The advantage is that each document is handled once for scanning, returned to its container, and stored in a safe place for use during the trial.

The Department of Justice (Department) has provided each USAO with software to image, manage, sort, search, and organize trial exhibits. The following features are included in IPRO Suite and used for document imaging and management.

- Image Analysis.
- Image Management.
- Scanning and Capturing.
- V-Code and Launcher.

II. Scanning and coding

The process of scanning and coding involves a significant amount of energy and resources, but the long-term payoff is worth it. The initial step in the process is scanning. Every single document is prepared for scanning. Staples and sticky notes, among other things, are removed and document separation sheets (prep sheets) are inserted. Batches of documents are then scanned into electronic copies. Coding, which is the most significant step of the process, is undertaken after the scanning process is completed. The trial team will capture the important issues of each document, such as the date, author, recipient, type of document, condition, and so forth. IPRO allows the capture of up to ten fields of information regarding each document. This is the most labor intensive aspect of the project, but well worth the time and expense. Once this process is completed, the images and coded information are stored on the local server (local computer) for shared use later. This allows multiple users to access the project for scanning, image management, and analysis. Multiworkstation batch scanning is also available when storing the files on a server. This allows more than one person to scan, view, and use the features available in IPRO View.

The documents can be made into Optical Character Recognition (OCR) files after they are scanned and coded. OCR attempts to read the characters on the image of each document so that the computer can perform searches to find pertinent information in the documents. Documents can be added or deleted at any point during this process. *See* Figure 1.

III. IPRO View

IPRO View is a part of the IPRO Suite that allows the litigation staff to view each electronic document. Remember that the document viewed is an electronic copy. The viewer allows full flexibility. The operator has the ability to zoom in and out, rotate the image, and fit the image in the window vertically or horizontally. IPRO View allows navigation to a specific image, quick scrolls through all or any portion of the documents, and jumps to the next and previous source, box, folder, or document, at the mere touch of a button. *See* Figure 2.

An overview of some of the annotations/uses of IPRO follow.

- Print. Any or all documents in the case can be printed and a variety of options can be selected to include on the document. There are many print options. Any annotation, redaction, tag highlight, and others, may be selected to print if a hard copy of a document is needed. *See* Figure 3.
- Paste a zoned area to the clipboard. This allows the selection of an area of the document to be placed on the clipboard for later use, such as pasting into another document or PowerPoint slide.
- Apply embedded text to an image. Select an area of the document using the embedded text tool, type a message in the box, and the text will appear on the image in the area selected. Embedded text can also be deleted.

- Attach a sticky note. This is similar to writing a note on Post-It paper and placing it on the document. The only difference is these will not fall off.
- Place a clip on the image. This creates an executable command that permits the launching of a program such as Microsoft Word or Excel (the program must be installed on the computer in use), and opens a file or Web page. The clip icon does not appear on the printed image, but the data can be printed from the clip through the print options dialog box. The clip will print on a separate page following the image.
- Redact. This blocks out portions of the image.
- Highlight. This function is used to highlight specific portions of an image. There can be more than one highlight to an image.
- Markup an area. This works the same as highlight, but is shown as arrows, circles, freehand drawing, and/or other symbols.
- TAGs. Creating Tags is a method used to easily identify all of the hot documents or all documents that have redactions. Create the needed tags and when the associated document is viewed, click on the tag and it will be marked with the tag(s) selected.

It is now possible to create a list of all redacted documents by searching on the "redacted" tag. A smaller document "hit list" is created indicating all of those documents that contain redactions. This list of documents may be saved or printed.

Searches on image text that has been OCR'ed may be conducted. Other searches may be performed on sticky notes and embedded text using the Boolean operators "AND" or "OR." The operator can also use wildcard characters such as * and ? to perform searches. Wildcards are used to match words that contain specific characters along with other characters.

This viewer is also linked with Dataflight's Concordance and is used to view the image of any selected document from Concordance.

IV. V Code

V Code is an IPRO application that permits coding of documents after the process of scanning and coding, using the IPRO Scan-IT program. Although the documents have a totally different look and feel, the primary purpose is to capture important details or attributes of a document. As previously discussed, coding is primarily a means to capture explicit details about a document such as document date, author, recipient, document type or condition, and so forth. Typically, coding is accomplished during the scanning phase of the process (Scan-IT). The completion of the coding and/or changes will be accomplished after the export of the project to the IPRO Suite. *See* Figure 4.

IPRO Tech allows secure document coding over the Internet or a local area network (LAN) and allows users to view and code images over the Intranet or Internet. Specific instructions are available in the IPRO Tech V-Code/V-Code Remote Admin Guide. The operator can also create "hot" keys for fields, hide fields, and assign batches, to a specific team.

V. IPRO Publish

A copy of the entire collection of documents can be created and placed on a CD or DVD with a stand-alone viewer using IPRO Publish. The CD or DVD can be used by everyone involved in the case. The users can insert the CD or DVD into their computer and the view will start. The documents can be reviewed, tags created, and other applicable annotations made. Upon completion, the user will export the annotations. This small file can be mailed or e-mailed to the attorney. This "load file" will be applied to the master project and every change, annotation, or tag made by any user will become a part of the master project. This process can be repeated as necessary. *See* Figure 5.

VI. IPRO Build

IPRO Build is similar to IPRO Publish. IPRO Build allows the user to take the next step in the production of images within the collection. For example, once all of the images are coded, annotated with comments, redacted, and those documents tagged as privileged are removed, a new collection can be created. The new collection can be renumbered to remove gaps in the Bates number system, and to "burn" in redactions and annotations. IPRO Build also creates a cross-reference list each time the collection is changed so that the AUSA will know what has

changed from the original collection to each IPRO Build subset.

Report generation is another feature available with IPRO Tech Suite software. The user can produce manifest, volume, and volume manifest reports with this software. With these reports, it is possible to produce a list of documents by document or boundary, list each volume and its location in IPRO, and list Bate ranges by volume.

VII. Help

Technical questions regarding IPRO Tech Suite can be answered by your systems manager or Information Technology department. Help is also available within the IPRO Tech program on the main menu. *See* IPRO Tech, Inc.'s home page on the internet at http://www.iprocorp.com/IPRO_main.htm.

VIII. Conclusion

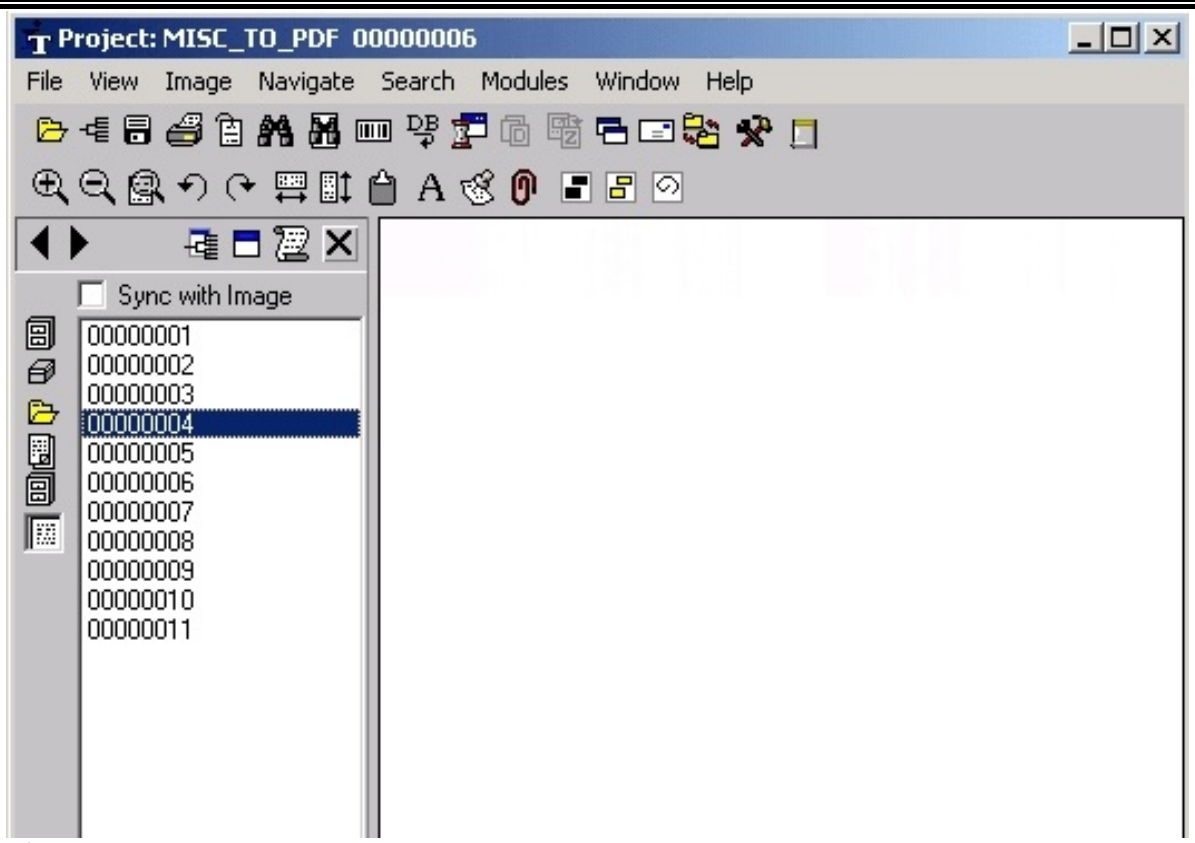
The IPRO Tech Suite offers wizards for setting up image capture, OCR, build, publish, print, V-Code (secure), and reports. Ease in the courtroom is well worth the time and effort put into the use of IPRO Tech. The IPRO Tech Suite allows the AUSA to take an entire case to court on a laptop.❖

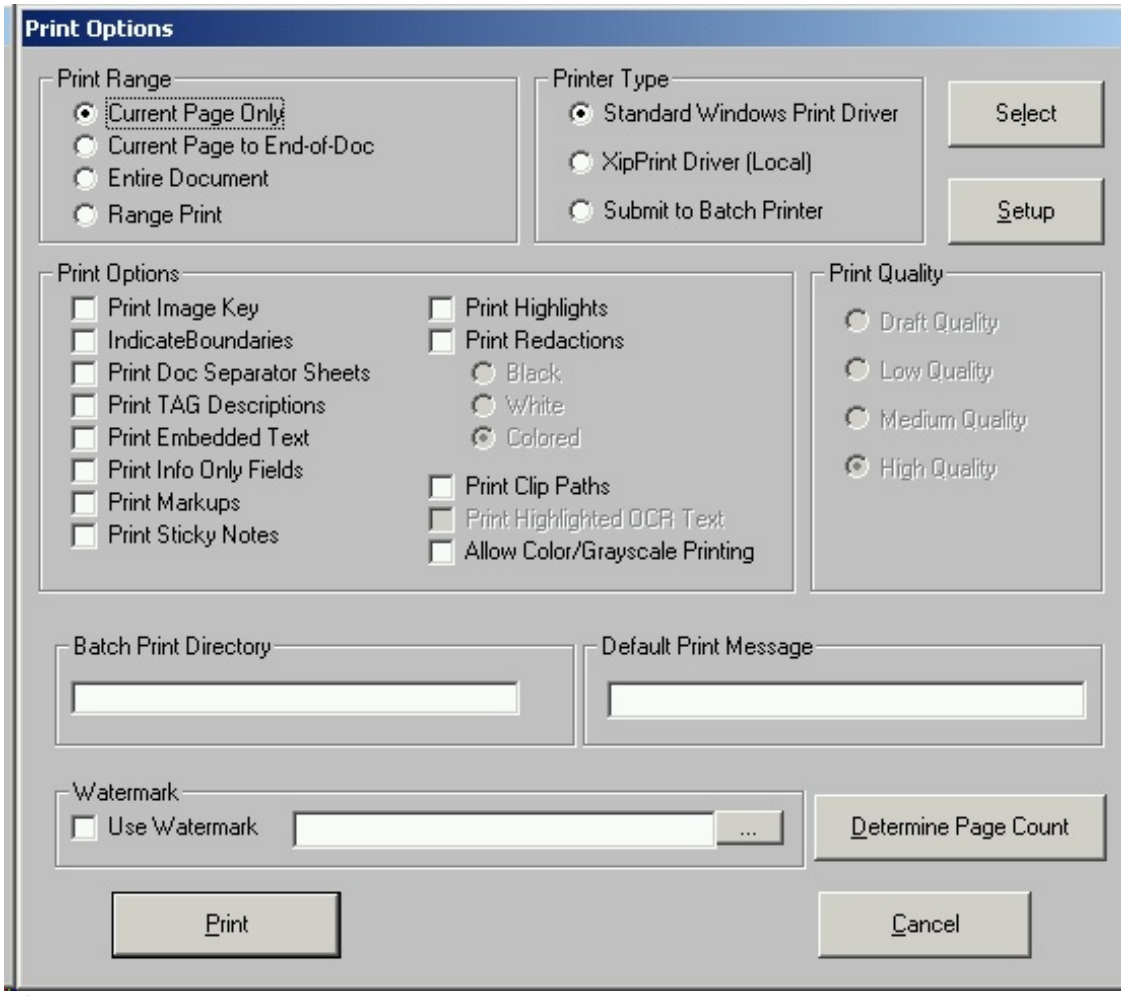
ABOUT THE AUTHORS

❑**Marcia Pelick** is the Litigation Support Specialist in the United States Attorney's Office for the Middle District of Tennessee.

❑**Montie Ruffner** is the Litigation Support Specialist in the United States Attorney's Office for the District of Nebraska. During his tenure in the Air Force, he was the Senior Information Manager for J6 (Command, Control, Communications, and Computers Directorate) of the United States Strategic Command. He was responsible for the planning, management, and policies of all administrative activities within the Directorate. During the last five years of his Air Force career, he worked extensively to retrain assigned administrative personnel in the management of the last ninety feet of the network within the Command.✠

Figure 1


Project: MISC_TO_PDF 00000006
File View Image Navigate Search Modules Window Help
Sync with Image
00000001
00000002
00000003
00000004
00000005
00000006
00000007
00000008
00000009
00000010
00000011
Figure 2


Print Options
Print Range
Current Page Only
Current Page to End-of-Doc
Entire Document
Range Print
Printer Type
Standard Windows Print Driver
XipPrint Driver (Local)
Submit to Batch Printer
Select
Setup
Print Options
Print Image Key
IndicateBoundaries
Print Doc Separator Sheets
Print TAG Descriptions
Print Embedded Text
Print Info Only Fields
Print Markups
Print Sticky Notes
Print Highlights
Print Redactions
Black
White
Colored
Print Clip Paths
Print Highlighted OCR Text
Allow Color/Grayscale Printing
Print Quality
Draft Quality
Low Quality
Medium Quality
High Quality
Batch Print Directory
Default Print Message
Watermark
Use Watermark
...
Determine Page Count
Print
Cancel
Figure 3


V-Code
File Data Entry Guest Mail Help
Unitization Batches
Unitize
Admin
Admin
Coding Batches
Code
QC
Admin
Admin
Exit
IPRO Tech, Inc.
www.iprocorp.com
Figure 4


IPROBuild
File
Options
Help
Login
Select Project
Build New Project
Exit
IPRO Tech, Inc.
www.iprocorp.com
Figure 5

Electronic Discovery & eScan-IT

Diana M. Wong
Information Technology Specialist
United States Attorney's Office
Northern District of California

I. Introduction

Compact discs, DVDs, external hard drives, pocket thumb drives, compact flash cards, and even the good old floppy disks, are turned over as evidence. What is an attorney to do with all these different types of media? The contents of the media have to be reviewed and somehow turned over for discovery. Instinct may first urge one to have the agents print out everything and hand Bate each page. There is an easier and better way to handle electronic discovery.

With their proliferation, computers have become vital tools for criminals. The offender may use them to keep photos of gang parties, tally drug income accounts, create fraudulent government documents, download pirated media, hack into business computers for corporate espionage and data destruction, e-mail child pornography, or keep a contact list. A criminal's computer may contain a treasure trove of evidence. That treasure trove may consist of thousands of computer files which could represent hundreds of thousands of printed pages.

Currently, a large percentage of the personnel in United States Attorneys' offices (USAOs) are elementary/basic computer users. In other words, if files are not WordPerfect or Word compatible, users have no idea how to open or use them. Even if they are savvy users, the offices are limited to the approved software for computers. "Quicken," "AutoCAD," "Adobe Photoshop," and "Lotus Notes," are samples of popular software programs not authorized. Because criminals may use programs unauthorized for USAOs' computers, opening and viewing all the files provided as electronic discovery may be a challenge.

The Executive Office for United States Attorneys (EOUSA) is looking into acquiring software to process electronic discovery. This allows processing of the various file formats without purchasing all the various software the criminal may use. eScan-IT by IPRO is one of many programs available that will take electronic data files and turn them into images.

Below are terms that will give the USAOs' personnel at least a basic understanding of the concepts used in this article.

Glossary

Scanning is the process employed to convert a paper document into a digital image. The image is usually stored on the computer as a tiff, jpeg, or PDF file.

A **Viewer** is a software program, such as IPRO Viewer or Adobe Reader, which allows the user to view the scanned images quickly and easily.

Optical character recognition (OCR) text is the result of the computer's attempt to identify the typed characters on a scanned image. The accuracy is dependent on the clarity of the typed characters on the paper documents. The OCR text can be used for word searches once it is loaded into a viewer.

Electronic discovery is the discovery of electronically stored information. Electronic files can be stored on computers, external hard drives, thumb drives, floppy disks, CDs, DVDs, digital camera cards, and so forth.

Native format is the software application in which the material was authored. Often, but not always, the file extension will give an indication of which software application was used. The file extension ".xls" is associated with Microsoft Excel, ".wpd" with WordPerfect, ".mdb" with Microsoft Access, ".nsf" with Lotus Notes, and ".htm" with a web browser.

Extracted text is captured during the process of creating images from the native files. The quality of the text extracted cannot be degraded by small type sizes or scripted/serif fonts. The program does not try to recognize each character because the software has the characters in the electronic files. Extracted text can be searched once it is loaded into a viewer.

Deduplication is the process of identifying two files as being the same file. For example, an e-mail with an attachment might have been sent twice, or

sent to different people. Selecting the deduping option prevents multiple copies of the same attachment from being converted to images.

Metadata is "data about data." The metadata is collected by the native program. For example, Microsoft Word tracks the author, date last modified, and the amount of time spent editing as separate fields of metadata. The operator chooses which types of metadata eScan-IT is to capture automatically during processing. The metadata can be exported for inclusion later as fields in a database for the documents.

Coding (also known as Indexing) is the process of manually entering data to identify the individual documents in the image collection. Coded data is created by a person reviewing each document. Common data fields are document date, document type (check, FD-302, transcript, photo, memo, letter, and so forth), title, author, recipient, police report number, and source. The coded data can be exported for inclusion later as fields in a database for the documents.

II. The program

IPRO naturally evolved eScan-IT from their highly successful and easy to use traditional scanning software, Scan-IT. eScan-IT contains all of Scan-IT's features and more. This powerful application supports electronic discovery for multiple e-mail formats and hundreds of file types from Adobe to Zip.

The electronic discovery features for eScan-IT version 2.6 follow.

- Step-by-step instructions walk users through the process, making it a painless experience each step of the way.
- A presearch filter allows searching of specific file types, which saves time and money.
- Support for over 350 file types is available, including database, spreadsheets, e-mail, graphics, and electronic document files.
- Detailed reports listing name, size, pages, and number of potential duplicates may be viewed before processing.
- Images may be viewed prior to processing, saving time and money by removing unwanted document images.
- Full-text metadata may be extracted and viewed from virtually any file format before processing.
- It can export to IPRO, DocuLex, Summation, Concordance, and other prominent litigation products.
- Unknown file types can be listed and saved for independent processing.
- Document boundaries (box, folder, document, and child) and attachment ranges can be maintained and recorded.
- The Bates number can be endorsed on the image.
- Images can be renumbered before export.
- It can dedupe on a project or batch level.
- Customizable indexing/coding fields are available.
- It has the capability to do high-speed image printing.
- It has the capability to remove blank pages.

See Figure 1– Example of eScan-IT's main screen.

III. The process

As with any other project, to have a successful and productive discovery experience, attorneys and agents need to communicate with their automated litigation support (ALS) personnel. Discussions should take place to identify quantity and quality of discovery, capabilities, manpower, roles, expectations, and realistic deadlines.

The actual procedure to process electronic discovery is fairly straight forward. Five basic steps are involved.

- Choose the desired processing settings.
- Create an electronic discovery batch and choose the data files/directories for processing.
- Process the files and convert them to images.
- Quality check the images and code the documents.
- Export the finished images and data.

The last two steps are the same as those carried out for a traditional paper scanning job. In this article the focus will be on the first three steps.

IV. The settings

The first step can be fairly intimidating for most people because there are so many options available. There are general settings that are applicable to both paper scanning and electronic discovery. Settings under "Discovery Options" are specifically for electronic discovery processing.

Attorneys should be aware of the different settings available in eScan-IT as ALS personnel may or may not be intimately involved in the cases. In the Northern District of California, the ALS unit functions similar to a typing pool–jobs come in and jobs go out. There are too many cases to process to become intimately involved in each one. The staff attempts to ask the AUSA all the necessary questions in order to get a complete set of specifications for a job. Attorneys who have been through the scanning process with previous cases are usually better at communicating what their cases entail and require.

V. Common options

In figure 2, the main concepts to be aware of are Bates numbering, removal of blank pages, and instructions on how the document breaks are identified. What Bates numbering scheme is to be used? Should blank pages be kept and Bated? Is being able to find where individual documents and folders begin and end important to the attorney and agents? These questions apply to both paper discovery and electronic discovery.

See Figure 2–eScan-IT's general options for a project.

The screen in figure 3 allows data fields to be defined for the coding/indexing of the images. IPRO has provided a convenient and simple data entry screen. Once the batch is exported, the data entered can be used to populate other databases such as Concordance, Summation, Casemap, and Excel.

See Figure 3–Defining data fields allow simple coding, indexing, of the images later.

VI. Discovery options–general

There are four key options in figure 4 to consider.

- Extract raw text while processing. This produces the extracted text which allows word searches to be undertaken in the image viewer.
- Extract e-mail attachments. This processes the attachments found in e-mail files for inclusion in the image collection.
- Insert place holder for unknown file formats. This creates an image listing the file (see figure 5) that eScan-IT cannot process, possibly because the format is not immediately identifiable, the file is blank, or the file is corrupt.
- Process in color. This allows any files with color to be saved as colored images.

See Figure 4– General options screen for electronic discovery.

See Figure 5–Sample of the image created when "insert a place holder for unknown file formats" option is set.

VII. Discovery options–metadata

The types of metadata that can be captured during processing are shown in figures 6, 7, and 8. The metadata is organized as fields in the indexing of the documents, and thus is exportable to other databases. Once the settings are selected, eScan-IT creates the metadata fields automatically. Metadata fields are not manually defined in the coding field definition screen, shown in figure 3.

See Figure 6–Metadata general options screen.

See Figure 7–Metadata options specifically for e-mail.

For example, capturing the metadata for e-mail files (files are ".pst" for Outlook and ".nsf" for Lotus Notes) is very useful. eScan-IT places the header information of an e-mail (to, from, subject, date, and cc) in separate fields. The e-mails exported from eScan-IT and imported into a database, such as Concordance, can be searched using specific names and subjects and inclusive dates. This process is much more efficient than flipping through thousands of e-mails.

See Figure 8–Metadata options specifically for Microsoft Word and Microsoft Excel documents.

The ALS staff in the Northern District of California recently received a CD from the local DEA office that contained over 29,000 calls. Each call was in its own subdirectory and the unique identifying information for each call was incorporated in the file name and file path. If the synopses were printed without reviewing the disk, it would have resulted in thousands of blank pages, as well as thousands of pages of call synopses without identifiers. The conversion of the electronic files to images and the capture of the metadata (in this case the name and location fields), enabled the attorney to search the data for the calls needed and view the file as a Bated image. Figure 9 is an example of the metadata from a Microsoft Word document.

See Figure 9– Screen showing an image created from a Microsoft Word document and metadata that was extracted from it.

VIII. Discovery options–Microsoft Office applications

Settings also apply to how the program will handle the formatting of Microsoft Office electronic files. The screens in figure 10 allow customization of Microsoft Excel, Word, and Powerpoint files.

See Figure 10–Shows the three screens used to customize the options for Microsoft Excel, Word, and Powerpoint document formatting.

What is so significant about formatting? What is printed is what is in the file, right? Wrong. It is impossible to know if all the data contained in an electronic file will be printed out if the electronic files are sent straight to a printer. A person could control what is seen by hiding portions, such as Excel spreadsheet columns, or print the pages in black and white, when parts of the file were highlighted with color.

The "track changes" option can be set in a Word document. eScan-IT can produce a version that shows all revisions and/or the final version. This could help the litigation team to see who knew what and when. For example, it would be apparent that names, dates, and other things were added after the offender discovered an investigation was underway.

What about Powerpoint? Speakers use Powerpoint presentations to display main speaking points and then expand on the topic verbally, such as providing examples, definitions, and anecdotes. If the slides are printed without the speaker's notes, information in the notes will be lost.

IX. Discovery options–filters

Filters are used to limit the files to be processed. The operator may want to limit the files processed because of time constraints, organizational considerations, or at the direction of the attorney.

If the suspect keeps his spreadsheets of drug dealings and his family photos on the same computer, it is possible to deselect the setting for "Kodak Photo CD" to filter out the photos. If all the transcripts on the CD received are duplicates of ones previously scanned but the e-mail files are new, filter out the word processor files and convert the e-mail files.

See Figure 11– Filtering specific file types for processing is as simple as a checklist.

See Figure 12– Filtering e-mails is made easy by creating a criteria sieve to run the e-mails through.

Sometimes it is easier to process thousands of images if they are grouped together by type. For instance, run the discovery process only on word processing files first so they are all in one continuous Bates range. Process the spreadsheets as another Bates range, e-mails as another, and photos as yet another.

X. The batch and file selection

After all the settings are chosen, it is time to start the electronic discovery batch–step 2 of the process. Though eScan-IT does both electronic discovery and traditional paper scanning, a batch can only contain one type. Directories and/or specific files to be processed are selected in the screen in figure 13. Also during this process, the files may be previewed and filtered to further refine the list of files to include.

See Figure 13–Select the directories and files from the checklist you want converted to images.

After creating the batch and selecting the files/directories to be processed, eScan-IT will analyze the files and generate a report listing its findings. The main report identifies the file types, the number of files of each type, and the total file size per type. A list of unknown file types is given

as a line item. The duplicate report lists all the files that were identified as duplicates.

See Figure 14–Sample report that is generated when the program analyzes the directories/files that were selected for processing.

XI. The processing

Step 3 of the process converts the pages into .tiff (black and white) and/or .jpeg (color) image files. In addition, it will capture the metadata and the extracted text.

The extracted text from the file is stored two ways. The first is a simple ASCII text (.txt) file. It contains the text with all the formatting features removed. The second is an IPRO ".cxt" file. Though it is also ASCII, it contains the complex positional details which make the highlighting in IPRO Viewer's text search possible.

See Figure 14– Conversion of files to images completed.

XII. Quality control and coding

It is always a good idea to do a quality check on the images and data. After reviewing the unknown format files, it may be necessary to reprocess some of them and delete others. While checking the images, one may realize all the PowerPoint slides will be generated as black and white images because the "Discovery Options–Office Applications–Powerpoint–Image Generation" option was not set to "color." If there does not seem to be any Metadata showing up, more than likely the Metadata option may not have been selected and, therefore, none was captured.

Once the files have been converted into images, they can be handled just like scanned paper images. Images can be renumbered. Gaps in the Bates numbers from deleting pages can be corrected. Alphabetic prefices like "US" or the defendant's initials can be added to the Bates. Document breaks can be modified. OCR can be accomplished on pages that did not have extracted text, such as files that were already images.

Coding can now be done. It is essential to determine who will be responsible for entering the data. In the Northern District of California, ALS personnel do not code documents. The attorneys, agents, and paralegals are encouraged to handle the data entry since they are familiar with the case, the documents, and items of interest. A staff member unfamiliar with the case may start from the beginning and spend weeks coding 5,000 phone logs, only to find out that the FBI already knew that 4,789 were not pertinent and did not need coding. Similarly, if reports from operation "Song Byrd Sings" are of interest, and personnel do not know about the operation, the coding may not identify the documents as such. Communication is vital if searches are to be effective.

XIII. The export

eScan-IT allows export of the images into .tiff, .jpeg, and/or Adobe .pdf formats. The data, both data entered via coding and the generated metadata, can be exported in any number of formats. It is possible to select which coded data and which metadata fields will be exported.

Once exported, the images can be loaded in IPRO for viewing. The data can be loaded into any number of programs, such as Concordance, Summation, CaseMap, Microsoft Access, Sanction, or Excel.

When considering turning over the processed discovery electronically to the defense, ensure it is in a format that he or she can use. If the AUSA does not know, have the opposing counsel contact the ALS staff to arrange for a format. The most commonly requested formats from opposing counsel in the Northern District of California are to provide the images either in an IPRO Viewer or as .pdf files on CDs.

XIV. The technical difficulties

During testing of eScan-IT on bits of N.D. Cal. discovery, it was found that large files could not be processed. The testing was done on a standard USAO issued Compaq EVO PC. The IPRO technician suggested that the PC did not have sufficient RAM to process the files.

IPRO recommends the following as the **minimum** required system for eScan-IT.

- Window XP Operating System.
- 1.5 GHz processor, such as an Intel Pentium 4 or AMD XP 1800.
- 1 GB RAM.

- 150 MB hard disk space (required for installation, see note below).
- Office 2003, including Outlook.
- Novell GroupWise 6.5 (6.5 evaluation copy is free from Novell's Web site).
- Lotus Notes Client 6.0 (6.0 evaluation copy is free from IBM Web site).
- Current anti-virus software (for processing of compressed files).

The amount of hard disk space needed depends on the options selected and the amount of data to be processed. IPRO recommends that at least two to three times the amount of data to be processed be available on the hard drive, (if processing 10 GB of data, at least 30 GB should be available on the hard drive).

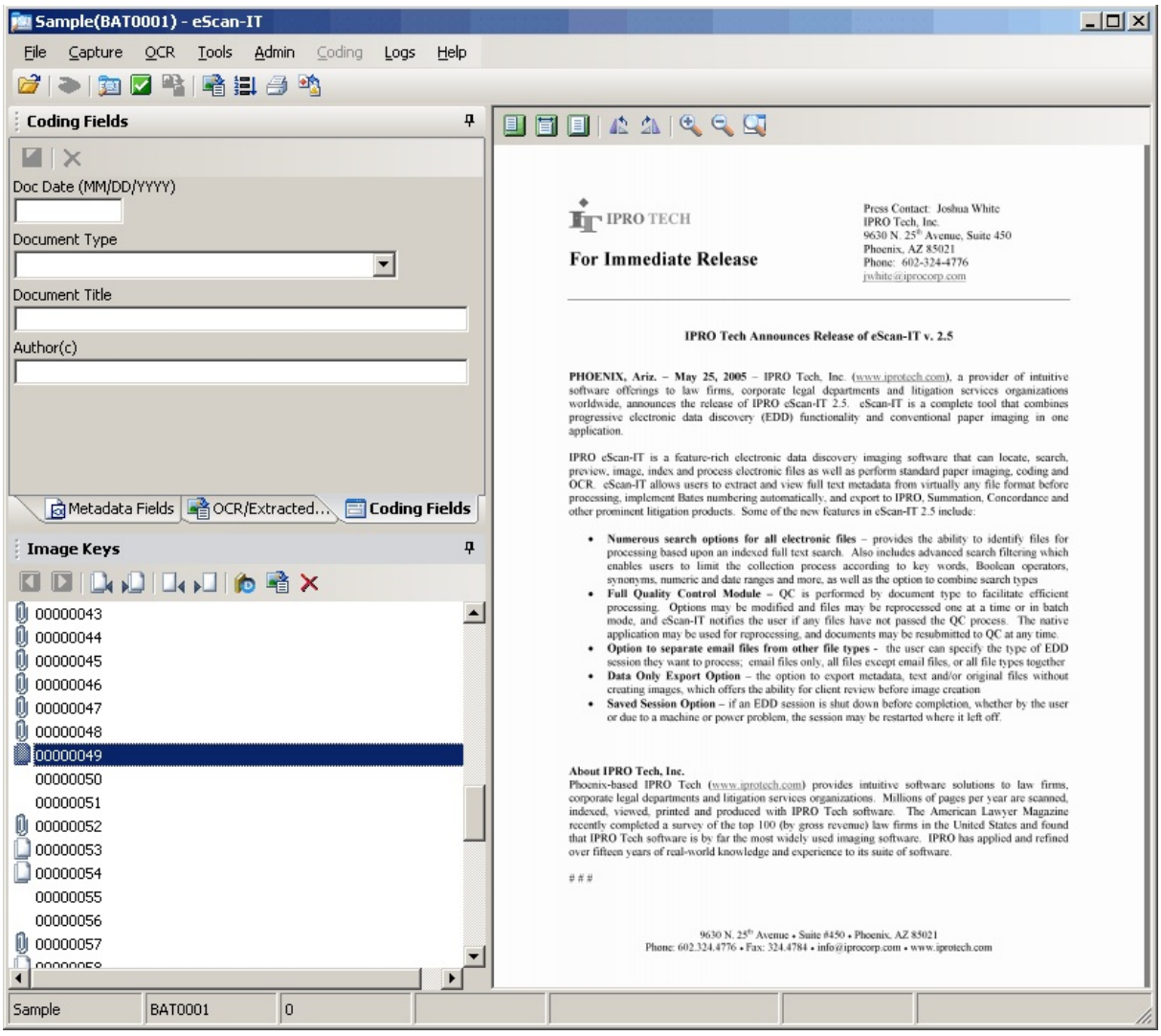
USAO Compaq EVO standard system configuration consists of the following.

- Window XP Operating System (if the office has gone through "The Migration").
- 2.26 GHz processor, an Intel Pentium 4.
- 248 MB RAM.
- 150 MB hard disk space available for installation on C drive, and up to 50 GB available for processing/storage on the D drive.
- Office 2003, including Outlook.
- Current antivirus software.

Without sufficient memory (RAM) and disk space, eScan-IT is very limited on the file sizes it can process. The simple solution would be for the districts to purchase additional memory for the computers that would be running eScan-IT.❖

ABOUT THE AUTHOR

❑**Diana M. Wong** is an Information Technology Specialist in the United States Attorney's Office for the Northern District of California. She has been with the office since November 2000 in the Automated Litigation Support Unit. Prior to joining the USAO, Diana was a computer scientist for thirteen years for the Navy.✠


Sample(BAT0001) - eScan-IT
File Capture OCR Tools Admin Coding Logs Help
Coding Fields
Doc Date (MM/DD/YYYY)
Document Type
Document Title
Author(c)
Metadata Fields
OCR/Extracted...
Coding Fields
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IPRO TECH
For Immediate Release
Press Contact: Joshua White
IPRO Tech, Inc.
9630 N. 25th Avenue, Suite 450
Phoenix, AZ 85021
Phone: 602-324-4776
jwhite@iprocorp.com
IPRO Tech Announces Release of eScan-IT v. 2.5
PHOENIX, Ariz. – May 25, 2005 – IPRO Tech, Inc. (www.iprotech.com), a provider of intuitive software offerings to law firms, corporate legal departments and litigation services organizations worldwide, announces the release of IPRO eScan-IT 2.5. eScan-IT is a complete tool that combines progressive electronic data discovery (EDD) functionality and conventional paper imaging in one application.
IPRO eScan-IT is a feature-rich electronic data discovery imaging software that can locate, search, preview, image, index and process electronic files as well as perform standard paper imaging, coding and OCR. eScan-IT allows users to extract and view full text metadata from virtually any file format before processing, implement Bates numbering automatically, and export to IPRO, Summation, Concordance and other prominent litigation products. Some of the new features in eScan-IT 2.5 include:
Numerous search options for all electronic files – provides the ability to identify files for processing based upon an indexed full text search. Also includes advanced search filtering which enables users to limit the collection process according to key words, Boolean operators, synonyms, numeric and date ranges and more, as well as the option to combine search types
Full Quality Control Module – QC is performed by document type to facilitate efficient processing. Options may be modified and files may be reprocessed one at a time or in batch mode, and eScan-IT notifies the user if any files have not passed the QC process. The native application may be used for reprocessing, and documents may be resubmitted to QC at any time.
Option to separate email files from other file types - the user can specify the type of EDD session they want to process; email files only, all files except email files, or all file types together
Data Only Export Option – the option to export metadata, text and/or original files without creating images, which offers the ability for client review before image creation
Saved Session Option – if an EDD session is shut down before completion, whether by the user or due to a machine or power problem, the session may be restarted where it left off.
About IPRO Tech, Inc.
Phoenix-based IPRO Tech (www.iprotech.com) provides intuitive software solutions to law firms, corporate legal departments and litigation services organizations. Millions of pages per year are scanned, indexed, viewed, printed and produced with IPRO Tech software. The American Lawyer Magazine recently completed a survey of the top 100 (by gross revenue) law firms in the United States and found that IPRO Tech software is by far the most widely used imaging software. IPRO has applied and refined over fifteen years of real-world knowledge and experience to its suite of software.
###
9630 N. 25th Avenue • Suite #450 • Phoenix, AZ 85021
Phone: 602.324.4776 • Fax: 324.4784 • info@iprocorp.com • www.iprotech.com
Sample
BAT0001
0

Figure 1

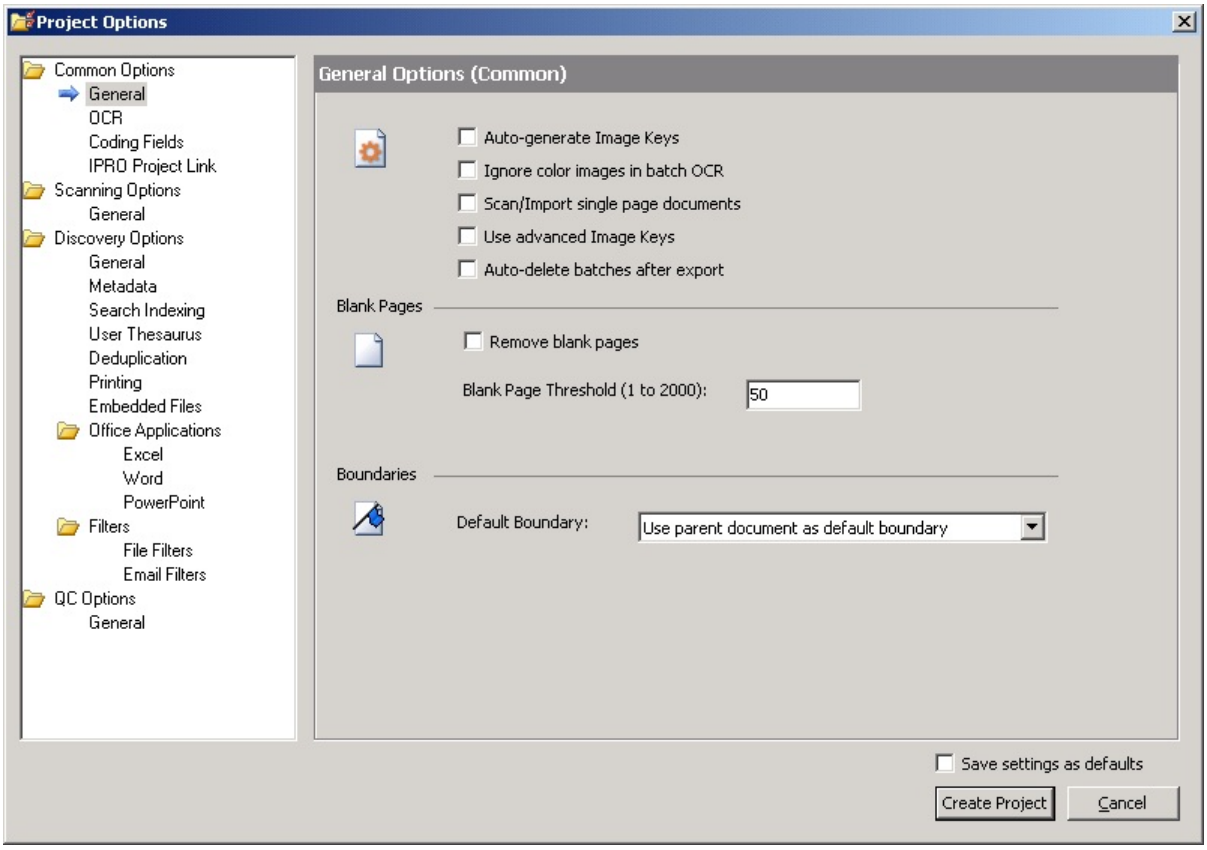

Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
General Options (Common)
Auto-generate Image Keys
Ignore color images in batch OCR
Scan/Import single page documents
Use advanced Image Keys
Auto-delete batches after export
Blank Pages
Remove blank pages
Blank Page Threshold (1 to 2000):
50
Boundaries
Default Boundary:
Use parent document as default boundary
Save settings as defaults
Create Project
Cancel

Figure 2

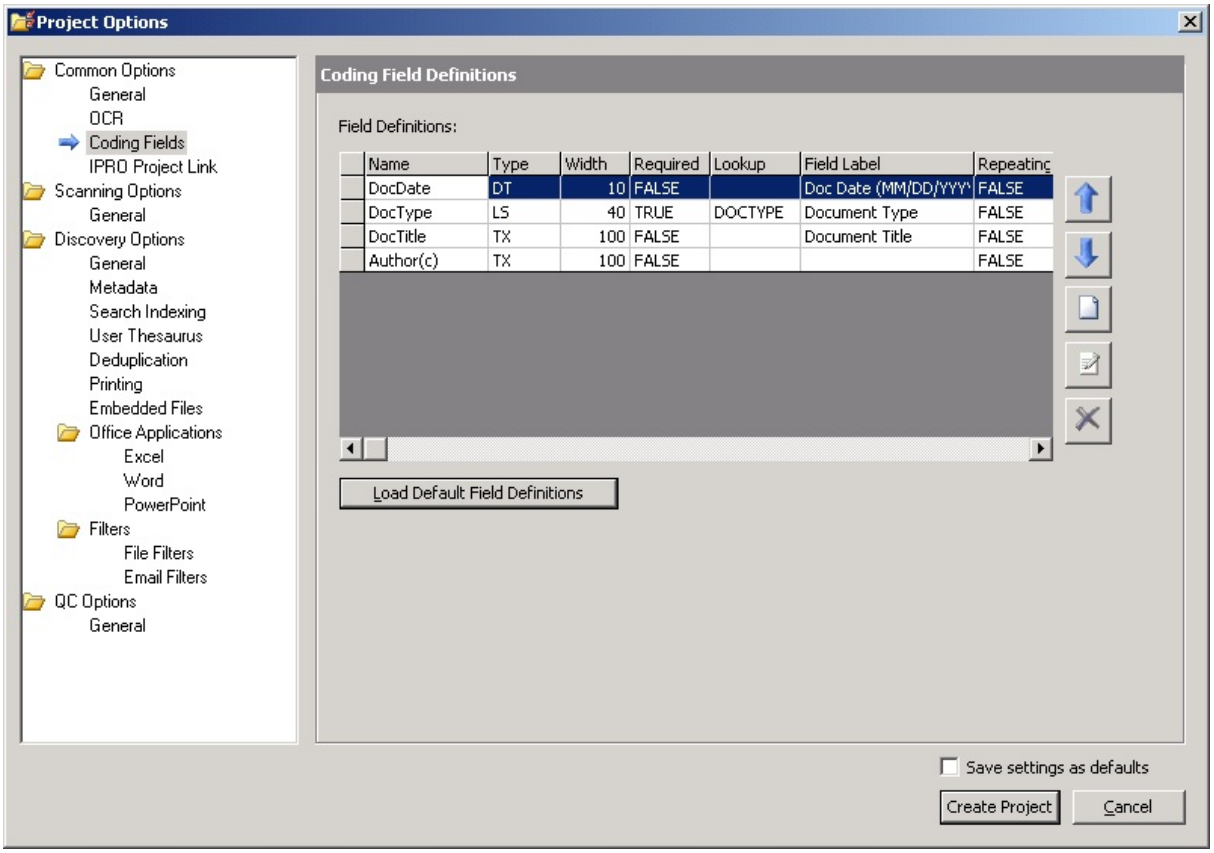

Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
Coding Field Definitions
Field Definitions:
Name Type Width Required Lookup Field Label Repeating
DocDate DT 10 FALSE Doc Date (MM/DD/YYY FALSE
DocType LS 40 TRUE DOCTYPE Document Type FALSE
DocTitle TX 100 FALSE Document Title FALSE
Author(c) TX 100 FALSE FALSE
Load Default Field Definitions
Save settings as defaults
Create Project
Cancel

Figure 3

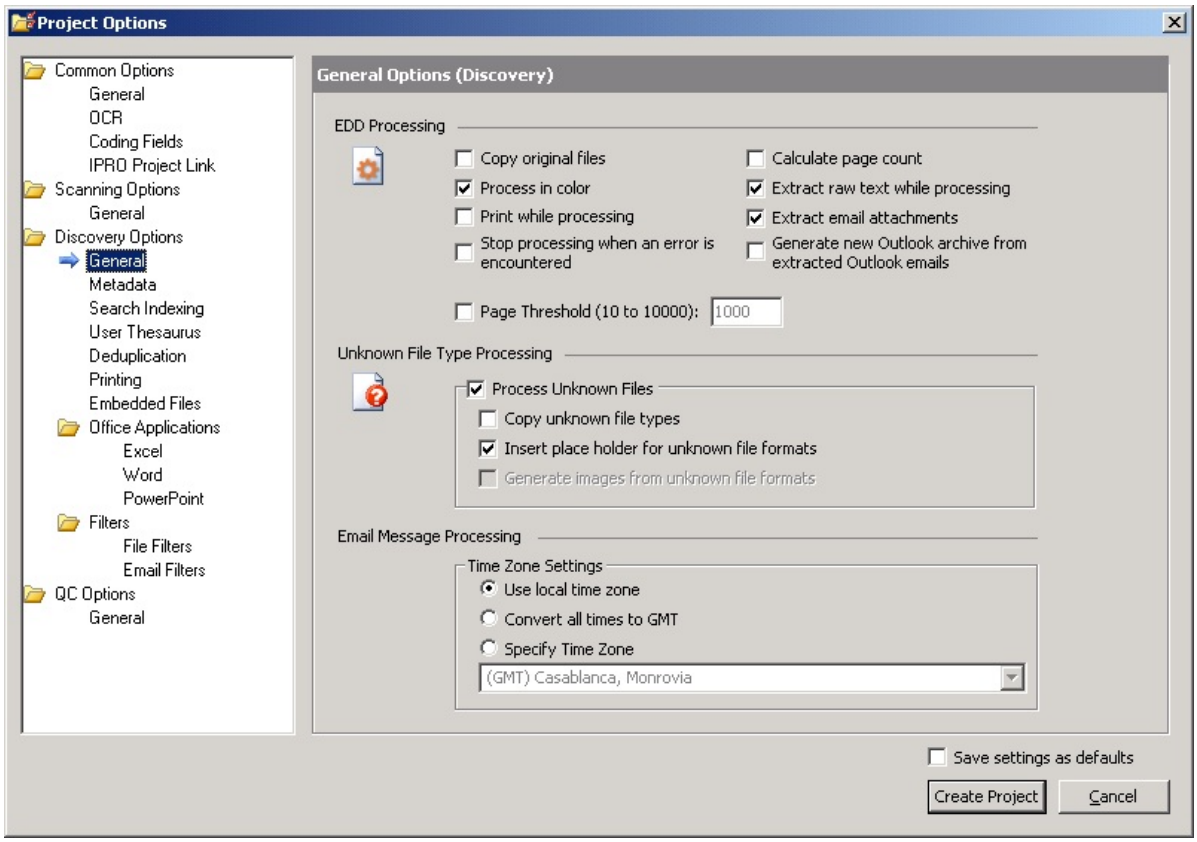

Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
General Options (Discovery)
EDD Processing
Copy original files
Process in color
Print while processing
Stop processing when an error is encountered
Calculate page count
Extract raw text while processing
Extract email attachments
Generate new Outlook archive from extracted Outlook emails
Page Threshold (10 to 10000):
1000
Unknown File Type Processing
Process Unknown Files
Copy unknown file types
Insert place holder for unknown file formats
Generate images from unknown file formats
Email Message Processing
Time Zone Settings
Use local time zone
Convert all times to GMT
Specify Time Zone
(GMT) Casablanca, Monrovia
Save settings as defaults
Create Project
Cancel

Figure 4

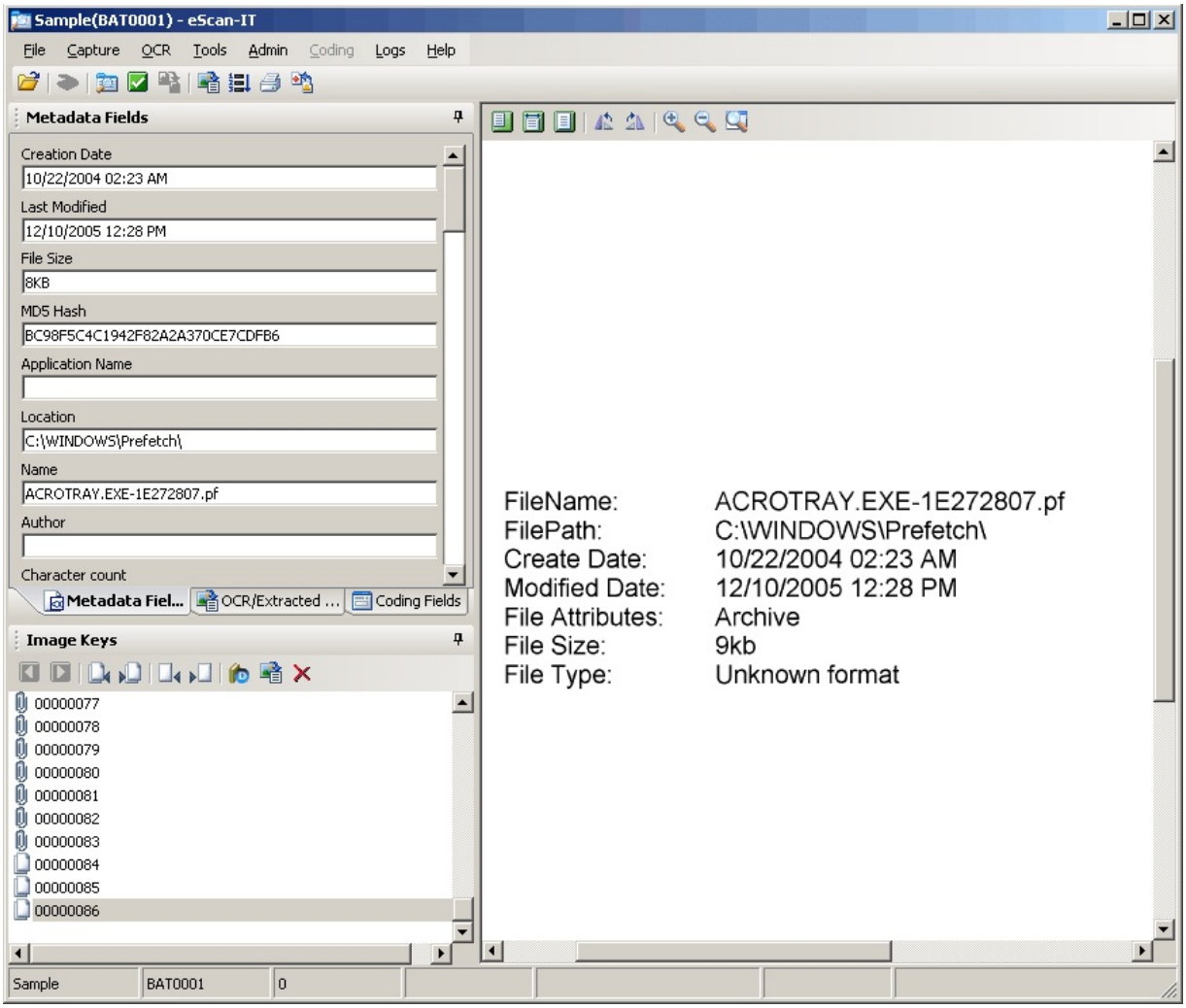

Sample(BAT0001) - eScan-IT
File Capture OCR Tools Admin Coding Logs Help
Metadata Fields
Creation Date
10/22/2004 02:23 AM
Last Modified
12/10/2005 12:28 PM
File Size
8KB
MD5 Hash
BC98F5C4C1942F82A2A370CE7CDFB6
Application Name
Location
C:\WINDOWS\Prefetch\
Name
ACROTRAY.EXE-1E272807.pf
Author
Character count
Metadata Fiel...
OCR/Extracted ...
Coding Fields
Image Keys
00000077
00000078
00000079
00000080
00000081
00000082
00000083
00000084
00000085
00000086
FileName: ACROTRAY.EXE-1E272807.pf
FilePath: C:\WINDOWS\Prefetch\
Create Date: 10/22/2004 02:23 AM
Modified Date: 12/10/2005 12:28 PM
File Attributes: Archive
File Size: 9kb
File Type: Unknown format
Sample
BAT0001
0

Figure 5

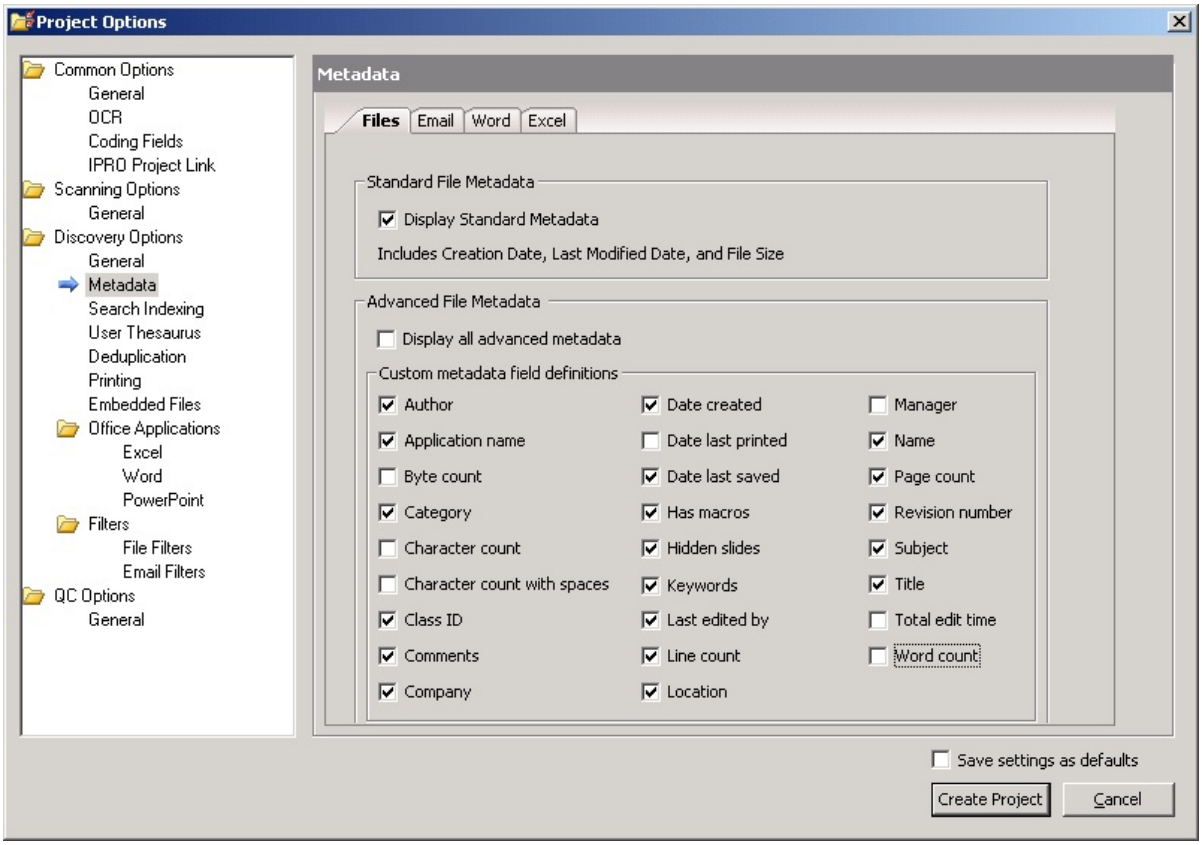

Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
Metadata
Files
Email
Word
Excel
Standard File Metadata
Display Standard Metadata
Includes Creation Date, Last Modified Date, and File Size
Advanced File Metadata
Display all advanced metadata
Custom metadata field definitions
Author
Application name
Byte count
Category
Character count
Character count with spaces
Class ID
Comments
Company
Date created
Date last printed
Date last saved
Has macros
Hidden slides
Keywords
Last edited by
Line count
Location
Manager
Name
Page count
Revision number
Subject
Title
Total edit time
Word count
Save settings as defaults
Create Project
Cancel

Figure 6

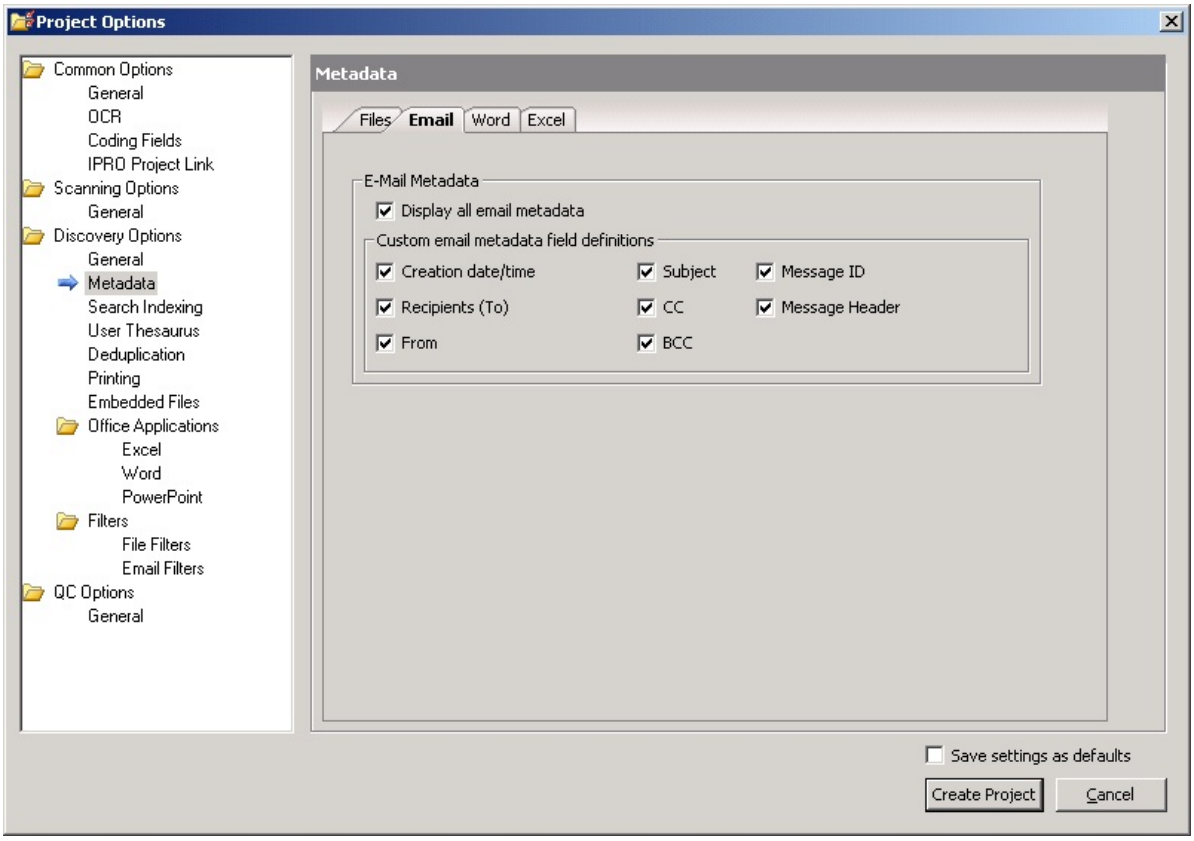
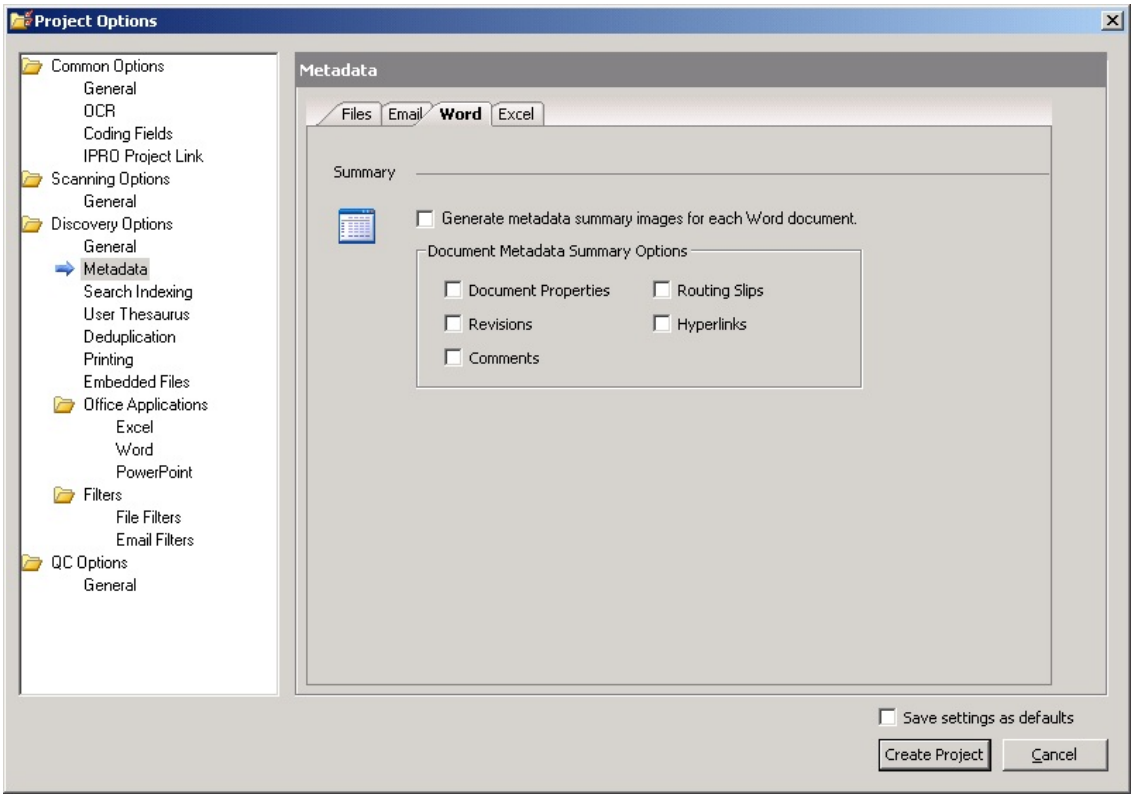

Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
Metadata
Files
Email
Word
Excel
E-Mail Metadata
Display all email metadata
Custom email metadata field definitions
Creation date/time
Subject
Message ID
Recipients (To)
CC
Message Header
From
BCC
Save settings as defaults
Create Project
Cancel

Figure 7


Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
Metadata
Files
Email
Word
Excel
Summary
Generate metadata summary images for each Word document.
Document Metadata Summary Options
Document Properties
Routing Slips
Revisions
Hyperlinks
Comments
Save settings as defaults
Create Project
Cancel
Figure 8

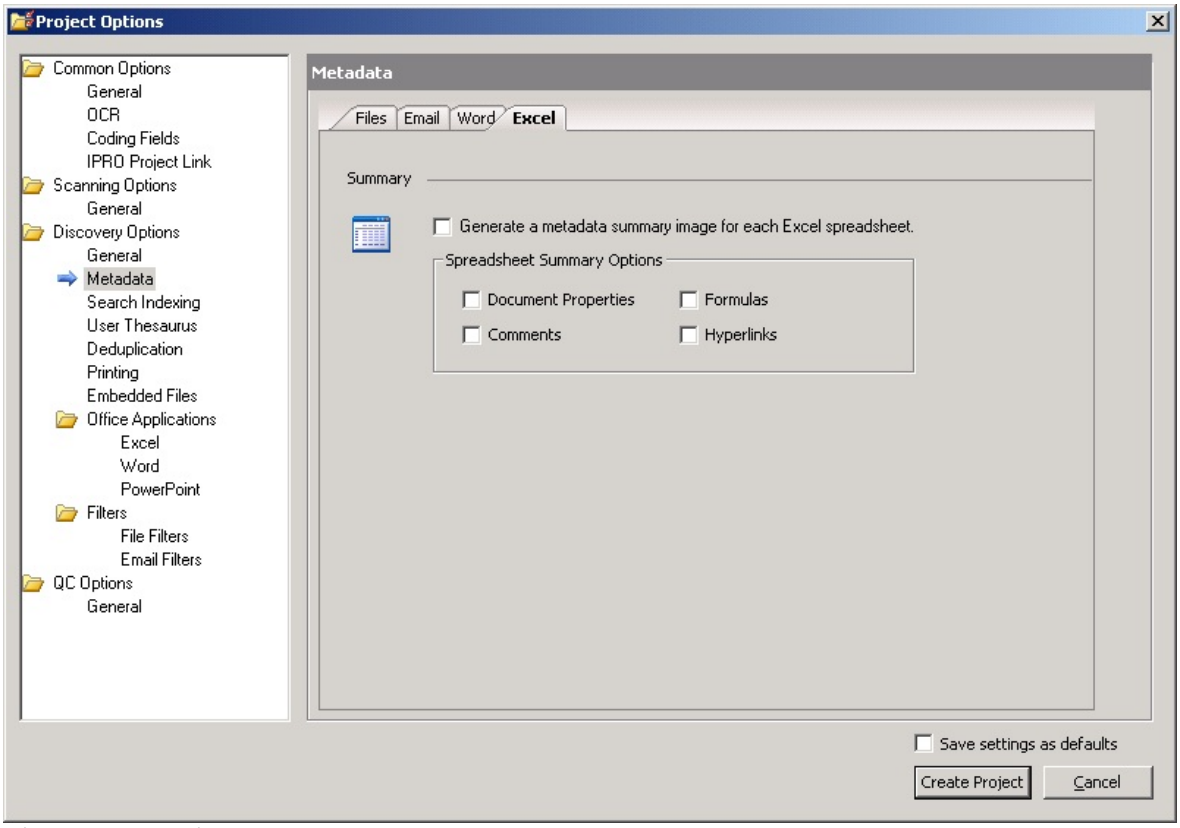
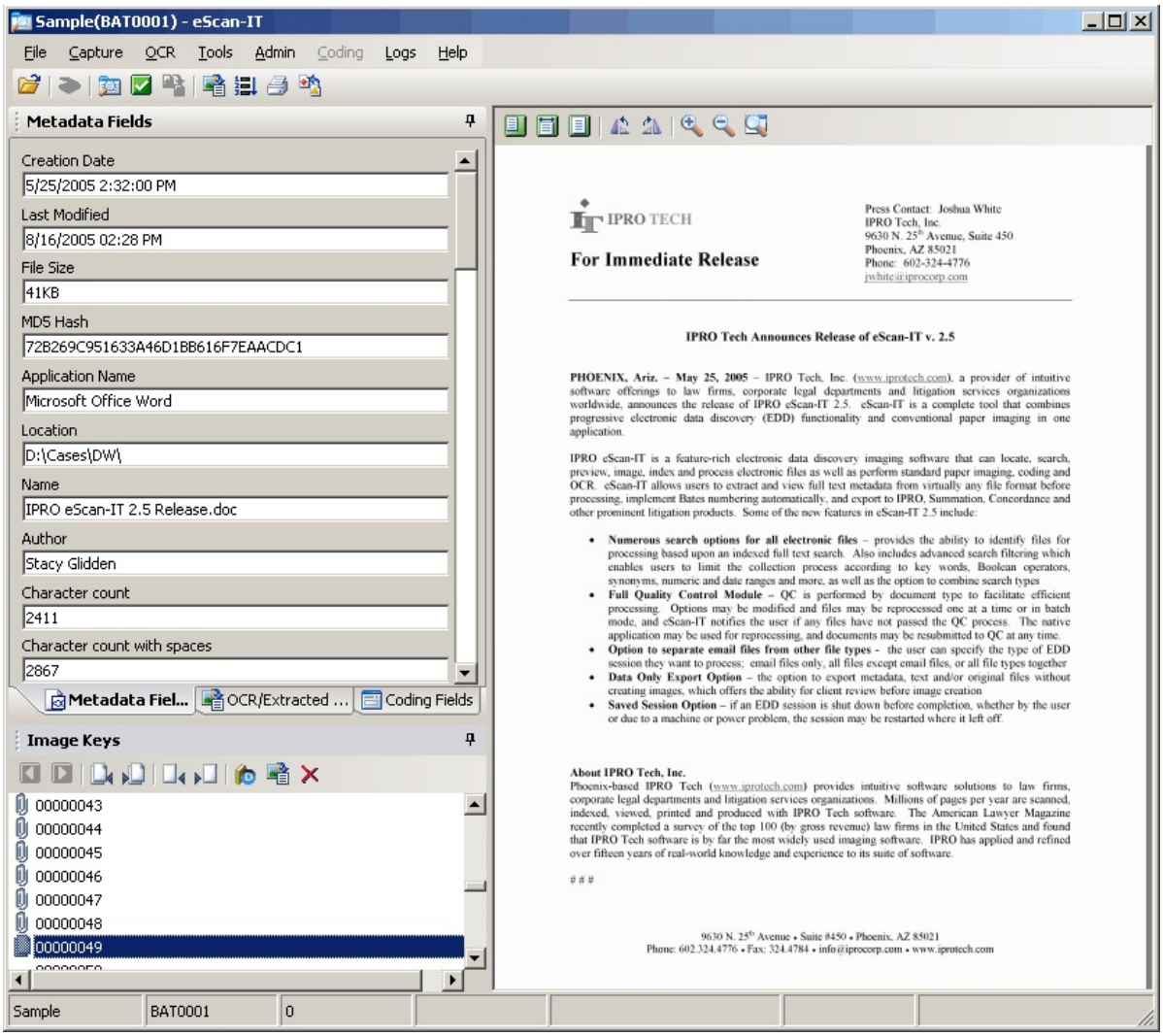


Figure 8 Cont'd


Sample(BAT0001) - eScan-IT
File Capture OCR Tools Admin Coding Logs Help
Metadata Fields
Creation Date
5/25/2005 2:32:00 PM
Last Modified
8/16/2005 02:28 PM
File Size
41KB
MD5 Hash
72B269C951633A46D1BB616F7EAACDC1
Application Name
Microsoft Office Word
Location
D:\Cases\DW\
Name
IPRO eScan-IT 2.5 Release.doc
Author
Stacy Glidden
Character count
2411
Character count with spaces
2867
Metadata Fiel...
OCR/Extracted ...
Coding Fields
Image Keys
00000043
00000044
00000045
00000046
00000047
00000048
00000049
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# # #
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Phone: 602.324.4776 • Fax: 324.4784 • info@iprocorp.com • www.iprotech.com
Sample
BAT0001
0

Figure 9

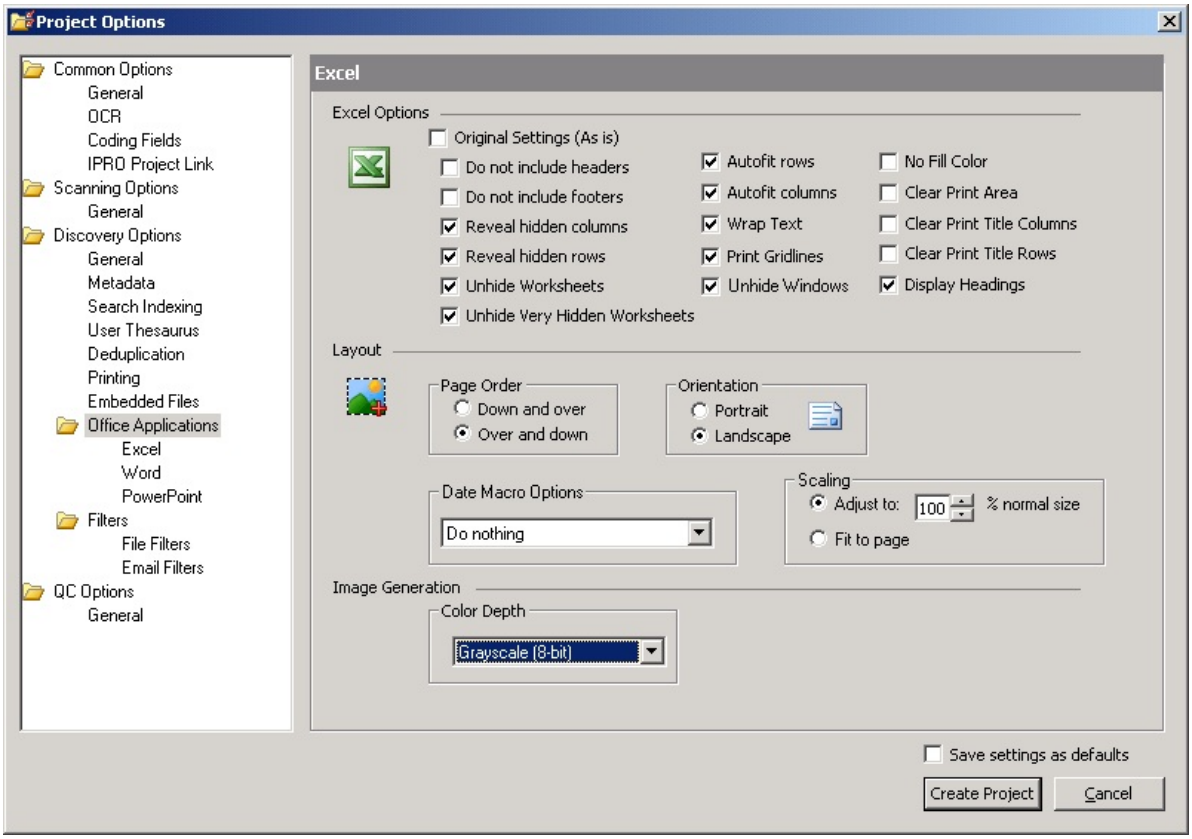
Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
Excel
Excel Options
Original Settings (As is)
Do not include headers
Do not include footers
Reveal hidden columns
Reveal hidden rows
Unhide Worksheets
Unhide Very Hidden Worksheets
Autofit rows
Autofit columns
Wrap Text
Print Gridlines
Unhide Windows
No Fill Color
Clear Print Area
Clear Print Title Columns
Clear Print Title Rows
Display Headings
Layout
Page Order
Down and over
Over and down
Orientation
Portrait
Landscape
Date Macro Options
Do nothing
Scaling
Adjust to:
100
% normal size
Fit to page
Image Generation
Color Depth
Grayscale (8-bit)
Save settings as defaults
Create Project
Cancel

Figure 10

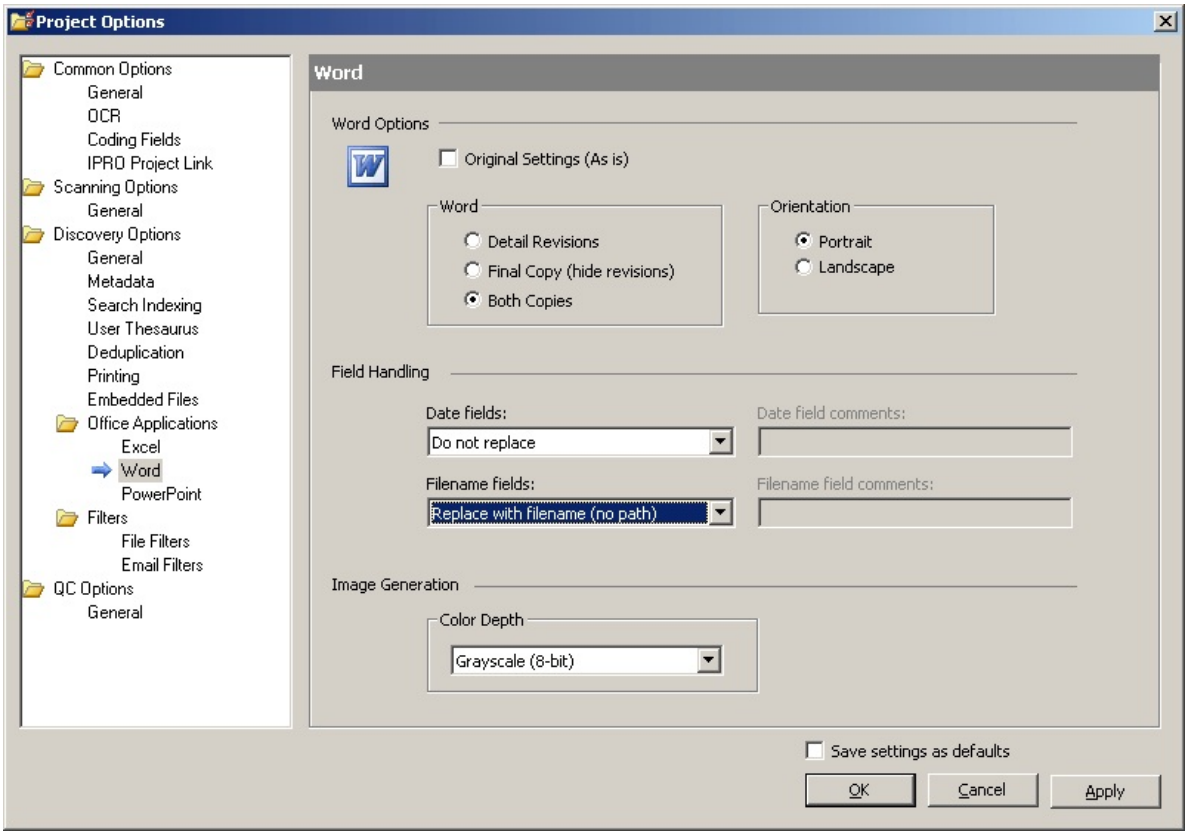

Figure 10 Cont'd

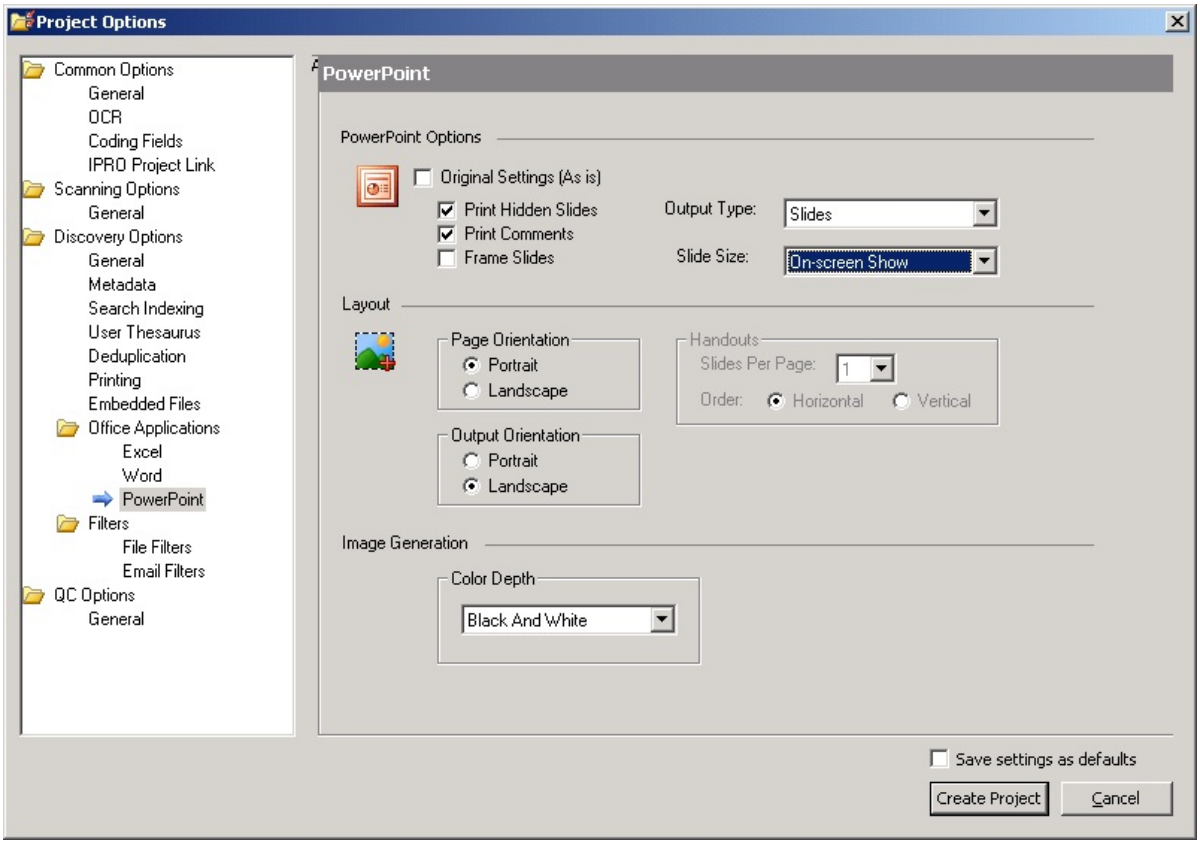

Figure 10 Cont'd

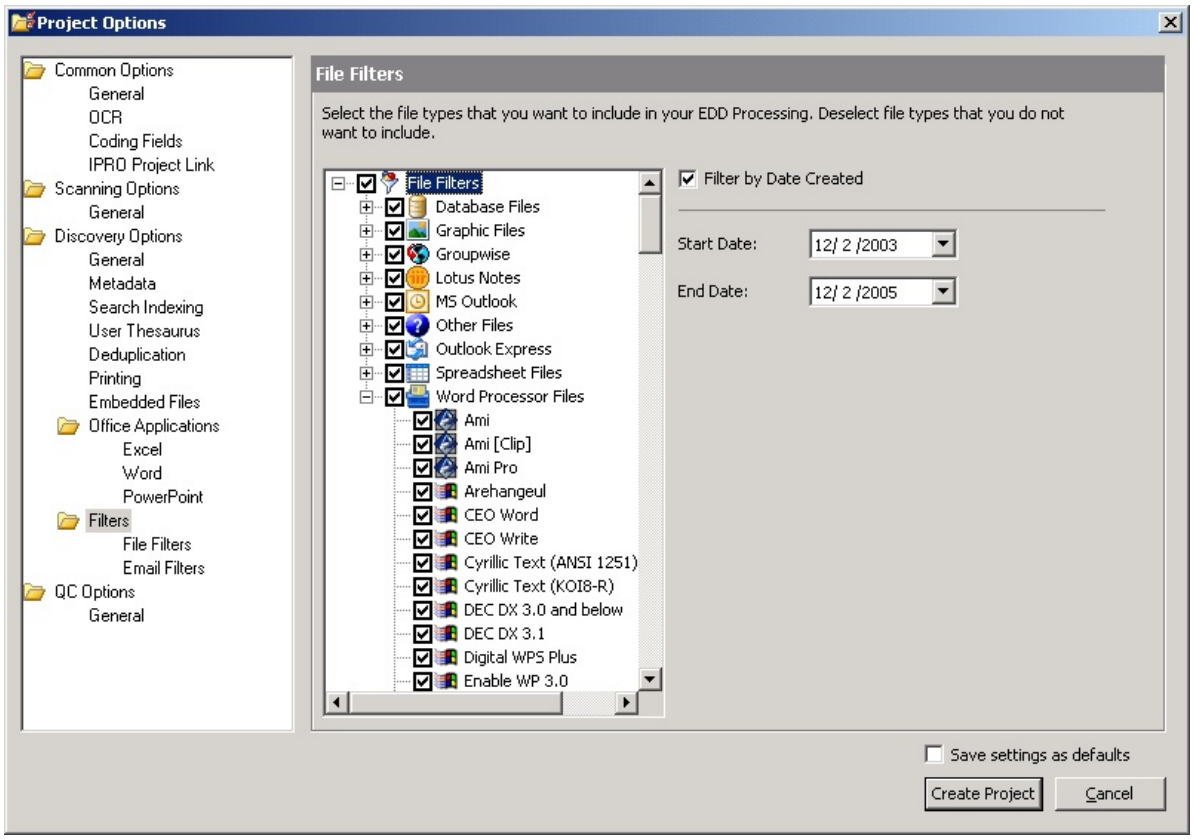
Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
File Filters
Select the file types that you want to include in your EDD Processing. Deselect file types that you do not want to include.
File Filters
Database Files
Graphic Files
Groupwise
Lotus Notes
MS Outlook
Other Files
Outlook Express
Spreadsheet Files
Word Processor Files
Ami
Ami [Clip]
Ami Pro
Arehangeul
CEO Word
CEO Write
Cyrillic Text (ANSI 1251)
Cyrillic Text (KOI8-R)
DEC DX 3.0 and below
DEC DX 3.1
Digital WPS Plus
Enable WP 3.0
Filter by Date Created
Start Date:
12/ 2 /2003
End Date:
12/ 2 /2005
Save settings as defaults
Create Project
Cancel

Figure 11

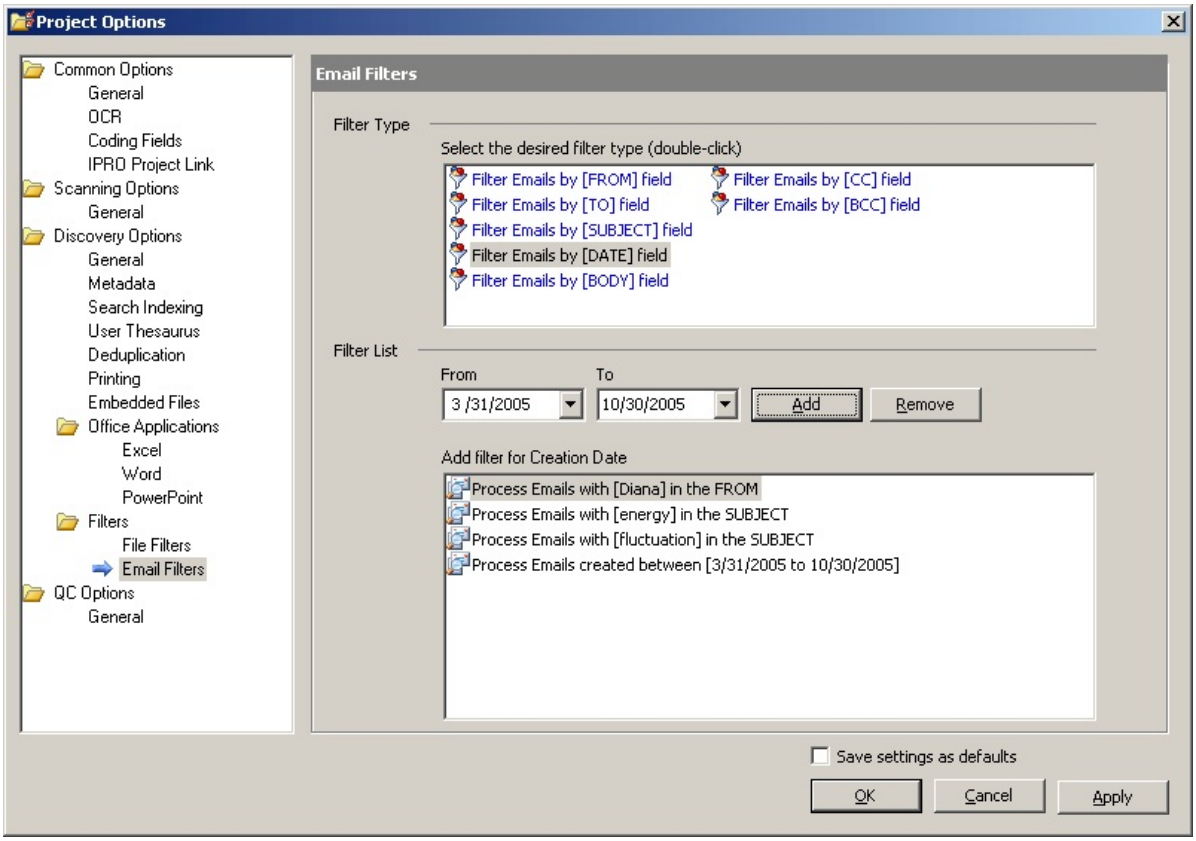
Project Options
Common Options
General
OCR
Coding Fields
IPRO Project Link
Scanning Options
General
Discovery Options
General
Metadata
Search Indexing
User Thesaurus
Deduplication
Printing
Embedded Files
Office Applications
Excel
Word
PowerPoint
Filters
File Filters
Email Filters
QC Options
General
Email Filters
Filter Type
Select the desired filter type (double-click)
Filter Emails by [FROM] field
Filter Emails by [TO] field
Filter Emails by [SUBJECT] field
Filter Emails by [DATE] field
Filter Emails by [BODY] field
Filter Emails by [CC] field
Filter Emails by [BCC] field
Filter List
From
To
3 /31/2005
10/30/2005
Add
Remove
Add filter for Creation Date
Process Emails with [Diana] in the FROM
Process Emails with [energy] in the SUBJECT
Process Emails with [fluctuation] in the SUBJECT
Process Emails created between [3/31/2005 to 10/30/2005]
Save settings as defaults
OK
Cancel
Apply

Figure 12

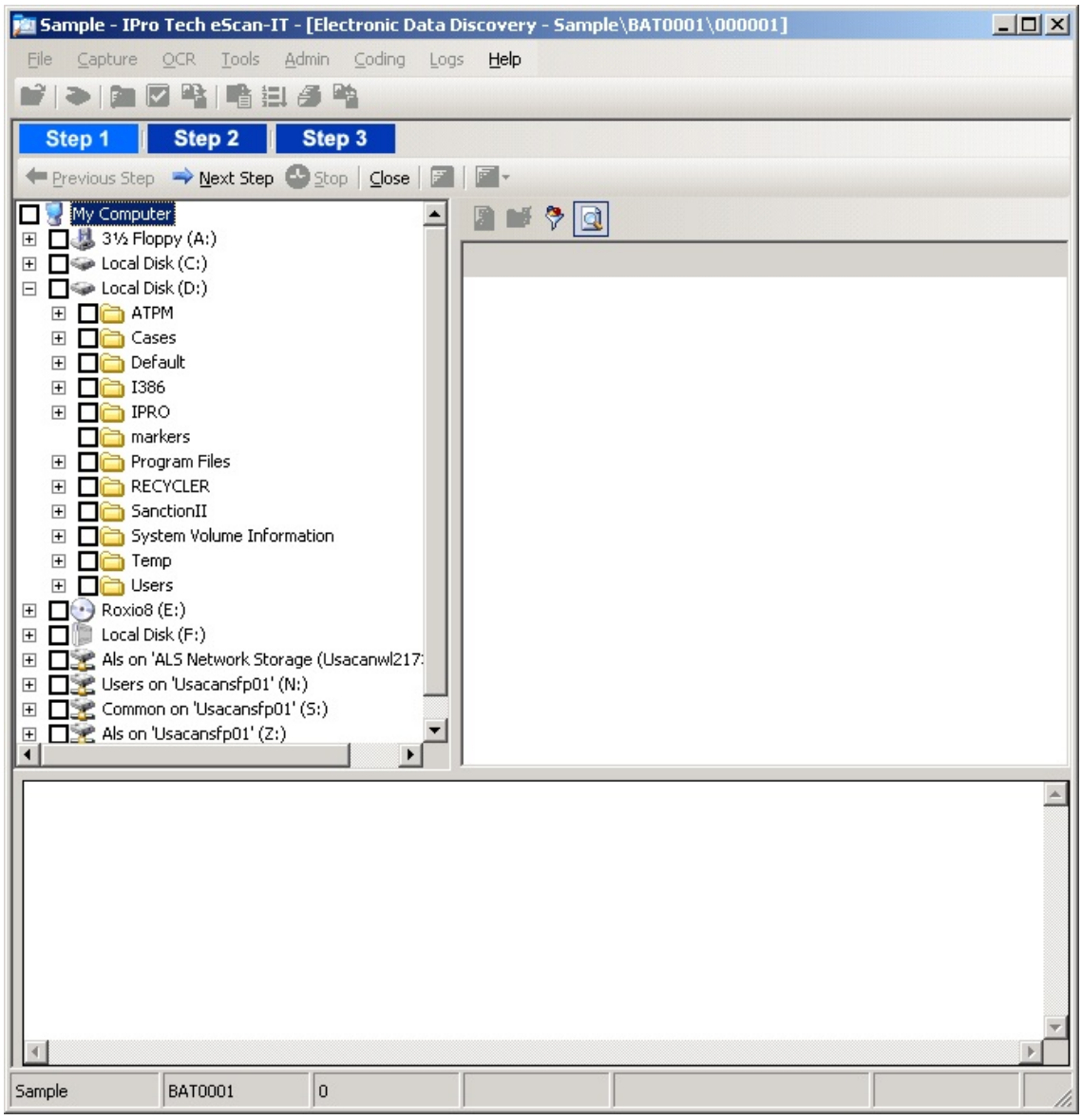
Sample - IPro Tech eScan-IT - [Electronic Data Discovery - Sample\BAT0001\000001]
File Capture OCR Tools Admin Coding Logs Help
Step 1 Step 2 Step 3
Previous Step Next Step Stop Close
My Computer
3½ Floppy (A:)
Local Disk (C:)
Local Disk (D:)
ATPM
Cases
Default
I386
IPRO
markers
Program Files
RECYCLER
SanctionII
System Volume Information
Temp
Users
Roxio8 (E:)
Local Disk (F:)
Als on 'ALS Network Storage (Usacanwl217:
Users on 'Usacansfp01' (N:)
Common on 'Usacansfp01' (S:)
Als on 'Usacansfp01' (Z:)
Sample
BAT0001
0

Figure 13

SAMPLE
eScan-IT Discovery Summary
(Standard Session - Email and Files)

File Type	File Count	File Size (In Kilobytes)
Adobe Acrobat (PDF)	3	18
Compuserve GIF	9	374
EXE / DLL File	28	10950
JPEG File Interchange	19	4530
Microsoft Access 7	2	628
Microsoft Excel 2002	2	35
Microsoft Word 2002	1	31
Microsoft Word 2003	3	937
Plain Text	141	54284
Rich Text Format	1476	1685
Tagged Image File Format	10327	2731230
Unknown format	7	72219
Windows Bitmap	1	118
Windows Icon	1	3
Windows Metafile	10	839
WordPerfect 6.0	1	92
File Totals	**12031**	**2877973**

Email Summary

Email Totals	**0**
Overall Total	**12031**

eScan-IT Discovery Summary: Printed on 12/2/2005 2:44:40 PM

Page 1 of 1

Figure 14

Notes

Request for Subscription Update

In an effort to provide the UNITED STATES ATTORNEYS' BULLETIN to all federal law enforcement personnel who wish to receive it, we are requesting that you e-mail Nancy Bowman (nancy.bowman@usdoj.gov) with the following information: Name, title, complete shipping address, telephone number, number of copies desired, and e-mail address. If there is more than one person in your office receiving the BULLETIN, we ask that you have one receiving contact and make distribution within your organization. If you do not have access to e-mail, please call 803-705-5659. Your cooperation is appreciated.