Software Was Out of Date

The Iowa Finance Authority (IFA) Section 8 Performance-Based Contract Administration (PBCA) team was dependent on the original Contract Administration Tracking (CAT) software application to manage many aspects of the business. While considered "cutting edge" when originally developed, many features weren't included in the original application that were needed to meet the growing requirements and complexity of successfully administering IFA's Section 8 Annual Contributions Contract (ACC) with HUD.

- The technology used for the original CAT application was three generations out of date.
- The nightly back-up of the data could be compromised if a user failed to exit out of the application thus locking the Microsoft Access database.
- The contact data (owners, agents, HUD personnel, business associates) was not integrated with the rest of Iowa Finance Authority data.
- There was frequent need for IFA's programmers to "fix" the data due to user errors or programming issues.
- Tracking of HAP Voucher Payments was a manual process utilizing multiple spreadsheets and thus increasing the risk of errors.

Rewriting CAT

In 2008, it became obvious that the original CAT software system needed to be re-written to meet the needs of the Section 8 PBCA team and to allow for enhancements to successfully accomplish all of the performance based tasks required under the ACC. Rewriting the original system allowed IFA to use upto-date web technology and common libraries to integrate CAT with the rest of IFA's software systems. The new CAT website went live in July 2009 with significant enhancements following throughout 2010 and early 2011.

A Reinvigorated CAT

The new CAT is a web-based system that allows for access by internal IFA team members, in-the-field inspectors, and other business partners (on a limited basis). CAT is a combination of workflow, scheduler, tracking, payment processing, survey tool, e-mailer, document imaging, and management reporting.

The new CAT application provides numerous management functions including tracking monthly voucher reviews, tracking authorized rent and utility allowance adjustments, tracking contract renewal due dates, approving and monitoring payment of special claims, monitoring timely Housing Assistance Payments (HAP) to owners, and automatically creating an Automated Clearing House (ACH) transaction for each monthly HAP payment. CAT ensures that payment of Section 8 HAP vouchers and special claims to owners are timely, authorized and paid only for eligible units.

Why CAT is Innovative and Meets the NCSHA Award Judging Criteria

Innovative

The Question and Answer Module (QNA) offers the ability to create input screens for any purpose. The variety of question types, conditional control over the flow (example: "skip to question X"), nested child surveys and other features provide the cornerstone for any screen input the business unit can imagine. Possibilities for users creating their own presentation layers are without limit.

Automation is the foundation of the system. With a single click of a button the enhanced CAT system can project the workload of every staff member for a year in advance, compare projected to the actual performance, and historically recreate any invoice.

Replicable

The CAT system was designed using a collection of Common Libraries to aid in reuse throughout the Iowa Finance Authority.

The projection, scheduling and completion of tasks are designed with automation rules that are configurable from within CAT. Wish to reschedule next year's rent review two weeks before the end of the contract? No problem. Wish to automatically have an email notification sent two days prior? No problem. The Tracking Module allows the scheduling of assignments and the tying in a wide variety of action items from the automated printing of reports to taking a snapshot and the saving of a critical document.

CAT's Workflow and QNA modules have been utilized in other IFA business areas with only minor configuration needed due to the generic nature of their design. The workflow engine is oblivious to the data or what process is being designed, built and maintained by the business unit.

Respond To Management Challenge

The system was built in response to management's challenge to provide a system that would assist in the daily operations of the Section 8 program, affect savings in staff time by streamlining processes, and help ensure the successful re-bid of the Section 8 Annual Contributions Contract with HUD. The requirements included designing a system that would be flexible, user-maintained, secure, and provide effective enforcement of policies and processes.

Measurable Improvements In Operations

Reduction in labor hours is gained with every module. Some of the largest achievements have been realized by field staff. The system is capable of offering remote users the ability to submit a multitude of actions and then track them, thus empowering our customers while freeing staff time. One notable example was the design of the HAP Voucher Payment module which provided IFA with the opportunity to reduce one full-time staff position and allow the realization of an annual savings of over \$100,000.

Where it once took days to complete the monthly invoice it is now reviewed and approved in a few hours. This was made possible by linking the monthly invoice directly with CAT's workflow module. The accuracy of process measurement and financial calculations are 100 percent based on the actual completion times of IFA Staff.

Provide Benefits That Outweigh Costs

CAT's web-based design allows IFA users to access their information 24-hours per day. This was accomplished by utilizing the existing web server environment. The system was coded by just one programmer and can be configured by the users. We met our goal of making the system flexible enough so the users could configure changes in workflow and setup new information gathering modules without Information Technology involvement - a truly self-maintaining system. For example, the QNA module puts the power into the hands of the business unit to create their own question-and-answer inspection report, mapping it to a formal reporting document (for example a specific HUD form) and deploy the data to mobile field inspectors.

Program documents can now be stored in CAT and tied directly to the appropriate property. Users can check out a HAP Voucher for a particular month and view all of the imaged documents supporting the voucher without having to navigate to a shared folder somewhere on the network. This provides added security for documents, ensuring users won't have the ability to accidentally delete stored documents.

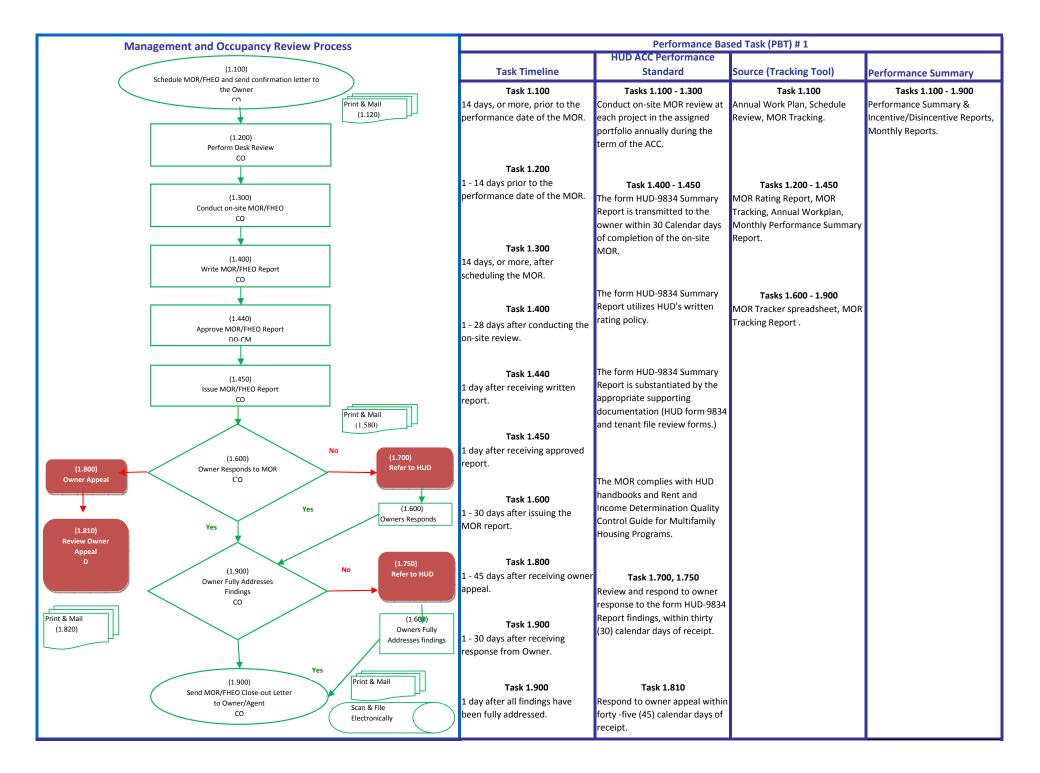
Effective Use Of Resources

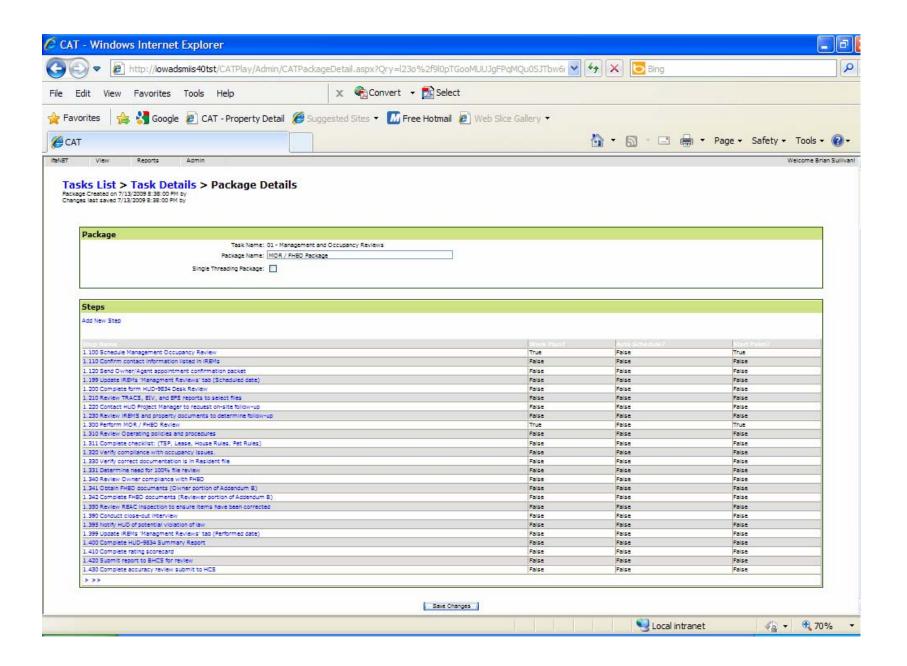
The heart of the newly enhanced CAT software system is the workflow management engine that tracks all tasks associated with the PBCA responsibilities, ensures deadlines are met, and projects tasks into the future. Many assignments are scheduled automatically as prior tasks are completed by IFA team members. Workflow management is tied directly into the Invoice reports so that all PBCA requirements are reported based on the actual performance of IFA staff.

Workflow management also provides IFA's management a tool to track the progress of tasks throughout the month to ensure that all assignments are scheduled for completion in a timely manner. The Workflow Module provides collaboration on documents and the ability to manage tasks. The business unit gains consistent processes, efficiency and productivity by managing the tasks and steps involved in the workflow thread. Staff can focus on performing the work rather than managing the workflow.

Achieve Strategic Objectives

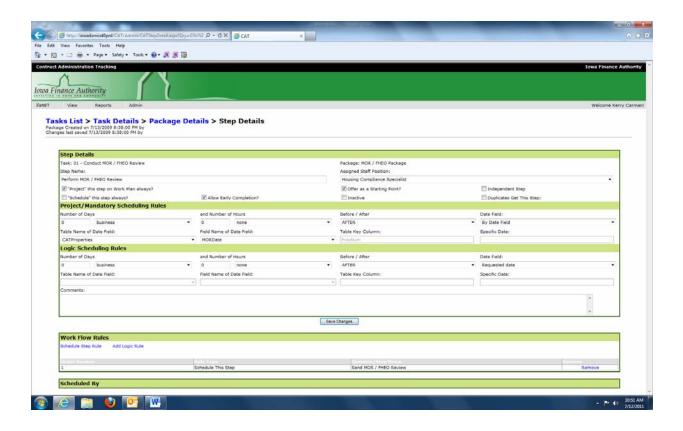
The Annual Contributions Contract with HUD was recently put up for a competitive, nationwide re-bid process. It was imperative that IFA's Information Technology Department develop a system which streamlined processes, improved accuracy, reliability, and timing, while at the same time reducing overall staffing needs. The CAT system accomplishes this and much more, allowing IFA to continue successfully administering the Section 8 program!



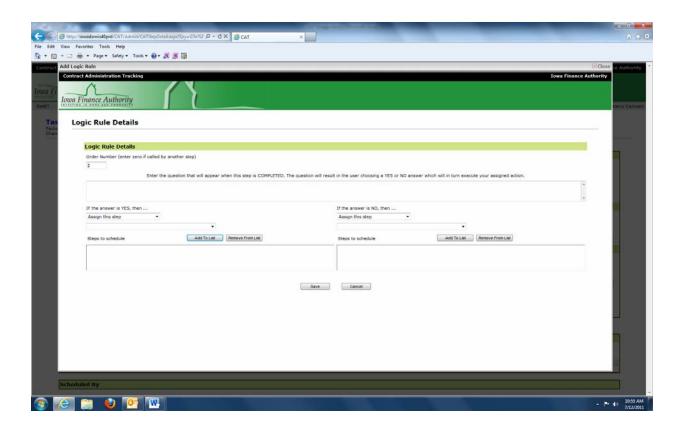


WORKFLOW MODULE

The workflow is organized by Task, Package and Steps. Below is a screen snapshot of the Step Details which shows the flexibility of the workflow engine. The workflow module allows for projected workload scheduling, actual scheduling, and completion. Upon any of these actions a series of Logic and Flow Rules determine the automated steps to do next. For example, upon completion of the MOR inspection one or more ensuring steps may be scheduled or an email notification could be automatically sent.

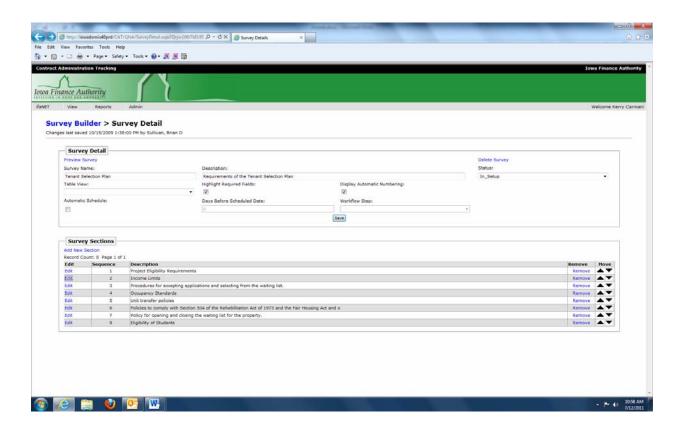


The follow snapshot shows the details for a Logic Rule. The workflow is based upon True or False conditions such as "Is the report completed?" This provides for a level of granularity so that any step can be time stamped and measured.



QNA MODULE

The QNA (Question and Answer) module allows for ease of inspections, surveys and any other actions that consist of questions and answers. The snapshot below shows a number of sections within the survey to allow for quick navigation. All answers are mapped to specific locations on the final report so that rewrites and reviews are no longer required of staff. This allows for a copy of the report to be presented immediately to the property manager and owner.



TRACKING MODULE

The Tracking module allows managers to monitor progress of any Workflow Step. There are two main views provided: Assignments (shown below) by staff, and Projected Workflow for resource allocation. Tracking ties in closely with the Workflow and is then organized in this one Assignment screen.

