white paper

A Primer on Evaluating State and Local Government Collections Software

By: Martin Germanis
CEO, CR Software

CR Software
A Higher Return On Intelligence.

Executive Summary

Bank on this: In the modern world of government collections, the ideal software addresses the distinct needs of end-users, procurement officers and upper managers alike. Its intuitive interface accommodates both new and legacy users while minimizing time spent navigating or troubleshooting the software. Security is assured through innovative authentication, authorization and encryption techniques, and audit logging is both thorough and immediate. The system's scalable architecture is eminently customizable and features an integrated Rules Engine -- enabling the real-time modification of workflow parameters and decision criteria. Designed for both network and hardware interoperability, the ideal software reduces cost of ownership through vendor independence. It also innovates data mining, trend analyses and the creation of instant, versatile reports. To accommodate disabled or remote users, the system supports full technical and functional accessibility. Of course this "ideal" government collections software is merely theoretical, but modern engineers are making great strides toward an optimized design. Companies like CR Software are currently fielding systems that are more capable, open and versatile than ever before. But at the same time, they are continuing to investigate the nascent technologies that might influence the future of government collections.

Introduction

Imagining the "Ideal" Government Collections Software

For some, the words *government collections* may conjure up the image of an antiquated office building, littered with paperwork, typewriters and the occasional rotary telephone. But the reality is quite different – you will more often find a new, modern world of sophisticated information technology and transformed recovery methods. In fact, the demand for effective debt retrieval extends far beyond state and local tax authorities to numerous, diverse government entities. Taken as a whole, the government market for next-generation collections software is widespread, substantial and steadily growing.

Yet within the aggregate government market, individual role-players throughout the supply chain possess distinct operational needs. For end-users, consolidation, organization and the automation of manual tasks are paramount (having to manually assemble information between disparate systems is a classic example of wasted productivity). And because collections officers aren't incentivized in the government, a pleasant user experience is particularly vital to worker efficiency. In the eyes of procurement officers, cost-of-ownership and system flexibility are the primary concerns. For management, the bottom line is simply that – higher revenues, with a secondary focus on practical innovation.

The concept of "ideal" government collections software presupposes that each of these discrete audiences could be satisfied with a common system. In fact, such a system would need to break ground in a number of key areas, including interface

design, security, architecture, interoperability, cost, business intelligence and accessibility. Let us now take a look at each of these specified areas and attempt to identify the essential requirements for a perfect system.

Essential Requirements for Government Collections Software

Ideal Interface

…modern interfaces are significantly reducing training time and costs.

Designed for business users, not software developers, the model interface must be intuitive and forgiving. Graphical user interfaces (GUIs) provide familiar, Windows-inspired environments for a new, browser-based generation. But provisions must be made for the large contingent of veteran users migrating from legacy green-screen systems. The consummate interface combines a modern, mouse-centric GUI with keyboard-only hotkeys mapped into the software for accelerated data entry and access.

"With an advanced GUI, we can present dramatically more information at a glance than green-screen systems ever could," noted Ed Wallen, Chief Information Officer for Fairfax-based CR Software. "But even more importantly, modern interfaces are significantly reducing training time and cost. A new user of CR Software's Titanium ORE can be fully acclimated to the system within a matter of minutes."

To support its intuitive interface, an ideal system must also provide context-sensitive help throughout the complete navigation path (government users often stress the importance of being one click away from the service desk as well). By minimizing the time spent troubleshooting and/or navigating the interface, we maximize the time for account service.

Ideal Security

With the advent of shared networks, there came a new generation of internal and external security threats. While disturbing in the commercial market, a security breach in the government is potentially catastrophic (according to the Privacy Rights Clearinghouse, more than 160 million sensitive records were compromised within the U.S. alone between 2005 and 2007). Internal breaches are particularly insidious and require a shift away from traditional perimeter protection. With a vast majority of database intrusions being perpetrated by insiders, the need has never been greater for innovative, comprehensive security reform.

The ideal collections software must appreciably strengthen traditional authentication. State governments are particularly interested in software that seamlessly connects with a central authentication repository (such as Microsoft Active Directory) for single-point ID management. Cutting-edge software also uses a code signing package to ensure the authenticity and integrity of compiled files run from user workstations.

To match thousands of discrete users with thousands of distinct system privileges, modern software uses a technique known as granular authorization. Administrators must have the ability to create custom security profiles for users based on role associations or individual job duties. An infinite number of these profiles should then be replicable, modifiable or replaceable.

"Effective encryption is usually the dominant concern in the government," added Wallen. "It's clearly imperative that data in transit be secured with Transport Layer Security (TLS). But that still ignores the monumental internal security risk posed by unsecured data at rest. Our software fully encrypts data as it sits on the hard drive, both at the filesystem level and even the field level for the most sensitive data elements. And these same fields can be masked when shown to users without sufficient security privileges."

System transparency and audit logging are also essential to database protection. The optimal software will track and preserve the complete history of all data as it changes over time, down to the last field (capturing User ID, date/time, software component and version). Additionally, through advanced monitoring at multiple hook points, it's now possible to send automated alerts to IT and management personnel in real-time – identifying anomalies and performance issues before the damage becomes too severe.

Ideal Architecture

Flexibility is a top structural consideration for government buyers. But as modern software becomes more open, the need for preliminary vendor customization declines. A modern system can now be customized and integrated almost entirely by in-house business and technical staff, post implementation.

Much of this customization involves user-defined business rules, which are critical to an automated system. An integrated Rules Engine enables the creation and real-time modification of workflow parameters as well as the mechanization of key decision making throughout the software.

"In particular, an ideal architecture must be scalable and reliable," noted Wallen. "Government entities engaged in collections vary in size from just a handful of users with small datasets to thousands of concurrent users working against terabytes of data. Providing high levels of system availability and eliminating single points of failure is crucial to collections operations."

Ideal Interoperability and Cost

Traditionally, government agencies have isolated their data centers. But there has recently been a strong push toward central IT management and information sharing. The primary motive is efficiency – to eliminate the unnecessary replication of information, hence streamlining data exchange and workflow. And for a centralized procurement office, this interoperability is a blessing, if not a requirement.

Flexibility is the key to integration. The ideal system can interface in real-time with virtually any commercial predictive dialer, any document management system and

any service provider. And an Extract Transform Load (ETL) tool can enable the import and export of data to/from any external system.

"Vendor independence is critical to cost of ownership," added Wallen. "Governments often have existing COTS or homegrown systems that would benefit from integrating directly with a core collections platform. Real-time exchanges of data and events can drive collections and operational efficiencies while reducing latency and the potential for human error. State governments should be able to leverage their internal IT staff to implement this integration instead of being at the mercy of the software vendor."

There's also a cost concern regarding system training and service. Complete documentation of the software is essential to customer self-sufficiency. If the system is truly open, government agencies can use their existing IT staffs to train users and to service the new technology.

Transparency has become the heart of our business intellegence.

Ideal Business Intelligence

Government managers know the bottom line is higher revenues. But increased account volume is not the only means to the end. Today, government agencies are prioritizing certain debts based on data mining and trend analyses. So the ideal software not only collects data, it makes that data useful and accessible in strategic business scenarios.

"For years, the data within commercial collection systems has essentially been a black box," added Wallen. "Now with current technologies, we are able to open up the system, allowing customers to discover data trends which would never have been possible to know previously. Transparency has become the heart of our business intelligence."

Similarly, reporting capabilities are now more crucial than ever before. To drastically increase efficiency, an ideal system will offload reporting data to an ancillary database, ensuring that day-to-day collections operations are never interrupted. The software must also automatically generate reports at any time, to any recipient, in a variety of formats (containing any and all user-definable fields).

Modern systems are also increasing efficiency through automated work assignment – technology that reflexively allocates accounts to specific individuals or groups based on user information, account demographics or other custom criteria.

Ideal Accessibility

As state and local governments feel pressure to reduce overhead, significant telecommuting initiatives have multiplied. Recently, several government entities have even begun mandating remote access for as many as 10% of their collections personnel. The ideal system must support this substantial influx of telecommuters – in a way that optimizes efficiency while maintaining the security of the network.

Of course in the federal space, Section 508 compliance is a mandatory requirement. Functional and technical access for disabled users must be a primary consideration throughout the development of a modern system.

Conclusion

Revisiting the "Ideal" Government Collections Software

Truth be told, creating the perfect software may forever be a theoretical pursuit. Satisfying each distinct audience throughout the government supply chain is a dubious if not impossible proposition. But the key to addressing this challenge is plainly evident – flexibility and an open design.

To get there, modern innovations are transforming the traditional, closed construction of collections software. Companies like CR Software are integrating openness and versatility into every aspect of their systems – from the interface to the architecture and beyond.

"We designed Titanium ORE to be the most scalable, open and versatile government collections tool there's ever been," said Wallen. "But at the same time, our engineers are always on the lookout for new ways to advance technology and to improve operations. When systems progress, everybody wins. And in the government market, that's particularly true."