Document Imaging Report

Business Trends on Converting Paper Processes to Electronic Format

May 19, 2006

IMAGING, SEARCH, SPEED UPGRADES IN PAPERPORT 11

The latest version of **Nuance's** *PaperPort* is designed to drive further adoption of the world's most popular desktop document imaging and management system. *PaperPort 11*, which will make its debut at **AIIM On Demand** this week, features improvements in the areas of ease-of-use, speed, search, and image compression.

With *PaperPort 11*, Nuance is leveraging its patented automatic launch technology. Working through their Windows control panels, users can configure *PaperPort* to open on their desktops when they hit the scan buttons on their hardware. In addition, *PaperPort* users can pre-set image profiles, including automatic application of *PaperPort's* image processing tools, that will be implemented before they even see their images.

"One of the obstacles holding back more widespread adoption of scanning is that users often don't know what's going to happen when they hit the scan-button on their MFPs or desktop scanners," said Jeffrey Segarra, senior product manager for Nuance. "With, copiers, they know they are going to get a printout. We've tried to remove some of the mystery from scanning."

Another interesting upgrade involves integration into *PaperPort* of the *Watson* search assistant from **Intellext** (http://www.intellext.com). *Watson* can aggregate several desktop search engines. Results can then be dragged and dropped directly into *PaperPort*. Nuance has also increased the speed with which *PaperPort* works by up to 200%, introduced more accurate OCR, and added mixed raster content (MRC) segmenting and advanced compression. The MRC technology is especially valuable for documents like magazine and newspaper articles, where graphics and print appear on the same page.

http://www.nuance.com/paperport/

Kofax Introduces SOA-Based Scanning

New appliance designed to bypass traditional PC-based drivers.

When Bill Houser of **DTI Integrated Business Solutions** first heard about Kofax' Document Scan Server, he said "a light bulb went off" in his head. At the time, DTI was working with the **Boy Scouts of America** on a distributed scanning application involving close to 300 sites. "We were looking at deploying thick clients for capture on the PCs at each site," said Houser, who is the manager of strategic alliances for the Greensboro, NC-based VAR. "This was going to be difficult

Kofax' new Document Scan Server is designed to make scanners available directly through Web services calls.

because of the variety of PCs and operating systems it involved. However, because of the value of the implementation, the Boy Scouts had decided to go forward with it anyways.

"Immediately after I saw the presentation on the Document Scan Server at Kofax' partner conference in Orlando [held this March], I was on the phone with the Boy Scouts. Within 15 minutes, they were convinced this was a solution to their deployment issues. When we told their IT manager about the remote administration capabilities, it just sealed the deal."

So, what exactly is this miracle tool for distributed capture? The Document Scan Server, which makes its debut at the **AIIM Conference and Expo** this week, is a hardware/software appliance designed to replace traditional scanner drivers by directly integrating imaging into SOA-based applications. It looks kind of like a modem with two USB ports on one side and an Ethernet port on the other. The scanner plugs into one USB port and a network

cable goes into the Ethernet port [*The second USB port is currently not being utilized*.]. Inside the box is a processor running an SOA-based program for transferring images from a scanner to any application that can make Web services calls. In essence, the Document Scan Server is designed to enable truly Web-based capture for the first time.

New market, new solutions

"We've all seen the numbers from **InfoTrends** reporting rapid growth in sales of scanners in the distributed capture segments," said Bruce Orcutt, senior product manager for Kofax. "With the Document Scan Server, we wanted to make sure the needs of those customers were being fully addressed. We want them to be able to leverage the tools and IT infrastructure they already have in place, to do scanning. We didn't want them to have to create an exception process for scanning."

"As the market moves toward distributed capture, there is a desire to implement thin-client applications, and this is very difficult to do with traditional drivers."

— Anthony Macciola, Kofax

By an exception process, Orcutt is referring to the need to attach a scanner to a PC that runs a dedicated scanning driver used to capture document images. "For ages, the document scanning paradigm has been to run a TWAIN, ISIS, or Image Controls-based driver with a thick-client document capture application on a PC," said Anthony Macciola, Kofax' VP of product marketing. "However, as the market moves toward distributed capture, there is a desire to implement thin-client applications, and this is very difficult to do with traditional drivers. Traditional drivers need to run on a PC. So, to run thin-client capture, you often end up creating 40 MB plug-ins. This kind of defeats the whole purpose."

Network management tools

The Document Scan Server replaces traditional drivers by leveraging Web services calls made by the destination application. In other words, the scanner transfers images to the Document Scan Server, which then receives SOA (service-oriented architecture) calls from a Web-based application. These calls transfer the images to their destination.

"There is definitely a trend in the market toward SOA, and there seems to be an opportunity to take advantage of this by making scanning available as a service," said Macciola. "The Document Scan Server will enable very straightforward integration of document scanning into enterprise-wide SOA

applications. In conjunction with this, it will introduce the ability to create truly zero-footprint client scanning, in which an entire capture process can be run on, and managed from, a server."

The management portion of the Document Scan Server is handled through Windows-based console application. This console enables users to discover, configure, update, and load scanning profiles into their Document Scan Servers from a central location. "We've had cases in which a distributed capture application was all but sold, until the IT management realized installing and managing the drivers was going to require giving administrative rights to PCs to employees at remote sites," said Orcutt. "This is because traditional drivers are installed in the Windows directory. Not only does this create a security risk, it creates administrative headaches. If a user changes the settings of the driver to scan a personal document, for example, those changes get propagated to other users leveraging that machine for scanning.

"Through the Management Console, the user has the capability of logging into the Document Scan Server, loading it, testing it, sending updates, and restoring it remotely. The universal feedback we've been receiving from our customers is that traditional distributed applications can be costly to support and add a level of complexity. The Document Scan Server is designed to remove those barriers to entry."

Standards open-up market

For the Boys Scouts of America, DTI was going to write a custom capture application to be deployed at each remote site. "They didn't have the budget or the requirements to install an off-the-shelf client application," said Houser. "We were going to work with TWAIN or ISIS tools to come up with something. It would have cost three to four times as much to do that development as it will to deploy the application using the Scan Server."

DTI will deploy the Document Scan Servers in conjunction with **Fujitsu** fi-5120C workgroup scanners, one of four Fujitsu scanners currently certified to work with the appliance. Initially at least, Kofax will be developing integrations between the Document Scan Server and hardware devices. The Document Scan Server also includes a toolkit for SOA-based integration with destination applications.

DTI, for example, is writing an integration into Kofax' *Ascent Collection Server*, which will receive the images directly from the Scan Server. "It just so happens that the Boy Scouts of America are using a Web-based Kofax capture application," said Macciola. "However, any application that can make

Web services calls will work. We eventually see users scanning documents directly into line of business applications, like health information management systems, for example.

"We see this as really helping open up the market for document scanning. Instead of having to work with proprietary imaging tools like TWAIN and ISIS drivers, with the Document Scan Server, image-enablement can be done working solely with standards-based Web services calls. This opens up document imaging to a whole new community of developers."

The Document Scan Server is scheduled to ship in June. Pricing will be based on the volume of units being installed.

DTI plans to have some beta sites installed for the Boy Scouts in July, with 50 sites going live by mid-August. Houser expects to achieve full production at some 250 sites in 2007. "I'm excited about some of the opportunities the Document Scan Server opens up," concluded Houser. "It will enable DTI to address distributed applications that we wouldn't have even thought about before."

For more information: http://www.kofax.com; http://www.dtiibs.com/

EDITORIAL

Improving Distributed Capture

The term "distributed capture" has almost become a mantra in our industry over the past few years. Two of the hottest trends in the market are sales of workgroup scanners and the adoption of scanning on digital copiers. Both represent direct avenues to distributed capture.

We've seen plenty of successful distributed capture installations in vertical markets like transportation, financial services, healthcare, and retail. However, it's our opinion that what we've seen so far is just the tip of the iceberg. There are still obstacles preventing document scanning from becoming prevalent on every desktop, similar to the way printing is.

Hardware costs are probably the most obvious one, but also the obstacle most rapidly being eliminated. While low-end network printers can be had for less than $300, 15 ppm, color, duplex document scanners are now available with list prices less than $700. And if you're shrewd about it, you can even bury the cost of scanning capabilities within a lease for a digital copier.

Software costs are another issue. While printers typically can be managed fairly effectively simply through an Ethernet connection and an intuitive network driver, configuring a network scanning application is more complex. At minimum, it requires some sort of distributed capture software that can effectively transfer images to a server. Unfortunately, this software is not typically packaged with the scanner. Depending somewhat on volume, distributed capture software runs anywhere from $200, all the way up to $4,000 per seat.

Because distributed capture software carries a premium, end users typically want to see the potential for a return on their investment before they will purchase it. ROIs that we've seen are often tied to a reduction in fax and courier charges, as well as an improved turnaround time for processing documents. Having to prove an ROI means there is a sales cycle and real pre-sales work that needs to be done to sell distributed capture. This is obviously not the case with network printing.

The bottom line is that as long as we have to sell the benefits of distributed capture, it will never become an application that sits on every desktop— just because not everyone will see the cost justification. This represents a double-edged sword. Users who do see a potential ROI can better justify paying a premium for the software. This keeps the application from becoming a commodity. So, we may not want to drop the price of capture software just yet to drive mass adoption.

A call for network admin tools

One area that we can improve on, however, without cutting into our profits, is network administration. I recently had the opportunity to discuss a distributed installation with a systems admin for a large energy company. He had formerly presided over only a centralized application. An acquisition by his employer had put him in charge of a distributed operation as well. "Every time a scanner needs to be adjusted, the capture application needs to be changed, or someone needs to be trained, I end up having to travel to each of the distributed sites," he told me. "It was much simpler when I only had a centralized operation to supervise."

Thankfully, we are starting to see some solutions designed to address these concerns. **Kofax'** soon-to-be introduced Document Scan Server represents one such solution. The scanning appliance is designed to eliminate local administration of scanning drivers. We've also written in recent weeks about network TWAIN and ISIS initiatives. Even RemoteScan's dumb terminal application offers some advanced network administration tools [*see story on page 6*].

Yes, this whole SOA (service-oriented architecture) trend and even the "retro-futuristic" [*in the words of RemoteScan's president*] dumb terminal movement indicate that server-based computing is the next "in" thing. To keep document imaging an "in" thing, as it has become recently after 20 years of being "out," we need to continue to move to a server-based administration model. Solutions such as the Document Scan Server, **ABBYY's** Recognition Server [*which we discussed last issue*], and **Datacap's** new architecture for capture, which will be shown at AIIM this week, all represent steps in the right direction. We expect to see plenty of other server- and services-based stuff at the show, as well.

Yes, as scanning moves into the mainstream, it becomes more important than ever to embrace mainstream trends to continue to drive growth. Distributed capture has definitely arrived, but we think improved server-based administration tools will give it the final nudge through the door of acceptance.

Kodak Introduces Own-Manufactured Workgroup Model

After initially wading slowly into the waters of what it refers to as the "distributed capture" market, **Kodak** has now taken the full plunge. This week's announcement of the i1200 and i1300 represents Kodak's third and fourth new product releases in the sub-$4,000 range in just over a year. Unlike Kodak's earlier offerings in these segments, all the new models are being manufactured by Kodak.

The i1200 represents Kodak's first own-manufactured workgroup model, while the i1300 is an intriguing departmental alternative to Kodak's more robust i100 series. When Kodak phases out a couple legacy models, it will have a complete line of own-developed scanners, ranging from the $800 i1210, to the $85,000 i840. "This is especially important in some developing markets, such as Asia and South America, where less sophisticated buyers might just see similar boxes and go for the one that costs less—not even considering some of the additional image processing (IP) we put into our OEM models," said Paul Whittard, Kodak's worldwide director, distributed capture.

Of course, with these new models, Kodak has included more than just its PerfectPage with iThresholding IP to differentiate them from the

competition. Some of the intriguing new features include an extremely versatile feeder, on-board OCR, improved IP, new "smart touch" functionality, an upgraded software bundle, and an optional tethered flatbed.

Let's take a brief look at each one:

■ **versatile feeder** – Last issue, we did a fairly extensive article on the new **Panasonic** KV-S1025C, which has an innovative feeder that can scan both cards and full-sized

Kodak's new i1200 and i1300 models feature one of the smallest footprints in their classes.

documents in the same batch [*see DIR 5/5/06*]. We touted the value of this type of functionality in healthcare applications, in particular. Kodak has also recognized this market need and boasts similar functionality in its i1200 and i1300. In addition, the feeder on Kodak's new models can be tilted to work at a steep angle to reduce the scanners' footprints when feeding documents ad hoc, or it can be slanted back to take full advantage of the 50-sheet ADF. The feeder also incorporates ultrasonic double-feed detection, matching FCPA's 5x20C scanners as the only workgroup models with this functionality.

■ **on-board PDF OCR** – Kodak has embedded OCR technology from capture software technology partner **I.R.I.S.** in its new models. This means the scanners have the ability to output full-text searchable PDF files or RTF files at rated speeds. The Fujitsu ScanSnap desktop model is the only other scanner we are aware of that has anything approaching onboard OCR [*see DIR 4/7/06*], and it, of course, is not networkable because of its lack of traditional scanning drivers.

■ **improved image processing** – In the new models Kodak has introduced features like auto-orientation based on content, enhanced electronic color dropout, and photo segmentation into PerfectPage. Kodak has also introduced an optional edit mode for manual viewing, rotation, and clean-up of images after they have been scanned, but before they have been delivered to their final destinations.

■ **Smart touch** – The optional edit mode is especially relevant when incorporated with Kodak's new smart touch functionality. This feature enables users to prefigure scanning profiles and destinations

and associate them with numbers that appear on an LED screen. A button on the scanner can be used to start the scanning process and automatically launch the destination application. We've written before that **Nuance** has a patent pertaining to this type of auto-launch functionality and that may have something to do with the new software bundle Kodak has assembled for the i1200 and i1300.

■ **Upgraded software bundle** – The bundle includes Nuance's *PaperPort* and *OmniPage* applications. "*PaperPort* represents a nice image management tool for SMBs looking to leverage these scanners in standalone applications," said Whittard. "*OmniPage* OCR can be tightly integrated with *PaperPort*. We looked at what some of our competitors were doing and felt it was important to adopt a best-of-breed bundling strategy."

■ **Tethered flatbed** – For a list price of approximately $500, a user can add an interchangeable tethered flatbed scanner to either the i1200 or i1300. This flatbed comes standard with a six-foot cable that can be extended for special circumstances. It is designed to give users more options when placing their scanners, such as keeping the flatbed on a different shelf. Interestingly, the units also come with a special security port, so they can be secured with a cable and a lock. "We found people were sometimes walking off with our i30 and i40 models," said Whittard.

LVP speed at dept. prices

Both the i1200 and i1300 have simplex and duplex models. The i1210 is rated at 30 ppm in grayscale and bi-tonal and 15 ppm in color. The duplex i1220 is rated at 60 ipm and 30 ipm, respectively. The i1310 and i1320 double those speeds across the board. The i1200s have a recommended daily duty cycle of 1,500 pages per day, the i1300s, 3,000. As of press time, list prices had not been finalized, but preliminary pricing set the i1210 at $800, the i1220 at $1,200, and the i1320 at $3,000.

While the i1200s are competitively priced with similar scanners in their class, the i1300s feature low-volume production rated speeds at a departmental price tag. **FCPA's** fi-5530C and Kodak's own i150/i160 models are probably the closest available products to the i1300s and both feature bi-tonal grayscale speeds at least 20% slower and have list prices $1,000 higher.

When we asked Whittard about the potential of cannibalizing the i100 series, he said Kodak had considered limiting the speed of the i1300, but in the end decided against it. Both the fi-5530C and i150/i160 do have larger ADF capacities than the i1300.

Leveling the playing field

One thing is for sure, the i1200 and i1300 models would seem to eliminate Kodak's need to continue its OEM relationship with Taiwanese manufacturer **Avision**, and we expect Kodak's i30-i80 models to be phased out over the next year or so. These new models should also put the high-volume market leader on more even footing with lower-volume market leader Fujitsu Computer Products of America, which also has a broad line of own-manufactured products. "Overall, the workgroup and departmental segments have experienced some impressive double-digit growth over the past two years, and we've kept up with that," said Whittard. "With the introduction of these new models, however, we expect to exceed the market growth rates and take share from our competitors."

Kodak partners are currently taking orders for the i1200 and i1300 models, which are scheduled to begin shipping in the second half of June.

For more information:
http://www.kodak.com/go/docimaging

RemoteScan Dominating Emerging Market

Start-up finds niche scan-enabling dumb terminals

Over the years, Steve Saroff has seen a few things in the information technology market. He is the co-author of the original Kinkonet system for managing the submission and delivery of remote print jobs. He's been with a company that was acquired by Bernie Ebbers' **MCIWorldCom** organization, and as a result gained and lost a fortune on paper. Saroff's latest endeavor is serving as the president of **RemoteScan, Inc.,** a Missoula, MT-based developer that has created software addressing an interesting and growing niche in the document imaging industry. RemoteScan enables scanning from clients in **Citrix** or **Microsoft** *Terminal Services* environments.

We first discussed support of scanning in these "dumb client" environments when we previewed the new features in **Kofax'** *Ascent Capture 7.5* [*see DIR 4/21/06*]. Apparently there is a trend, especially prevalent in heavily regulated industries like healthcare and financial services, to remove application software from users' PCs. This means that increasingly businesses want to control applications from a centralized server and leave only a machine running a browser on their employees' desks. These machines are often referred to as "dumb terminals."

Saroff compared this "new" IT paradigm to the mainframe-dependent infrastructures of 25 years ago—before the PC was introduced. "Businesses are ending the love affair that workers have with their PCs," he told *DIR*. "I've seen studies that show workers spend anywhere between 5% and 35% of their time just fiddling with their PCs. Organizations in markets like financial services and healthcare are putting an end to this.

"It's not that dumb terminals are any less expensive than traditional PCs, it's just that businesses see them as more efficient. The paradigm is kind of spooky, actually. You might see a couple hundred people working on computers on the fourth floor, but those computers are being controlled by a couple IT guys in the basement. It's like Big Brother controlling everything."

Despite his misgivings on the control aspect of the model, Saroff has been able to cash in on it by scan-enabling the dumb terminals in these environments. "Capturing images requires that a driver from a scanner is connected to a driver within an application," said Saroff. "However, in dumb terminal environments, there are no applications running on the clients. All the applications are running on servers in another part of the building."

To get around this, Saroff has designed *RemoteScan for Terminal Services/Citrix* to "trick" scanners into believing that server-based applications are sitting on the PCs or specialized thin-client units the scanners are attached to. "You load one component of *RemoteScan* onto the server application and the other onto the PC or thin-client machine with the scanner attached," he said. "Our software connects the two through the network, which enables a user to launch their scanner from the PC or thin-client. The captured images are delivered directly into the server application, which can be used to manage them."

Saroff described the specialized thin-client devices as basically looking like large modems. They are designed to replace PCs in Citrix or *Terminal Services*-based environments. "As long as those devices are running Windows XPe (embedded), our software can be loaded onto them," said Saroff. "Otherwise, the user can go through their thin-client interface to access a scanner connected to a networked PC. That PC might be shared by a workgroup."
[http://www.remote-scan.com/terminal-services-diagram.php].

Regulations drive demand

Saroff first became interested in scanning while working with the print capabilities of digital copiers. "We actually wrote the first versions of *RemoteScan*

while trying to figure out how to share desktop photo scanners over a network," he told *DIR*. "That product has evolved into our LAN version of *RemoteScan*. We sell a lot of copies to universities, for example, that might have one scanner in a classroom with 20 or 30 PCs for students. The challenge with our LAN product is keeping it priced lower than the cost of an additional scanner. We charge $20 per seat and make it available in increments of five seats for $100."

> **"Businesses are ending the love affair workers have with their PCs. I've seen studies that show workers spend anywhere between 5% and 35% of their time just fiddling with their PCs."**
>
> **— Steve Saroff, RemoteScan**

According to Saroff, the demand for scanning in Citrix and *Terminal Services* environments has been driven by regulations such as HIPAA and the Patriot Act. "Both have strict requirements involving capturing images of ID cards," said Saroff. "Hospitals and banks have found it is more efficient to scan these cards and deal with them as digital images, than it is to manage paper copies in accordance with the regulations. At the same time, however, there has been a trend towards installing Citrix- and/or *Terminal Services*-based infrastructures."

Overall, Saroff said RemoteScan has sold 250,000 seats of its software. "With an estimated three users per seat, that means we have 750,000 users," he said. "The majority of our current business is coming from sales of *RemoteScan for Terminal Services/Citrix*."

Among its partners, RemoteScan lists a number of EMR (electronic medical records) and hospital administration system providers. These include **Cerner Corporation**, **A4**, and **McKesson**. Saroff estimates *RemoteScan* is in use at thousands of healthcare providers (hospitals and clinics) around the country. Accounting software and services provider **Creative Solutions** is also a RemoteScan partner. Insurance giant **AIG** is listed as a customer. Government, education, transportation, and large manufacturing businesses are also customers.

RemoteScan for Terminal Services/Citrix is clearly being targeted at large installations. "It starts out at $200 per scanner, but when purchased in volume, the price drops dramatically," said Saroff.

Improving network management

In addition to scan-enablement, RemoteScan offers its customers features to improve network management of their scanning applications. "One thing we do is leverage the security of the Citrix or *Terminal Services* application," said Saroff. "This means that whatever methods are being used to encrypt data between the terminals and the server, we can piggyback the image on top of them."

RemoteScan for Terminal Services/Citrix can also be used to update drivers and set up and maintain scanning profiles across a network. "We were working with a V.A. hospital, for example, that was using our software to scan insurance cards with flatbed scanners," said Saroff. "Unfortunately, because the users didn't understand scanner settings, they were capturing everything at 600 dpi, in color, at 11 ½ x 8 inches. This was creating 40 MB files, which were jamming up their network. We helped them set up default, locked-in parameters for capturing 40K files."

RemoteScan can also be used to configure multiple users to capture documents through a single scanner or digital copier. "While most digital copiers can, by default, scan to watched directory folders, our partners like the direct integration we provide into their applications through TWAIN," said Saroff.

Saroff concluded that because of the head start RemoteScan has in its particular niche, he is not overly worried about competition from others looking to get into this fast growing space. "Citrix, for example, advertises scanning capabilities in the latest version of its software," said Saroff. "But, from what I understand, they only support a small subset of scanners. And what about everyone running older versions of Citrix? About the only other way I've seen people effectively accomplish this, is by setting up a VPN or using some other sort of custom connection. For as long as it takes to install and administer this type of system, it's more cost effective to buy *RemoteScan*."

For more information: http://www.remote-scan.com

Federal Business Ramping Up For SourceCorp

SOURECORP was recently awarded one of the largest federal contracts in its history. The business process outsourcing (BPO) specialist announced a five-year, $31 million contract with the **National Oceanic and Atmospheric Administration** (NOAA). Specifically, the contract involves digitization work being done for NOAA's **National**

Climatic Data Center (NCDC) in Ashville, N.C.

According to Jeff Meshinsky, VP, Government Solutions for SOURCECORP, the entire federal market is looking up as government agencies embark on plans to update their filing and data collection systems. "When you here words like 'modernization,' 'transformation,' 'data rescue,' and 'FOIA,' those are all hot buttons for digital imaging and data conversion," Meshinsky told *DIR*. "Similar to what's occurring in the commercial market, it's taken digital document imaging about 20 years to gain full acceptance by government agencies. Federal business is now stepping up pretty dramatically, and there are some very large initiatives underway."

SOURCECORP has had a presence in the federal market since its 2001 acquisition of a BPO organization based in eastern Kentucky. The recent contract represents an extension of work the company has done for several years on the Climate Database Modernization Program (CDMP). SourceCorp is one of three principal contractors for the CDMP. **Lason** and **IMC** (a BPO organization based in West Virginia) are the others.

The contractors capture and convert weather records, going back hundreds of years in some cases, into a digital format. The images are made accessible though an online digital repository known as the Web Search Store Retrieval Display (WSSRD). (http://www.ncdc.noaa.gov/oa/climate/cdmp/wssrd.html). The repository was created and is maintained by IMC.

"Today, a lot of weather data is collected by satellites and generated digitally in the first place," said Meshinsky. "But, we've only been using satellites for 30 years. Their output provides only a small glimpse of weather patterns in recent times. The CDMP encompasses weather observations that go back for centuries.

"The United States government has been keeping paper weather records for 200-300 years. In 1996, it realized that much of this historical data, valuable in creating models for predicting developments like natural disasters or global warming, was beginning to deteriorate. That was when a program that was the predecessor to the CDMP was launched."

One particular aspect of the CDMP worked on by SOURCECORP involves the capture and conversion of weather data compiled by the U.S. Signal Service at frontier forts in the mid-1800s. "This data is highly valuable because it was tracked on an hourly basis," said Meshinsky. "Someone at each fort jotted down information like the temperature, wind direction, and precipitation. There are about 32 handwritten elements on each sheet that we are capturing."

To date, there are close to 100 million weather records available through WSSRD. "There are millions more weather files continued on paper or microfilm in a vast storage facility in Ashland," concluded Meshinsky. "Government workers are constantly evaluating, prioritizing, and staging assignments for the contractors."

For more information:
http://www.srcp.com/sourcecorp

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