



# The Intersection

A Newsletter for the users of Intersect Systems Retention Schedule Manager software systems and Records Control and Management software systems

Grand Prairie, Texas

Volume 21

## In This Issue:

### Intersect User Focus

- City of Plano, Texas — 3  
a long-time Intersect customer, and the city's use of the Public Records Request Manager in the RCAMS system.
- Johnson County Central 2  
Appraisal District in Cleburne, Texas and their use of the RCAMS reporting system for documenting compliance during their recent audit.

### Also in this Issue:

- The growing incidence of 1  
ransomware attacks and the new phenomenon of collaboration between hackers and ransomware producers
- Intersect Systems relocates to 4  
new offices in Grand Prairie.

### News and Updates

e-Records Conference 2016:  
"At The Intersection of Technology and Records Management"

November 4, 2016  
Austin, Texas

[rm\\_trng@tsl.texas.gov](mailto:rm_trng@tsl.texas.gov)

*Intersect Systems Inc. is a Texas-based company located in north Texas. Intersect specializes in developing software for retention schedule development, records management, and electronic document management.*

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## Malware / Ransomware Update

*Ransomware: a form of Malware that locks the victim's files by encrypting them, and then demands a payment from the victim in order to obtain a decryption key to unlock the files. Such technology-based criminal extortion attempts are characterized by intrusion using specialized internet-based methods that minimize the chances of identification of the perpetrators, and by payment demands using Bitcoin, which makes it virtually impossible to trace any payment in order to identify the recipient.*

An Intersect customer once commented that "There are two kinds of records centers: those that have accidentally shredded a document that should not have been shredded, and those that will accidentally shred a document that should not be shredded." Today, a variation of that same statement could be applied to records departments — those that have experienced a ransomware crisis, and those that will experience a ransomware crisis — as ransomware extortion attempts continue to make headlines almost daily with newer and more sophisticated exploits against businesses.

Early this year, instances of collusion between ransomware developers and hackers, referred to as "Ransomware as a Service," began to appear. Ransomware packages, or kits, designed for use by hackers to incorporate in their attempts to penetrate a victim's network infrastructure, began to appear. The arrangement typically involves splitting the proceeds from a successful intrusion and ransom demand between the ransomware developer and the hacker who successfully compromises a victim's defense to install the ransomware on the victim's network infrastructure.

Ransomware can damage a records database by removing files from a server, or by encrypting files including indexed electronic document image files, database files, and database tables. A demand for payment for a decryption key may be an immediate indicator of a compromised records database. However, in other cases, such damage may not be detected immediately. A particular concern relates to encrypted electronic document images or deleted document images — current actions associated with some ransomware attacks. With thousands of indexed imaged documents typically residing on a server with a records database, all damage following a ransomware event may not be readily apparent. An encrypted document image file, or a referenced document image file that has been removed from the server, may not be detected for a long period of time — perhaps not until a document must be provided in response to a public records request, or until a document is required to be produced in a legal action — and the image file is found to be encrypted or missing.

Intersect's upcoming software updates to the RCAMS Records Management System include a series of records database integrity checks that will scan all records, associated metadata or content records, and indexed images including electronic document formats, and will provide a report on any missing or encrypted records or damaged or encrypted documents in the aftermath of any ransomware attack.

A multi-tiered approach to protection against Malware including Ransomware attacks — that is, an approach that includes several levels and methods of intrusion protection — is strongly recommended. However, these front-end measures can fail — and unfortunately, this is not uncommon as more sophisticated malware is developed, and as the number of incidents continues to increase. Intersect's upcoming updates will also monitor records database access, and display a red-flag warning in the event that any indication of malware presence or damage is detected, in order to allow quick reaction and response to protect records data and associated backups.

What happens when all precautions against an intrusion by ransomware fail? Users will find that some application programs no longer will run, or data that is accessed is suddenly no longer available to an application. A user's screen may display a notice that files are being encrypted, effectively locking them and preventing access to the information, with a demand for a payment in order to receive a key to decrypt, or unlock, the files.

(Continued on Page 4)



**Focus on:**

## Central Appraisal District of Johnson County Intersect Revisits A Long-Term Customer

Located in north central Texas, on the southwestern edge of the Dallas-Fort Worth metropolitan area, Johnson County covers 740 square miles and has a population approaching 150,000. Located in Cleburne, the Johnson County CAD was established in 1981 and currently has 37 employees. Cleburne's population of just over 30,000 is projected to double by 2030. With an appealing small-town rural character, and a location just twenty-nine miles south of downtown Fort Worth, Cleburne and the surrounding area offer an attractive residence alternative for those employed in Fort Worth. The recently completed Chisholm Trail Parkway connecting Cleburne with downtown Fort Worth is expected to further stimulate growth in Cleburne and Johnson County over the next several years.

Intersect Systems welcomed the Central Appraisal District of Johnson County as a new user of Intersect's Records Control and Management System (RCAMS) software in 2007. Software installation of RCAMS was completed in the summer of 2007, and two on-site training sessions were conducted for selected staff members responsible for maintaining the District's records control schedule and managing its records inventory.

In early September 2016, Intersect visited the Central Appraisal District office in Cleburne, completing an update to the RCAMS system and presenting a brief overview of the new software enhancements for several staff members.

**Expanded Support Options** Intersect's training and support program frequently involves the use of laptop computers, each with Intersect's Retention Schedule Manager (RSM) and Records Control and Management System software installed, along with sample data. Each computer used for training includes sample Texas Local Government records retention schedules and a sample records database designed for training, allowing hands-on experience with the actual applications.

In the past few years, Intersect has expanded its use of remote connections for customer training and support with software tools such as Join Me and Team Viewer, providing direct online screen-to-screen interaction between Intersect support and a customer's system, as well as allowing convenient online software updates. This alternative for remote support and updates has helped Inter-



Training Session on new RCAMS 10 Version

sect maintain reasonable Annual Support Program costs by greatly reducing, and in some cases eliminating, the need for on-site visits. Online support with shared screen / keyboard / mouse interaction is being adopted by many software and hardware companies. Intersect has found that training sessions work well when conducted for a group in a conference room or classroom with an internet connection and large-screen projector, particularly when a computer system with the Intersect applications is installed locally.

**Audit Ready!** Intersect Systems welcomes suggestions regarding Intersect software from our community of users. Users' experiences and suggestions have been an important factor in updates and new features that have been added to RSM and RCAMS over the 25-year history of Intersect's records management software systems.

During the September 2016 visit to the Central Appraisal District of Johnson County, staff members described to Intersect's representative their recent audit by the Texas Comptroller's Office. Audits of Central Appraisal Districts occur every two years – with half of the Texas County CADs being audited one year, followed by the other half in alternate years. The focus of audits varies from year to year, and a particular audit will be based on areas selected by the auditor from their current list of areas of interest.

Records retention and related areas of records management are being addressed in audits by the Texas Comptroller's Office. Ms. Donna Pace, Records Manager for the Johnson County CAD, and Director Jim Hudspeth described their recent audit and identified Intersect's RCAMS software system as an important asset. Donna Pace summarizes:

"One audit question concerned our records retention plan, procedure, and documentation. We presented our written procedure, along with a point-and-click printout from the RCAMS Retention program of our records retention schedule as filed with the Texas State Library and Archives, as requested. We followed this with a printed list of all records that have been disposed of in accordance with our retention schedule, printed out from the RCAMS records database, to document our compliance with records retention and disposal requirements.

"Another audit question concerned

(Continued on Page 4)



From Left: Donna Pace, James Hudspeth, Laura Martin





**Focus on:**

## City of Plano, Texas

### Intersect Revisits A Long-Term Customer

The city of Plano, Texas, is located 20 miles north of downtown Dallas. The largest city in Collin County with a 2016 population of over 274,000, the city is noted for a business-friendly climate and superior accessibility with a 30-minute drive to DFW International Airport (world's third busiest) and a central location for convenient access to both east and west coasts.

**Toyota Selects Plano** In the past several years, a remarkable number of large corporations have relocated their headquarters to Plano, including Toyota's current relocation of its North American headquarters to Plano, currently underway with an investment of over \$1 billion in facilities and relocation expenses, with an initial projected employment of 4,000 including jobs in finance, quality engineering, information systems, and sales and marketing. The new seven-building campus is currently under construction on a 100-acre site in north Plano.

Other notable relocations of businesses to the city include Liberty Mutual Insurance Company; J. C. Penney, which moved its corporate headquarters to Plano from New York City; Electronic Data Systems (now a part of Hewlett-Packard); and Perot Systems Inc. as well as numerous other technology and telecommunications companies. A factor influencing relocations has been real-estate taxes that are lower than those in New York and California, and the fact that Texas has no personal or corporate income tax.

In September 2016 Money magazine announced that Plano was named #3 on its *Best Places to Live in 2016* list – with Plano the top-ranking Texas city on the list. According to the magazine, factors contributing to the magazine's decision included population size, job growth, crime level, home values, health care, and quality of schools. Money also recognized the fact that Plano's diversity (about 43% of residents are non-caucasian, with approximately 80 languages spoken in city schools) is one of Plano's key strengths.

The City of Plano has a history of strong emphasis on records management. Beginning in 1987, the city developed cus-

tom records database software to meet its needs, pre-dating much of the initiative by the Texas State Library and Archives (TSLAC) to develop the Texas Retention Schedules for state and local governments. Operating on a mini-computer installed at the city hall, the Plano-developed system was used to manage paper and microfilm records for the ensuing fourteen years. Several updates were made to the original mini-computer database system as the TSLAC state schedules were finalized and as appropriate state guidelines and procedures were put in place.

**Early Focus on Records** When the first retention schedules could be submitted to the Texas State Library and Archives for approval, Plano already had its schedules ready and was one of the first to submit, resulting in an Award of Merit by the library to Plano in 1987.

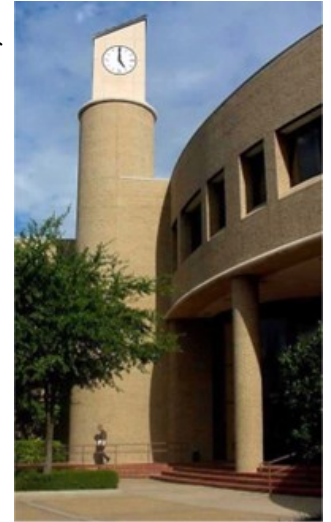
When plans to phase out the aging mini-computer system were being made in 2001, the city began looking for replacement software that would run on the Windows® operating system, and that could be installed on the city's Local Area Network and shared among various users.

The city selected Intersect's Retention Schedule Manager (RSM) and Records Control and Management System (RCAMS) software. Intersect installed the RSM and RCAMS software in the spring of 2002, and converted the city's records data to the Intersect records format. After a brief period for system testing and for on-site training, the city switched over to the new Intersect records management software system.

The city's physical records database averages around 8,000 containers, most of which are located in an off-site warehouse facility. This total is somewhat smaller than typical records databases for cities of similar size – made possible by the city's diligent observance of the state's retention requirements, and by disposal of records when the retention requirements are met.

Many of the city's permanent records have been transferred to microfilm, allowing the city to apply to the state for approval to dispose of the hard copy originals, further reducing physical space requirements. In addition, electronic imaging is used for appropriate records. In fact, the Plano police department was one of the first to use electronic imaging beginning in the late 1980s.

**Public Records Requests** When Intersect Systems began the development of the Public Records Request management component for the RCAMS system several years ago, the Plano Records Management Department was receptive to using the early development versions and providing valuable insights into the operation of the added functions in the department's processing of public records requests.



From left: Billie Clayton, Sylvia Berry, Andres Morales, Hong Skipper, Beverly Lynch

(Continued on page 4)

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Intersect Systems Inc. is a Texas-based developer of specialized software database systems for records retention and records management applications. Intersect Systems is now in our 26th year.

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**(Johnson CAD Continued)** our procedure for receiving and responding to open records requests in compliance with Texas Government Code Chapter 552, and whether the procedure is being followed. We do have a procedure that includes use of the RCAMS software Public Records Request Manager, and as with the printed records disposal list, we documented our compliance by printing out a record of all open records requests received and processed by the District from the RCAMS public records database.

“Using the Intersect RCAMS software has helped us organize and manage our retention schedule and our records information, and the reporting system made it easy to provide the required information to the Comptroller’s office.”

One suggestion by the Central Appraisal District concerned the large amount of paper required to print the list of records that had been disposed of – amounting to several pounds – reflecting the District’s records dating back to 2007 when the RCAMS system was first installed. Donna suggested that adding an option for a more compact format for some reports would be desirable.

Intersect agrees – and the next update to RCAMS 10 / 2016 version will include an option for a more compact summary of records that have been disposed of, with the option of the full format where more detail is required.

The Johnson County Central Appraisal District can be reached at (817) 648-3000.

**(Malware Continued)** The growing incidents of ransomware, and the almost daily examples of major attacks on businesses, health care institutions, and state and local governments, add the prospect of disasters resulting from technology-based criminal extortion attempts to the very real threats organizations face today, and strongly underscore the need for attention to, and renewed emphasis on, identifying and managing an organization’s *Essential Records*. Essential Records, also called *Vital Records*, refers to any local government record necessary to the resumption or continuation of government operations in an emergency or disaster, to the recreation of the legal and financial status of the government, or to the protection and fulfillment of obligations to the people of the state. Essential Records, along with permanent records, must receive special consideration for storage in terms of environmental controls, protection from fire and flood, protection against unauthorized access, backups and off-site storage, and other similar considerations. Records Storage Standards Bulletin F of the Texas Local Government Code, Title 6, Subtitle C, contains additional details on this and related storage considerations.

The ransomware phenomenon is growing rapidly, with more malicious methods appearing constantly. There are no guarantees

**(City of Plano Continued)** The arrangement has proved worthwhile as Plano’s volume of public records requests has expanded over the past several years. The Records Management Department received approximately 1600 public records requests during Fiscal Year 2015-2016, including walk-ins and e-mails received by other departments, but not including requests received by the Police and Fire Departments who each handle requests separately.

Many public requests require documents from several departments for fulfillment, and tracking progress across several departments in locating the required documents proved to be an import function. As a result, an important feature of the RCAMS Public Records Request system has been the ability to track the processing and response of various departments’ handling of requested documents in order to ensure timely response to each request.

Intersect Systems introduced the concept of a retention schedule management component integrated into a records management system in 1993, and the retention requirements for public records requests, based on whether fulfilled or declined, and related information, were a logical feature that was included in the Public Records Request functions. In addition, Intersect’s double-click auto-queries were incorporated into the Public Records Request component and have proven particularly useful as the volume of records requests in Plano’s RCAMS database have grown.

The long-term success of the City of Plano’s records management program can clearly be attributed to the experienced and dedicated staff, and to the fact that city officials and departments throughout the city have been very supportive of the program.

The city of Plano’s Records Management Department is happy to share its experience in managing their records facility with other records professionals. Visitors are asked to call in advance to arrange a mutually suitable time for a visit. Please contact Ms. Billie Clayton, Records Manager / Archivist and Records Management Officer at (972) 941-7222 for more information.

for protection, and careful attention to maintaining and protecting backups, *and to securing backup systems*, is critical to restoring damaged files in the event of a disaster. Note that backups *must be maintained off-line*; backups that are accessible from a server are themselves exposed to malware and subject to encryption by a ransomware intrusion.

Recent lawsuits against businesses that have been hacked resulting in large-scale compromises of customer data, as well as a number of large-scale information technology systems failures affecting airlines and health providers that have been attributed to “power failures,” “server crashes,” or other dubious causes, suggest that organizations are becoming reluctant to acknowledge ransomware intrusions, and that in fact some may have paid substantial ransoms for data recovery.

Several of our customers are considering cloud-based data hosting services, and database security and backups, along with encryption options, are of concern with cloud service providers as well. Intersect is currently preparing a guide and a check list with suggestions for evaluating and comparing cloud-based database hosting options. The guide will be provided without charge to our customers when completed.