

WITS

Product Information





Thank you for taking the time to review the WITS tracking system. This document will explain how the software functions and the benefits to your company.

We value your business and look forward to working with you for many years to come. If you have any questions please do not hesitate to call. I can be reached via the contact information below.

Respectfully,

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Overview



WITS Winn Item Tracking System

WITS is a Web-based tracking system designed to track any asset from its entry point (typically mail and receiving) to its delivery point within the company.

WITS is designed to simplify the often-overwhelming process of organizing, delivering, and tracking of mail, packages, faxes, office supplies, records, and all manner of valued assets. Eventually someone will want to know where the item is, when it was delivered, and who signed for it.

WITS enables you to keep record of all your assets that now require handwritten logs; thus eliminating the time-consuming process of looking through reams of paper to find expected or disputed deliveries. The data **WITS** records will allow you to easily produce management reports showing carrier statistics, delivery information, and employee activity.

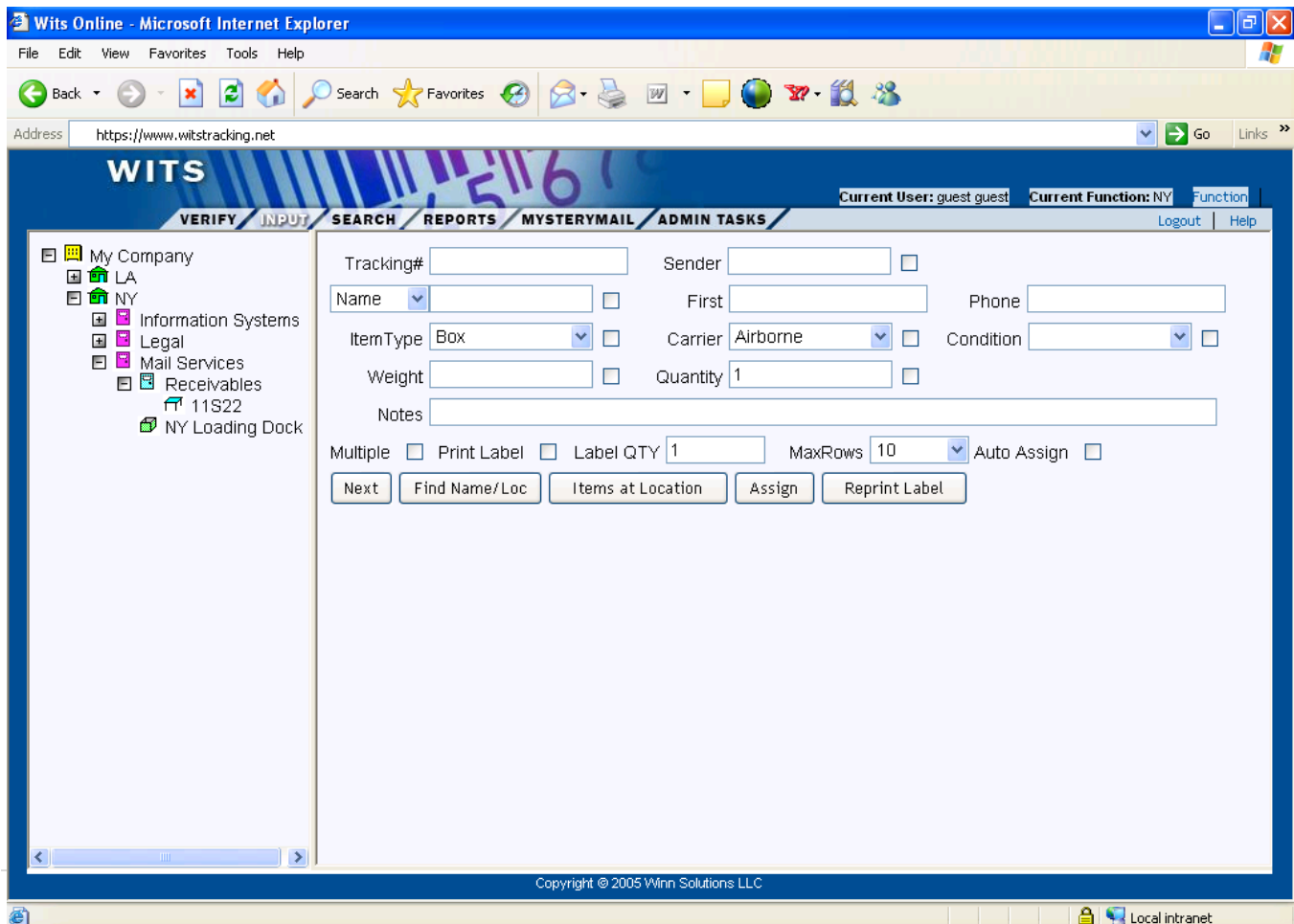
WITS features were incorporated as a result of feedback from corporate mail and receiving managers and our 17 years of experience and expertise in this area. Users wanted a system that would be flexible and economical while providing the information necessary to better manage their people and processes.

Sophisticated in its capabilities, yet simple to operate, **WITS** is the solution that will improve all aspects of your receiving and tracking process.



Web-Based System Benefits

- No software to install.
- No IT department woes.
- Maintenance and support are included.
- Any software updates are completed automatically.
- Your data is backed up throughout the day, every day!
- Redundant servers so WITS is always available.
- No need to purchase your own server. Less \$\$\$
- No server software licenses to purchase. Less \$\$\$
- Seamless global scalability, no matter how large or small your company is WITS will work for you.



Security



WITSTracking.net utilizes some of the most advanced Internet security technology available today. Your Data is protected using AES 256bit encryption. This is the same level of encryption that The NSA (national security agency) uses to protect U.S. government secret information.

When you access our site using Microsoft Internet Explorer versions 6.0 or higher, Secure Socket Layer (SSL) technology protects your information using both server authentication and data encryption, ensuring that your data is safe, secure, and available only to registered Users in your organization. Your data will be completely inaccessible to anyone besides authorized users.

WITSTracking.net allows you to create unique user names and passwords that must be entered each time a User logs on. WITSTracking.net issues a session "cookie" to record encrypted authentication information for the duration of a specific session. The session "cookie" does not include either the username or password of the user. WITSTracking.net does use "cookies" to store other non confidential user preference information.

In addition, WITSTracking.net is hosted in a secure datacenter with intrusion monitoring, secure firewalls, and other advanced technology to prevent interference or access from outside intruders.

WITSTracking.net is also available to install on your application server which allows you to control the security of the communication within your intranet*.

**This option will not allow search access from any internet location for your users if they do not have the currently ability to access your network remotely.*

Bandwidth



WITS was created to provide a maximum amount of benefits to the customer while using the least amount of resources.

- Average **WITS** use is 1 megabyte of bandwidth of internet per user, per day.*
- **WITS** was designed for high speed environments, for best performance we recommend DSL, Cable, or T1 connections
- If **WITS** is installed on your *intranet* the speed will be determined by your network configurations.

* *This is based on actual usage statistics not estimates.*

Examples of Hardware

Signature Capture Delivery Devices



Wireless Laser Barcode Scanner



WITS AT - 508 Compliant Software



WITS AT (Assistive Technology) is a complete version of WITS adhering to all section 508 requirements under the Rehabilitation Act of 1973 as revised in 1998 complete with a built-in screen reader.

What is Section 508?

In 1998, Congress amended the Rehabilitation Act to require Federal agencies to make their (E&IT) accessible to people with disabilities. Inaccessible technology interferes with an individual's ability to obtain and use information quickly and easily. Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic information technology. Under Section 508, agencies must give disabled employees and members of the public access to information that is comparable to the access available to others. Most states have adopted Section 508 or a form of it for state funded agencies. Also many private companies have followed the government in creating 508 compliant solutions (websites, applications, etc.) to meet their customers' needs. Similar to adding a wheelchair ramp to a new building, it allows access to those who need it.

The Scope

E&IT includes information technology and equipment or interconnected system or subsystem of equipment that is used to create, convert, or duplicate data or information. E&IT also includes, but is not limited to:

- Software applications and operating systems.
- Web-based information or applications.
- Telecommunication products.
- Video and multimedia products.
- Self-contained, closed products, such as information kiosks, calculators, and fax machines.
- Desktop and portable computers

Are there consequences if I don't buy compliant products?

Yes – persons with disabilities can file administrative complaints or bring civil actions in Federal court against the agency. Court orders compelling compliance can also be issued.

Additional Websites for research:

- Federal IT Accessibility Initiative Site (www.section508.gov)
- U.S. Access Board Web Site (<http://www.access-board.gov/about/Rehab%20Act%20Amend-508.htm>)
- Department of Justice 508 Web Site (<http://www.usdoj.gov/crt/508/508home.html>)
- Center for IT Accommodation (CITA) (www.gsa.gov/cita)
- State E & IT Accessibility Initiatives (http://accessibility.gtri.gatech.edu/sitid/state_prototype.php)
- Buy Accessible Data Center! (<http://datacenter.buyaccessible.org:8080/DataCenter/>)



Custom Reporting

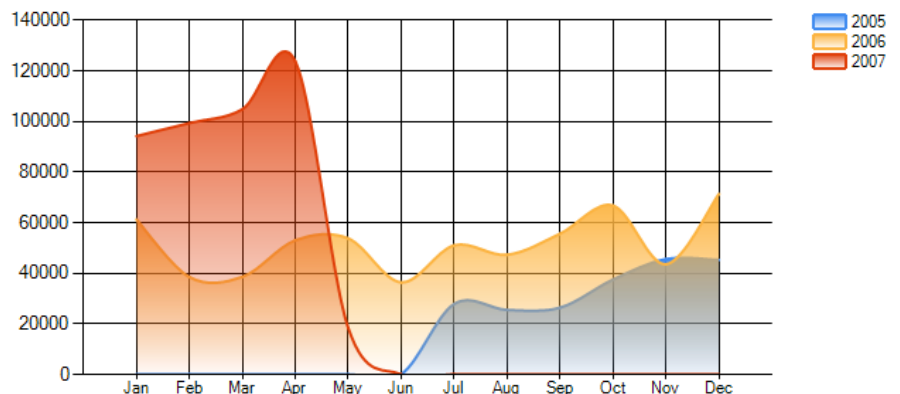
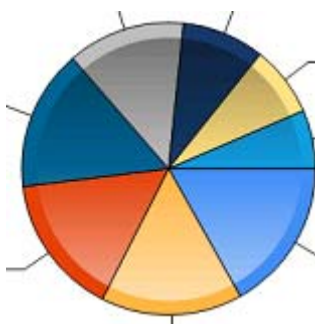
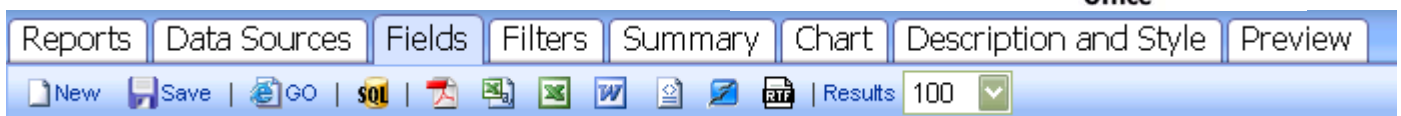
Winn Solutions has gone above and beyond the competition again with another new feature, Custom Reporting. Over the past fifteen years **WITS** has created canned reports to accommodate the most common questions anyone would need answered from the data **WITS** records (an Item Detail Report, a User Activity Report, and an Undelivered Report, to name a few). Our Canned reports have continued to fulfill 90% of our clients report writing needs.

However, our clients over the years have requested different formatted reports, the ability to export that data to other applications and additional data to be included in those reports to meet their specific needs. It is as a result of these requests that we have created an incredibly versatile tool in that of our **Custom Report Writer**. This tool is included free of any additional charge with **WITS**. Here are a few features...

- **AJAX Report Designer** has a level of responsiveness that must be experienced to be believed.
- **Design new reports from scratch in minutes** from anywhere using just a web browser.
- **No complex Windows programs.**
- Business users can generate sophisticated reports with details, charts, summaries and grand totals without ever leaving their web browser.
- **Save and share reports with just one click!** Instead of having to save to your hard drive, log on to a web app, find the file and upload it, and repeat this for every revision.
- **No graphic design skill required.** Just select fields from our Smart Dropdowns.
- **No extensive training required.** Most users understand use within minutes of using it.
- **It intelligently makes most formatting and data selection decisions for you.**

Easy Sharing and Exporting

- Exports to PDF, Excel and other industry-standard file formats with one click!
- Share a report via email with one click!





Custom Label Design

Winn Solutions has also incorporated a new label designer into **WITS**. Design and generate your own unique barcode tracking labels to ensure accountability.

Yet another feature available to our clients at no additional charge!

Size

2.25 x 2
 4 x 3
 4 x 5

Function:

Style


Font Size:

Label

Route
Undefined
Delivery Point
My Company

Name/Location

PO#: PO# Sender: Sender
Item Type: ItemType

WUQA00LFQ5
00/00/0000 00:00:00

W00000001F

Label Items

Show Date
 Show Time

Address	<input checked="" type="checkbox"/>
888-111-1111	<input type="checkbox"/>
Phone	<input type="checkbox"/>
Sender	<input checked="" type="checkbox"/>
Carrier	<input type="checkbox"/>
ItemType	<input checked="" type="checkbox"/>
Condition	<input type="checkbox"/>
Control	<input type="checkbox"/>
PO#	<input checked="" type="checkbox"/>
Quantity	<input type="checkbox"/>
Charge	<input type="checkbox"/>
Post	<input type="checkbox"/>
Patent	<input type="checkbox"/>



References

"The WITS system is completely user friendly; all you have to do is enter your password and begin processing!"

"Entering packages into WITS is very quick: everything is electronically scanned so you have instant access to all your package data."

"Compared to manual logging I save a minimum of at least 2 hrs per day. In addition to saving time, WITS creates an automated delivery manifest which is clear, professional, and easy to read."

"Using WITS brought my company's mail services to a level of automation and competency that exceeded management's expectations and would not have been otherwise possible."

Rocco Viggiano

**Assistant Vice President
Bank of Tokyo Mitsubishi**

"Our agency has used this product for approximately eight years from DOS to Windows versions. The software has been reliable, is easy to use, and the vendor has always displayed strong customer support. It was one of the initial package tracking systems at the time and I still believe it's on top of the competition. Another division of our agency purchased the software because of the overall success it's had in our department."

Alex Ho

**Manager Mail Services
New York City Housing Authority**

"As always, when you receive inquiries on WITS, you may certainly give my name and contact info and I would be glad to relay my wonderful experiences - since I've experienced what works and what doesn't, I have a good perspective."

Nancy Smith

University of Connecticut



System Requirements

WITS Workstation Client (Hosted / Self-Hosted)

Minimum:

1.5GHZ Pentium III or higher
512MB RAM minimum
8MB Video Card
Windows XP Pro (SP1)/Vista
.Net Framework (Version 2.0)*
Internet Explorer (IE) 7.0
Access to Local Intranet IE Security Settings*
Broadband Internet – minimum 256k to the desktop
Palm Desktop 4.0 (required for use with SPT 1800)*
Active Sync 4.5 (required for use with MC70)*

WITS Single Station Server/Workstation (Self-Hosted)

Minimum:

1.5 GHZ Pentium III or higher
512MB RAM minimum
8MB Video Card
Windows XP Pro (SP1)/Vista
.Net Framework (Version 2.0)
Internet Explorer (IE) 7.0
Palm Desktop 4.0 (required to synchronize SPT 1800)
Active Sync 4.5 (required for use with MC70)
MSDE 2000
2.5GB of Hard Disk Space

Application Server (Self-Hosted)

1.6 GHZ Dual Core Intel Xeon or higher
2GB RAM
Windows Server 2000 (SP4)/2003
IIS 5.0/6.0
.Net Framework (Version 2.0)

Application & Database Server (Self-Hosted)

1.6 GHZ Quad Core Intel Xeon or higher
4GB RAM
Windows Server 2000 (SP4)/2003
IIS 5.0/6.0
SQL Server 2000 (SP3)/2005
(2) 36GB SCSI hard drives
.Net Framework (Version 2.0)

Recommended:

2.0GHZ Pentium IV or higher
1GB RAM minimum
16MB Video Card
Windows XP Pro (SP1)/Vista
.Net Framework (Version 2.0)*
Internet Explorer (IE) 7.0
Access to Local Intranet IE Security Settings*
Broadband Internet – 512k to the desktop
Palm Desktop 4.0 (required for use with SPT 1800)*
Active Sync 4.5 (required for use with MC70)*
*Administration rights required for installation

Recommended:

2.4GHZ Pentium IV or higher
1GB RAM minimum
16MB Video Card
Windows XP Pro (SP1)/Vista
.Net Framework (Version 2.0)
Internet Explorer (IE) 7.0
Palm Desktop 4.0 (required to synchronize SPT 1800)
Active Sync 4.5 (required for use with MC70)
MSDE 2000
2.5GB of Hard Disk Space

Database Server (Self-Hosted)

1.6 GHZ Dual Core Intel Xeon or higher
2GB RAM
Windows Server 2000 (SP4)/2003
SQL Server 2000 (SP3)/2005
(2) 36GB SCSI hard drives



Thank you for taking the time to speak with me and review these materials. I appreciate the opportunity to present our product to you and I am confident that WITS will fulfill your needs and exceed your expectations.

We at Winn Solutions are always available to answer any of your questions. Please do not hesitate to contact us at any time. We look forward to hearing from you!

Sincerely,

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Appendix A

ALA News International - September Issue- ROI

The compelling case for an in-house parcel and document tracking system By Joan Hacker

As the speed of business has accelerated, the problem of misplaced parcels, mail, faxes, and files is more critical than ever. Just ask the mail services manager in a New York law firm, where one critical document couldn't be located to close an initial public offering (IPO) scheduled for a Friday morning. Bombings in the Middle East over the weekend caused the stock market to plummet, and the IPO was put on hold. The cash-dependent, though highly promising, high technology firm finally went public one month later at 20 percent below the original planned offering price.

This is not an unusual scenario, and it doesn't stop at the mailroom or reception desk. Every day banks scramble to get deposits into the US Federal Reserve before deadlines when interest rates drop and before the 4 p.m. cut-off for same-day credit. Delayed deposits cost banks their customers' goodwill and, sometimes, the interest that is paid to placate them. When investment companies receive client's checks, sometimes for \$1 million or more, they must be deposited immediately or interest income is lost. Misplaced and delayed documents often keep funds out of play. One stockbroker tells about a frustrating situation when funds in a large trust were locked out of a bull market for several weeks because one key document had been misplaced.

Land of the lost

How often is delivery of parcels and documents significantly delayed in-house after they are signed-off by receptionists and mailroom personnel? A study conducted by a bar code research firm, Data Capture Institute, concludes that companies receiving 100 or more parcels and overnight packets per day will misplace or experience in-house delivery delays with 2.5 percent of them. (In smaller companies that number decreases to 2 percent. When companies of any size located at multiple sites, the number increases to 3 percent.)

So if your company receives 500 parcels per week, in a year 650 of them will be delayed or misplaced long enough to cause concern plus cost in personnel time. If we assume that half of those parcels are of little consequence, it still leaves 325 that are of great value in terms of lost opportunity time and real dollars.

Below are some of the items respondents reported missing for one day or more:

- Checks, letters of credit, money transfers
- Contracts, financial filing documents, time-sensitive documents requiring signature, closing documents, records and data output
- Computer equipment, supplies, printed materials, meeting materials, airline tickets, audio-visual equipment
- Original contract, valued at \$1 million, misplaced for six months
- Super Bowl tickets

How are most companies currently keeping track of parcels, files and documents? Fifty of the 60 Fortune 500 companies in the study, with a daily inbound of 50 to 800 parcels, and as many as 32 sites, are using the paper and clipboard method. Seven are working from a shipping manifest. Three of the 60 use a full-blown tracking system.



High cost of inefficiency

The cost of inefficiency is easiest to measure as time lost while searching for misplaced documents and parcels and the laborious task of logging inbound parcels. For the 325 delayed and misplaced parcels mentioned in the study, imagine that a minimum of one hour, on average, was spent searching for each. The search is conducted by mailroom personnel who are often joined by secretarial staff. Both must interrupt their regular duties. In addition, respondents to the study indicated that it takes two people approximately two hours each day to log in 100 parcels.

Time required to look for misplaced documents and parcels:

225 hours @ \$10/hr. (mailroom personnel) = \$2,250

100 hours @ \$16/hr. (secretarial personnel) = \$1,600

Time to log in parcels:

20 hrs/week x \$10/hr. x 52 weeks = \$10,400

Time saved per week with tracking system:

12.5 hours search time

17.5 hours for log-in*

Total time saved each week = 30 hours

* This assumes that at 100 parcels per day, the time to inbound the parcels is reduced to 30 minutes.

Many respondents to the study cited that a large increase in overnight deliveries required them to hire additional mail services staff. With the gain of the 17.5 hours required for log-in, as well as time gained from search interruptions, at least one additional employee won't need to be hired as deliveries increase.

Additional employee = \$20,000 + benefits

Total cost savings for more efficient operation = \$34,250

Hard vs. Soft dollars

Other costs of inefficiency due to misplaced documents and parcels are more difficult to calculate but are no less real. These costs fall roughly into two categories: hard costs and lost opportunity costs. For example, if documents needed to handle the closing of commercial real estate deal are misplaced, the meeting will have to be rescheduled and the firm will lose goodwill with both companies involved in the sale.

Each firm must calculate these costs independently, as they vary depending upon the type of business and the in-house tracking methods currently in place.

Lost opportunity costs

- Client goodwill and customer service
- Decreased interest earnings
- Delays in operations due to misplaced equipment, supplies, forms, etc.
- Time, to manufacture, sell, service, implement, etc.
- Delays in shipping and invoicing

Hard costs



- Revenue written off for goodwill
- Interest paid out to clients
- Penalties and late charges incurred
- Checks covered for missing Federal Reserve deadline
- Replacement of software, hardware, and other supplies
- Rescheduling of airline reservations
- Reprinting of time-sensitive meeting materials

Covering their tracks

Another type of cost is the failure to recognize the slow trickle or pattern of lost opportunity which, overtime, creates deterioration in a firm's reputation as well as its bottom line. One respondent to the study was a managing partner of a prestigious Boston law firm. His response to the telephone interview was to state emphatically that nothing is ever misplaced at his firm.

"I can count on one hand the number of times things have been misplaced in the 35 years I've been here," he said. Yet a call to the head of his mailroom presented quite a different picture: "We get about 25 calls a day from people looking for packages, and then the hunt is on. It's very time consuming. We've had to hire extra people just to keep up with it."

This story illustrates a consistent finding from the study: Mail services personnel are extremely adept at scrambling to make sure upper management has what they need, when they need it. Upper management often doesn't know the high cost of the system's inefficiency.

This is not to say that management doesn't invest in obvious efficiencies - quite the contrary. Some large banks use helicopters to ensure the timely transport of data and deposits. Others rely on a courier staff, inter-bank pouches, and a fleet of trucks.

To completely eliminate inefficiency, however, a bar code control system should be in place to track the movement of critical documents through the entire processing chain. If a pouch is delivered to the wrong location and not immediately found, lost opportunity costs begin to mount, followed soon by hard costs.

With the ability to track parcels and documents internally through a system that uses signature capture and regular data downloading and reporting, the trickle of lost costs, both hard and soft, begins to reverse. An excellent example of this are the companies who use the time stamp feature on reports to prove late arrival of guaranteed early-delivery parcels. They also use a customized field to note damaged parcels. Delivery companies such as UPS and FedEx applaud this strategy as a safeguard against false claims.

Tracking system requirements

Specific requirements are necessary in order to reap the benefits of an in-house parcel and document tracking system.

- The first of these is to determine the important materials that need to be tracked. Ask which are high in value, which are time-sensitive, and which make your company most vulnerable to penalties and customer dissatisfaction. If there is no way to differentiate between the materials, the simple rule is to track everything.



- All these important items must bear a bar code. Most incoming parcels have a bar code already in place; others are readily available.
- The bar code must be scanned into the system.
- The principles of bar code tracking must be applied:
 - Scanning occurs when location changes.
 - Scanning and signature capture occur when ownership changes.
 - Scanning occurs when value changes.
 - Downloading to the control system occurs at regular intervals.
- Digital signature capture is an excellent feature to establish proof of delivery.

It is important that the in-house tracking system be dedicated only to the purpose of tracking parcels, mail, documents, faxes, etc. It could be a simple, stand-alone system or used across a network. Finally, the tracking system should be intuitive and easy to use, with a minimum of training and set-up time required for implementation.

As one Minneapolis operations manager pointed out, "We sometimes lose 70 percent or more of our mailroom staff after a snowstorm. The world doesn't stand still just because we've had a snowstorm. We expect 100 percent accuracy from 30 percent of our staff."

It's true that catastrophic events due to delayed or misplaced parcels and documents don't occur often. Like when lightning strikes, they occur unexpectedly and often with costly consequences. Business leaders need to realize that when they implement an internal tracking system, they are purchasing insurance against that lightning strike. They are also purchasing a competitive advantage by assuring their customers' peace of mind.

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Appendix B

Web-based VS. Web-enabled

Web-based Applications

Microsoft's new .Net technology has created a paradigm shift in the software business. The basis of computing has become web-centric as a result of the benefits received when utilizing web technology. This change is as significant as the move from DOS to Windows, and the introduction of PC's into a mainframe environment.

Thriving Versus Surviving

Web-based products are thriving. Their proven Return-on-Investment (ROI) and lower Total Cost of Ownership (TOC) than traditional client/server based counterparts cannot be disputed.

The formula to assess ROI and TOC has also changed because web-based products allow for the investment and ownership costs to be distributed across multiple departments. Business improvements and savings are also recognized across the entire organization's bottom line. These improvements and savings are ongoing as your business grows and expands.

The 3 Defining Rules of Web-based Products

- 1) Web-based applications require only a web browser, security, and access to the web site, (intranet or Internet) for a user to connect and use the product.
- 2) Web-based products do not require any additional client/server companion products to set up, maintain, or use the product.
- 3) The product resides on a web server.

Common Signs of a Web enabled Application

A limited set of functions or capabilities are available in the web browser product.

Terms to describe web-enabled products are web viewer, web component, or web front end.

The product requires an additional product or 'component', which is the traditional client/server application.

The product cannot 'stand on its own' and 'cannot exist' without its counterpart.

Web-enabled products are typically first generation initiatives by companies to provide some form of limited access to their original client/server programs.

Benefits of Web Technology

Easy to Install: Web-based applications are installed centrally on a single server. In an enterprise environment, this means saving tens of thousands of dollars because there is no need to visit each user PC to install the software.

No Driver Conflict: Maintaining a client/server network is difficult because you must install software on each PC. This often means hours of labor during the installation process and after the fact to ensure that there are no driver conflicts among the applications installed on the PC.



Lower Database Licensing Cost: A web-based product changes the database licensing cost from a per-seat model to a concurrent user model. This results in decreased deployment costs ranging from 25 to 75 percent. This will result in a savings of several thousands of dollars in an enterprise environment.

Easier On-going Maintenance: New releases of the software are installed at a central server, eliminating the need to update each workstation. This significantly reduces the on-going maintenance costs.

Reduced Training Costs: End users are already familiar with their browser and its functionality. This provides a familiar starting point for the end user making it easier for them to adapt to a web-based system.

Minimizes Network Traffic: A true web-based product operates efficiently in a network environment by minimizing the volume of transactions moving up and down that network. Users of the system receive only the information they need. Procedures stored on the network do all the database work which minimizes the amount of horsepower needed at the client PC.

Web-Enabled

A review of tracking system solutions on the market today will show that almost all companies, with the exception of WINN Solutions WITS Tracking System, claim to have web-based software when, in fact, they only have web-enabled software. The browser-based modules they deploy generally have very limited capabilities. All of the core functionality is still in their traditional client/server products.

Web Enablement

The world is moving very rapidly towards web-based products and ones that are

Web-enabled will not survive and are rapidly being pushed out of the market by newer, more-powerful products. Web-enabled products suffer some major deficiencies that will create significant problems for the groups that deploy them. These problems include:

An Out-dated Approach: A web-enabled product merely continues the traditional approach to tracking. Items are entered using a centralized approach with a traditional software product. This information is then made available to the intranet for viewing and requesting.

Second Product Required: A web-enabled product only provides partial functionality.

Training: Deployment of a web-enabled product has a major impact on training. You will need to train on two very different platforms: a traditional client/server product for managing the content and a browser based product for viewing, searching, and requesting.

Greater Cost of Deployment: In an enterprise application, web-enabled products are far more expensive to deploy because they will also require the installation of the fat-client component. The more users you have, the greater the deployment cost will be. Cost of deployment will also increase due to more database licenses required and the costs incurred from installing the product on every client PC.

Replacement: Web-enabled applications have limited life in the market.

They will eventually be replaced by more robust web-based products. Product replacement is always an issue with end users because the new version will have a different look and feel along with a new set of functions. When you upgrade you will have to obtain more training and deal with the disruption of a new system all over again. This problem can be completely avoided by going to a web-based product immediately.



Appendix C

Everyone Wins with Section 508 – Case Study

By Fred DiFiore, Director of Section 508 & 504 compliance, United States Patent and Trademark Office

On June 21st, 2001, federal agencies faced the daunting task of implementing Section 508 law. Section 508 requires strict compliance with specific automation standards that dramatically increase accessibility for people with disabilities. In 2001, government analysts projected that Section 508 compliance could cost the Federal government hundreds of millions of dollars. Fortunately for the United States Patent and Trademark Office (USPTO), these grim cost projections never materialized. In fact, Section 508 has become a rewarding benefit at no additional cost.

This success stems from the USPTO approach to integrating Section 508 into the way it does business. USPTO incorporated Section 508 standards into the development of its software and web based products at the beginning of the process. Inclusion of the standards at any other time in the process can easily result in "retrofitting," which has been proven to multiply the cost of the product, and delay production scheduling.

Employees and contractors are trained to create compliant products. Training is offered twice a year and includes multiple levels of courses in different subcategories of the law. For example, there are 100-level courses offered in most subcategories that discuss each standard and provide some non-technical methods for testing compliance. For example, 1194.23(f) requires that "for incremental volume control, at least one intermediate step of 12 dB of gain shall be provided." The USPTO non-tech test is if you can turn it on and increase the volume, then it likely meets the standard. There are 200-level courses that are more technical and provide participants with "hands-on" techniques for creating compliant software, web, and e-learning/multimedia products. The USPTO also has an evaluator assist developers in determining if a product is compliant well before it goes to final testing.

As with most new processes, there is always some degree of reluctance to adopt change. However, as developers have come to appreciate that compliance is mandatory, they have created methodologies to build compliant products within both budget constraints and production schedules. The realization that USPTO will strictly enforce Section 508 compliance was the critical turning point in IT product development.

The results from changes in the development process turned out to be more far-reaching and beneficial than just meeting the requirements of the law.

According to one of the major private-sector companies under contract with USPTO, creating compliant products is "really quite simple." The standards "force developers to create applications that all have the same look, consistency, and navigational capabilities. The resulting applications were easier to test, possessed higher quality, reduced user-learning time, and promoted confidence with the client."

Another major USPTO contractor stated that Section 508 provided them for the first time with "clearly defined standards for software development." Based on the standards, they built components for creating compliant software and collaborated with the USPTO Web Master to develop compliant templates for web-based applications. Using these proven standardized approaches ensure compliant products -- and much more! The web templates and software components allow anyone to create compliant web products or interfaces. For example, 508 standard 1194.22(M) requires that when a plug-in or an applet is required, a web page provide a link to an accessible page where the necessary application can be downloaded. Part of the USPTO web template is a link that takes the user to a collection of plug-ins and other miscellaneous viewers that might be required for viewing all content on the USPTO website. Thus, developers have one less standard to create a solution for-this one is done for them. And it's helping. A contractor once estimated that a task would cost \$30,000. Using a template, the USPTO was able to do the task internally for only \$4000.

The templates and components are:



- Reusable, enabling employees and contractors to create products faster, since there is considerably less development time; cheaper since there is less labor or resources required; and better since the final product is consistent with other products.
- Are proven to be compliant, which facilitates earlier review and acceptance of products by management, plus results in faster inspections and approvals by the quality testing organization.
- Can be used on different types of technologies. Most software and web programs are designed for specific technologies (e.g., proprietary software), which limit their use on other types of technologies. Since the Section 508 standards are not written for a specific technology, the templates and components are effective on most applications, tasks or products.
- Result in faster and more effective training of employees and contractor personnel on both creating and using products.
- Enable users to more easily adapt to other mandatory coding requirements (e.g., security web standards).
- Have significantly lowered in-house development costs since requirements are now understood more quickly and require simple, non-complex development practices and tools.

As the one contractor stated, they "do not price Section 508 compliance as a separate cost on the task. Instead (they) simply follow the (applicable) standards, and enjoy the benefits of productivity gains and lower cost through reuse." They now consider creating compliant products a smart way to do business. The USPTO has also found that some contractors have adopted the standards approach internally and use it for doing more cost effective business with their other customers.

From an accessibility perspective, the most important benefit of Section 508 is the proven enhanced support to the USPTO employees with disabilities. With a Section 508 compliant IT infrastructure, the USPTO can provide substantially faster and more effective accessibility solutions and support. In addition to these benefits, Section 508 saves the USPTO an estimated \$1+ million annually in maintaining accessibility to it employees with IT-related disabilities.

These benefits unequivocally prove the value of Section 508. However, it must be stressed that the benefits can only be realized from a mature program that includes the following characteristics:

- Strict enforcement of the standards. Create products to the standards, not to a technology or specific assistive device such as JAWS.
- Training of employees and contractors on creating 508 compliant products. As one contractor said: "the training caused a new era of cooperation amongst the development, test and client organizations. The various organizations started developing and testing to the same sheet of music." A critical point to the success of the USPTO 508 program was the training instructors. These were not the typical contract instructors who provided philosophical theories on how to create compliant products but rather individuals who were actually creating compliant products and taught from personal experience. This results in proven concepts that have created products that are compliant, accessible and usable. This is particularly important because a compliant product does not necessarily mean that it is accessible or usable. In other words, a compliant product simply means that it meets specific Section 508 standards, but that does not guarantee that manufacturers' assistive technology will make use of the application's accessibility features.
- Strict enforcement of the program. Once people accept the mandatory requirements of the law, they turn their ingenuity and energy to creating more effective methodologies to work within the new framework.



The USPTO has determined such a Section 508 program does work and provides enhanced benefits. Instead of costing money, the program actually saves the organization funds and results in faster and better products. The employees and customers with disabilities have greatly improved IT accessibility. And, the contractors have adopted Section 508 techniques to create better products for the USPTO, themselves, and their other customers. Everyone is winning with Section 508.