



(White Paper)

ViewWise™ and Image Enabling

What is Image Enabling and What Can ViewWise Do for Your Organization?

What is Image Enabling?

Image enabling is a hot new concept in improving office productivity through document imaging, with a high return on investment and an overall low cost. Image enabling is designed for organizations that want to leverage the investments they've made in e-mail systems, hardware, software, databases and other infrastructures. ViewWise is a powerful imaging system that utilizes the existing systems and equipment in almost any office environment through a new Java™-based server. ViewWise essentially adds document imaging to the systems already in place.

For over fifteen years, scanning technologies have improved and imaging has been implemented in organizations across the board as a major information management tool. Today, image enabling is the hot new ticket for institutions that want to add the time and money saving features of imaging, yet don't want to give up their bonuses to do it.

ViewWise is an ideal solution for users who want a premium imaging system, but don't want the headaches associated with extra employee training, large or high-risk investments, time-absorbing maintenance and days of scheduled downtime often associated with implementing a new infrastructure. ViewWise allows you to get the benefits of a powerful imaging system—straight out of the box—with little or no maintenance.

Image enabling with ViewWise utilizes the leading database engines and operating systems and allows administration anywhere on the network. Seamless integration means less hassle for you, and more efficient and productive employees for your organization.

Image enabling is a whole new category in document imaging. It leverages the investments an organization has already made in hardware and software infrastructures, saving countless resources by adding imaging to existing application systems.

One Piece of the Puzzle

Imaging is still only one piece of the IT puzzle. The information technology field is an ever-changing sector with upgrades and enhancements emerging constantly. It seems as though someone comes out daily with *the most* revolutionary technology of the century. The options for possible office solutions are unlimited and often confusing or risky.

Image enabling, however, is a creative new way to increase office efficiency through drastically reducing paperwork. What some may consider a "bonus technology," imaging can be quite fundamental in streamlining an office—depending on the type of business done there—and can be significantly less expensive and easy to maintain than anyone ever thought possible.

ViewWise image enabling allows imaging to be implemented and realized with relatively no hassle at a significantly reduced expense. ViewWise provides an out-of-box solution that can be acquired, installed and maintained for a fraction of the cost—in both money and time—over any other imaging system on the market.

Imaging is only one component of many possible productivity-enhancing office solutions, but ViewWise makes this bonus technology more affordable and manageable through image enabling.

Complementary Technologies

Imaging can be more easily understood in context with workflow and document management. It may help to think of imaging, document management and workflow as inter-dependent technologies that fit together like sides of a triangle. Each of the three systems can function independently, as one line (the distance between two points) can exist in its own right.

Collectively, however, three lines can form something different and more sophisticated - a triangle. This is how imaging, workflow and document management work together to complement and enhance the efficiency of each other.

The idea is simple synergy. The sum of the parts is greater than the whole. Workflow is great for an office, but sending a scanned JPEG image of a new client or product along with a proposal is even better. Add a document management system to the mix, and the collective system is even more effective.

Imaging, workflow and document management are inter-dependent technologies. Each can work independently, but together they enhance the effectiveness of each other.

Workflow

Workflow is essentially the process that connects a specific user to the document or image management system. It's an infrastructure that actually delivers the documents to the users who need to view them. Workflow technologies are often used in network, enterprise or intranet environments.

Workflow is simpler than e-mail because a user does not have to know or type in anyone's address. The entire process is automated. This significantly speeds up day-to-day processes that would otherwise be done through paperwork, snail mail, e-mail or a trip down the hall.

ViewWise provides a connector which enables this integration.

Workflow is a major contributor to the document management and imaging triangle model. It makes the whole process run more smoothly and eliminates costly errors.

Imaging

The imaging component of the triangle model is the data type—the actual file that's being transferred. This involves the transforming of paper information into an electronic file through capturing or scanning.

ViewWise currently supports over 30 industry standard image file formats. This means the native file format of the original document is preserved when indexed, stored or transported throughout the network, intranet or enterprise.

This is significant because the files maintain their original layout and content for both legal and aesthetic reasons. This eliminates the extra time it takes to double-check a document to see if the file maintained its integrity. This saves both time and unneeded hassle.

ViewWise imaging provides the added convenience of locating and sharing information through an easy-to-use storage and retrieval system feature. This involves a file cabinet analogy, using a Room, Cabinet, Drawer and File dialog that simulates a real metal file cabinet. With a ViewWise Imaging Agent connector, this feature can work directly from the user's e-mail system without having to open or run another program. Users can also engage the power search functions to immediately locate and share any file instantaneously.

In addition, ViewWise allows images to be annotated with up to sixteen independent layers while maintaining the integrity of the original scan, for tax and legal purposes. This feature makes collaborative editing faster and more organized than ever before.

ViewWise imaging also allows multiple users throughout the enterprise to access the very same file folder—simultaneously. This eliminates missing, lost and incomplete files, a common frustration with traditional non-electronic filing systems.

Imaging is a system of capturing paper images and converting them to electronic data files which allow them to be indexed and shared easily and effectively with or without document management and workflow. ViewWise is packed with integrated, timesaving features.

Computer Output to Laser Disk (COLD)

Computer output to laser disk (COLD) is another complementary technology that enhances imaging by storing mainframe data output on an electronic file, rather than outputting to paper.

Storing mainframe data has traditionally been done on miles of green bar paper. Most often this involves accounting information such as accounts receivables or general ledger line items. The data storage is critical for tax and legal purposes and must be maintained regularly.

The paper output technique is inefficient, though, because it consumes such enormous amounts of time, paper and physical storage space. Manually searching for specific data within the paper output can take hours or even days. Until COLD, there were few other options.

COLD is a much more efficient way to handle mainframe data storage. COLD allows the output to be dumped into an electronic file. With ViewWise, the data to be indexed appropriately for easy retrieval later and all the storage is done electronically on disk.

COLD technology also allows for additional data-enhancing options like OCR, ICR, data mining, and others. Hot spots can even be distinguished within the data, which allow linking to the actual file. For example, a line item ledger entry among the data can be set up as a "hot spot" link to the actual corresponding invoice in the imaging system. This saves countless hours in customer service research, accounting audit delays and turn-around time of all kinds.

ViewWise can be linked to COLD technology thereby enhancing the basic imaging product by facilitating easy, space-saving storage for mainframe data. Additional data-enhancing options are also possible with COLD.

Optical Character Recognition (OCR) and Intelligent Character Recognition (ICR)

Optical character recognition (OCR) is a technology involved with scanning and capturing. OCR allows text to be read by the computer and changed to digital form. Thus computer-generated documents can be scanned, converted to text and saved. Changes can then be made to the document since the text is actually transformed into electronic form.

Intelligent character recognition (ICR) takes OCR one-step further by actually learning how to read difficult-to-decipher handwriting. With a little initial introductory phase, ICR can learn to recognize any font and even the most unusual chicken scratches—even cursive writing. Imagine how that can speed up an office's input time.

When an ICR scan begins, the program will import and translate the text until it comes across a character it hasn't yet encountered. At that point, the author or another employee tells the system what the letter is or what the series of letters are. The ICR program will then recognize that series of letters at the next instance in the document and forever after that in all future documents. After several pages and a few minor clarifications, the system will be able to interpret almost anything written in that handwriting or font. With ICR, a document several hundred pages long can ultimately be scanned with little or no errors in minutes.

OCR and ICR technologies allow the fastest importation of hand-written documents on the market. These amazing systems eliminate the need for manual data entry or a host of hired temporary employees when the workload backs up. OCR and ICR also alleviate the need for repetitious handwriting clarifications usually resolved through faxes, phone calls and e-mail messages when someone's handwriting is illegible. This saves both time and financial resources and also significantly reduces human error when importing critical data and other information.

OCR and ICR complement ViewWise imaging by allowing employees to scan documents and transform them to electronic, editable text. ICR can also recognize handwriting and learn how to distinguish illegible letters after one correction, saving time and money while eliminating costly errors.

Forms Recognition and Zonal Extraction

Forms recognition is another complementary, add-on technology for imaging. Forms recognition allows the ViewWise imaging system to recognize standard government or industry forms. This may include tax forms, insurance forms, medical forms and many others. Organizations can actually train the system to recognize and identify the forms most pertinent to their industry.

Zonal extraction takes forms recognition technology one-step further by actually defining a specific area within a form and scanning only that particular information. This is especially handy with work orders or repetitive forms where only a portion of the paper needs to be captured and imported.

Once a form or a zone has been defined in View Wise, forms recognition and zonal extraction features can speed up the scanning process of stacks of forms, significantly cutting down the capture time on all documents of that nature. This will boost efficiency and further leverage the investment in ViewWise.

ViewWise takes imaging further by offering both forms recognition and zonal extraction technologies as add-on options in the form of Automatic Production Image Processing (APIP) available shortly.

Traditional Packaging

Traditionally, imaging technology has come packaged together with document management and workflow systems. Often times, this comes in the form of a software suite in which all systems work together on a common infrastructure, most often involving complex sub-networks or intranets.

These suites, while sometimes working well for an organization, are often extremely expensive and involve many excessive components. Mostly, the package is inflexible and does not allow an organization to select which specific systems it wants to implement. This traditional suite also does not allow for integrating systems and infrastructures that are already used in the organization.

The expense of a whole new infrastructure, software set, training programs and incalculable downtime is difficult to justify in today's fast-paced market. This dilemma has caused many organizations to hesitate before making such a large investment in a much-needed imaging or document management system.

Traditional document management, workflow and imaging suites are typically sold bundled together and can be extremely costly—an expense many organizations find difficult to justify in today's fast-paced market.

The Demand for Image Enabling

Through ViewWise, Computhink has rectified the dilemma of pre-packaged suites by creating a whole new category in document imaging—image enabling.

ViewWise's Java-based server image-enables an organization's current information management process by adapting to existing e-mail, intranet, document management and workflow systems. ViewWise leverages the organization's investment in costly hardware and software products that have already been purchased and implemented. This saves a small fortune in new infrastructures, training and downtime.

Image enabling has caught the attention of IT managers and senior executives across the board into many vertical markets. From government organizations to health care groups, ViewWise is a solution many are finding to be cost-effective and viable for their organization's livelihood.

ViewWise offer a fresh new solution to resolve the dilemma of expensive pre-packaged document management and imaging suites. Through image enabling, ViewWise leverages an organization's investments in already purchased hardware and software systems, including databases and networks.

ViewWise Imaging Agents—Bridges to Existing ERP and other Applications

ViewWise incorporates seamless integration to many ERP and other application packages. Adding imaging to your organization's production further leverages a lofty investment in third-party software like ERPs and e-mail systems.

The ViewWise Imaging Agents allow quick implementation for ERPs—straight out of the box. This allows for immediate return on investment as business processes are instantly made more efficient and reliable. Imaging Agents also don't require the extensive training, downtime and hassle often associated with other connecting systems.

ViewWise Imaging Agents work like connector pieces between ViewWise and third-party applications, allowing ViewWise to be accessed directly from the third-party software product without opening a different program.

The GroupWise Imaging Agent is a good example of a connector used with an e-mail system. A user could access ViewWise directly through an e-mail system like Novell GroupWise simply by clicking on an embedded ViewWise file within the GroupWise universal mailbox files on the left-hand side of the GroupWise interface window.

This process is so simple because e-mail programs like GroupWise are most likely to be open on a user's desktop throughout the day. For a user to access any ViewWise image file, all the user has to do is click.

Internally, ViewWise has a pointer file that connects to the ViewWise image file stored in the database with a .vwr (ViewWise reader) extension. When an image file is saved, ViewWise creates a folder in GroupWise and each subsequent save is then updated simultaneously in both locations, allowing for power search functions and the easiest image file accessibility on the market.

Currently ViewWise Imaging Agents connect to GroupWise with many more planned.

ViewWise Imaging Agents are bridges that make the most of ERP and other applications by image enabling systems that an organization already has invested in and currently works with on a daily basis.

The Industry Takes Note

ViewWise has gotten the spotlight industry wide. Novell has officially sanctioned ViewWise as its imaging partner, and has contracted the development of GroupWise Imaging through ViewWise, which ships with every copy of GroupWise.

Through this strategic partnership with Novell, ViewWise currently runs on over 22 million desktops worldwide—a number which continues to grow exponentially.

The first imaging system to utilize a Java-based server, ViewWise is packed with innovative features, unprecedented intuitive design and 100% pure Java integration.

ViewWise has a long history as Novell's premier imaging partner. ViewWise continues this legacy as the industry's first imaging system with a Java-based server.

The Future of Image Enabling

ViewWise is on the cutting edge of future imaging technologies. The adaptability of the Java-based server allows for maximum upgrade capability. To date, no other imaging product or service offers this capability.

The recent emergence of the Linux operating system, for example, is no problem for Java or ViewWise. Java's adaptability and scalability allow seamless integration and compatibility with Linux and any other existing operating system or platform.

As new technologies continue to enter the market, ViewWise can take you wherever you want to go. ViewWise uniquely covers the scope of past and future technology. ViewWise looks backward to image-enable the systems you bought in the past—leveraging your investment. It also looks forward to allow for up-and-coming technologies and future growth—at whatever pace you need to get there.

The future of image enabling is exciting and without limit. ViewWise can take your imaging system wherever you want to go, and at the pace you want to take to get there.

Java Technology

The advancement of the Java platform, developed by Sun Microsystems, has changed the face of imaging software and integrated technologies. Java's architecture neutral design supports applications on any network system. ViewWise utilizes this amazing technology and in doing so has created the new imaging category called image enabling.

ViewWise can image-enable any database, any network with anywhere administration. This capability is made possible through an innovative Java-based server. Java technology can virtually adapt to any platform or operating system environment with little or no modifications.

A Java server was selected for ViewWise based on its simplicity, stability and robustness. Java is a powerful programming code that's known for its high-performance, network-savvy, interpreted, portable, dynamic language. This strong coding structure fuels ViewWise's ability to integrate directly with a user's existing systems.

Because Java is also object-oriented, it focuses on the data involved and how this data can be facilitated cleanly with various interfaces or applications. This coding style is the premium choice for imaging software like ViewWise because of its specific focus on data, which are the images themselves and the heart of any imaging system.

Java is also multithreaded which means it can handle applications that involve many things happening at once. This sophisticated synchronization enables ViewWise to accommodate so many network platforms and database structures.

Through Java technology, ViewWise easily adapts to any network environment, can integrate with any database and allows administration anywhere on the network. Computhink calls this new process image enabling.

Summary of ViewWise Benefits:

- *ViewWise leverages the investments an organization has already made in hardware and software infrastructures, saving countless resources.*
- *Imaging is only one component of many possible productivity-enhancing office solutions, but ViewWise makes this bonus technology more affordable and manageable through image enabling.*
- *Imaging, workflow and document management are inter-dependent technologies. Each can work independently, but together they enhance the effectiveness of each other.*
- *Document and image management is a system of sending electronic files to various users on a network, enterprise or intranet in a faster and more efficient manner than e-mail, snail mail, inter-office couriers or any other traditional way.*
- *Workflow is a major contributor to both document management and imaging systems. It makes the whole process run more smoothly and eliminates costly errors.*
- *Imaging is a system of capturing paper images and converting them to electronic data files which allows them to be indexed and shared easily and effectively with or without document management and workflow.*
- *ViewWise is packed with integrated, time-saving features including a powerful search function, magnification tool, sixteen separate annotation layers and much more.*
- *Traditional document management, workflow and imaging suites are extremely costly—an expense many organizations find difficult to justify in today's fast-paced market.*
- *ViewWise offers a fresh new solution to resolve the dilemma of expensive pre-packaged document management and imaging suites. Through image enabling, ViewWise leverages an organization's investments in already purchased hardware and software systems, including databases and networks.*
- *Through Java technology, ViewWise adapts to any network environment, integrates with any database and allows administration anywhere on the network. Computhink calls this new process image enabling.*
- *ViewWise Imaging Agents are bridges that make the most of ERP applications by image enabling systems that an organization already has invested in and currently works with on a daily basis.*
- *ViewWise has a long history as Novell's premier imaging partner. ViewWise continues this legacy as the industry's first imaging system with a Java-based server.*
- *The future of image enabling is exciting and without limit. ViewWise can take your imaging system wherever you want to go, and at the pace you want to take to get there.*
- *ViewWise image enabling is the most efficient, cost-effective imaging solution on the market today.*

Conclusion

Imaging is simply one component in a host of production-enhancing technologies, yet it's a valuable and important one in its own right. With or without workflow and add-on complementary technologies, imaging can boost employee efficiency and save many dollars in labor, physical space, eliminated errors and enhanced customer service.

Image enabling is a new category in imaging, created by Computhink's revolutionary ViewWise document/image management solution. The Java-based server in ViewWise creates a convenient, cost-effective way to add imaging capabilities to any organization's information management system.

The benefits of ViewWise include easy out-of-box installation, minimal maintenance and superior integration with any network and any database.

The most unique benefit of image enabling, however, is the ability to leverage the investment you've made in your organization's hardware and software. No matter what database you're using, what e-mail system you have in place, or what workflow product you may have installed, ViewWise can work for you. It's a simple tool that can do amazing things for office productivity, customer service and bottom line.

The ViewWise image enabling is the most efficient, cost-effective imaging solution on the market today.

More information on ViewWise

For additional information on ViewWise, please visit us on the World Wide Web at www.computhink.com or call 1-630 705 9050.