West Virginia
Purchasing Division

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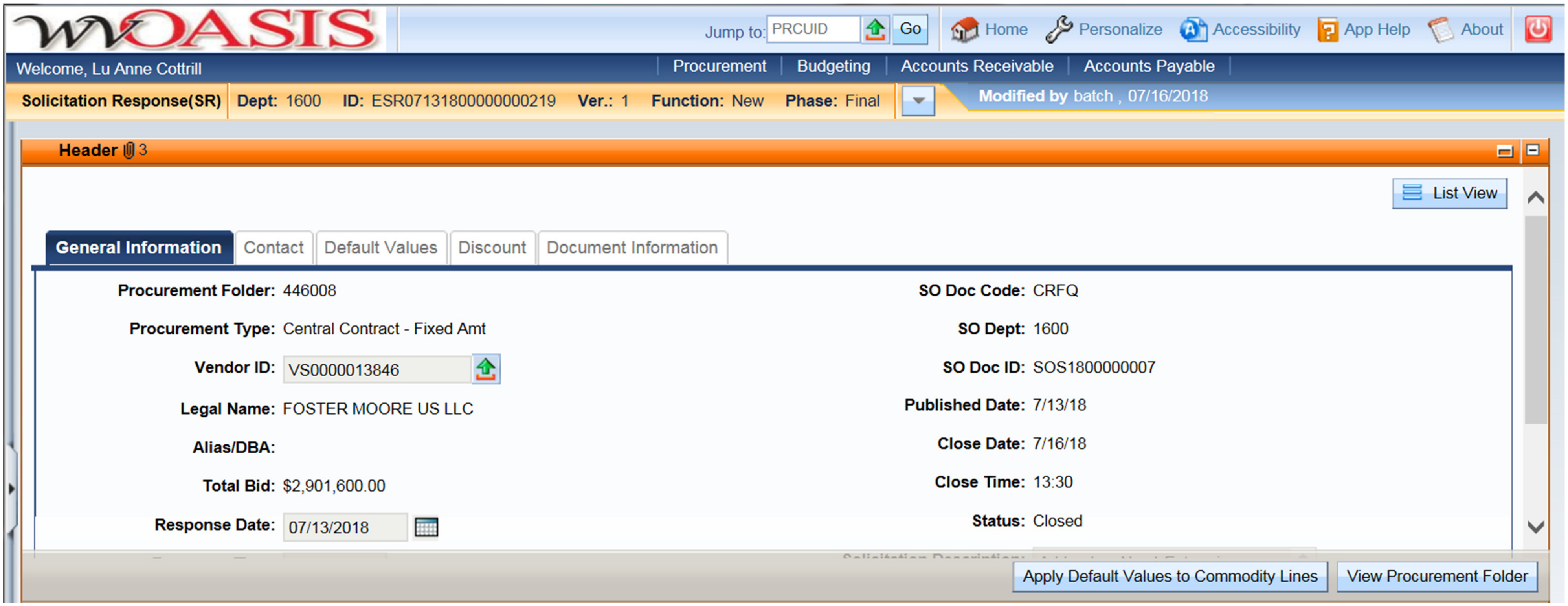
The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.


wvOASIS
Jump to: PRCUID Go
Home
Personalize
Accessibility
App Help
About
Welcome, Lu Anne Cottrill
Procurement
Budgeting
Accounts Receivable
Accounts Payable
Solicitation Response(SR) Dept: 1600 ID: ESR07131800000000219 Ver.: 1 Function: New Phase: Final
Modified by batch , 07/16/2018
Header 3
List View
General Information
Contact
Default Values
Discount
Document Information
Procurement Folder: 446008
Procurement Type: Central Contract - Fixed Amt
Vendor ID: VS0000013846
Legal Name: FOSTER MOORE US LLC
Alias/DBA:
Total Bid: $2,901,600.00
Response Date: 07/13/2018
SO Doc Code: CRFQ
SO Dept: 1600
SO Doc ID: SOS1800000007
Published Date: 7/13/18
Close Date: 7/16/18
Close Time: 13:30
Status: Closed
Apply Default Values to Commodity Lines
View Procurement Folder

	Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	**State of West Virginia** **Solicitation Response**

Proc Folder : 446008

Solicitation Description : Addendum No. 4-Enterprise Registration and Licensing System

Proc Type : Central Contract - Fixed Amt

Date issued	Solicitation Closes	Solicitation Response	Version
	2018-07-16 13:30:00	SR 1600 ESR07131800000000219	1

VENDOR

VS0000013846

FOSTER MOORE US LLC

Solicitation Number: CRFQ 1600 SOS1800000007

Total Bid : $2,901,600.00 **Response Date:** 2018-07-13 **Response Time:** 09:02:21

Comments: Please note pricing comments related to the "transactional" model requested by the State. These can be found in the "Pricing" section of the attached PDF, "Foster Moore Response_WVSOS Enterprise Registration SOS1800000007" as well as the attached Spreadsheet, "Foster Moore Response_Addendum No 3_Revised Pricing Page."
The pricing model represents an initial fee of only $180,000 upfront. All other costs are paid via Foster Moore invoicing (monthly) the State a percentage of the fees the State charges for transactions within the scope of this RFQ. Foster Moore will not begin invoicing these fees until the Enterprise Registry and Licensing System goes live.

FOR INFORMATION CONTACT THE BUYER

Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Signature on File **FEIN #** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Enterprise Registration and Licensing System (ERLS)	0.00000			$2,901,600.00

Comm Code	Manufacturer	Specification	Model #
81112300			

Extended Description : Pricing Page-Exhibit A-provided under separate addendum

Comments: See Pricing Page section for detailed response to the State's request for a hosted transactional model.

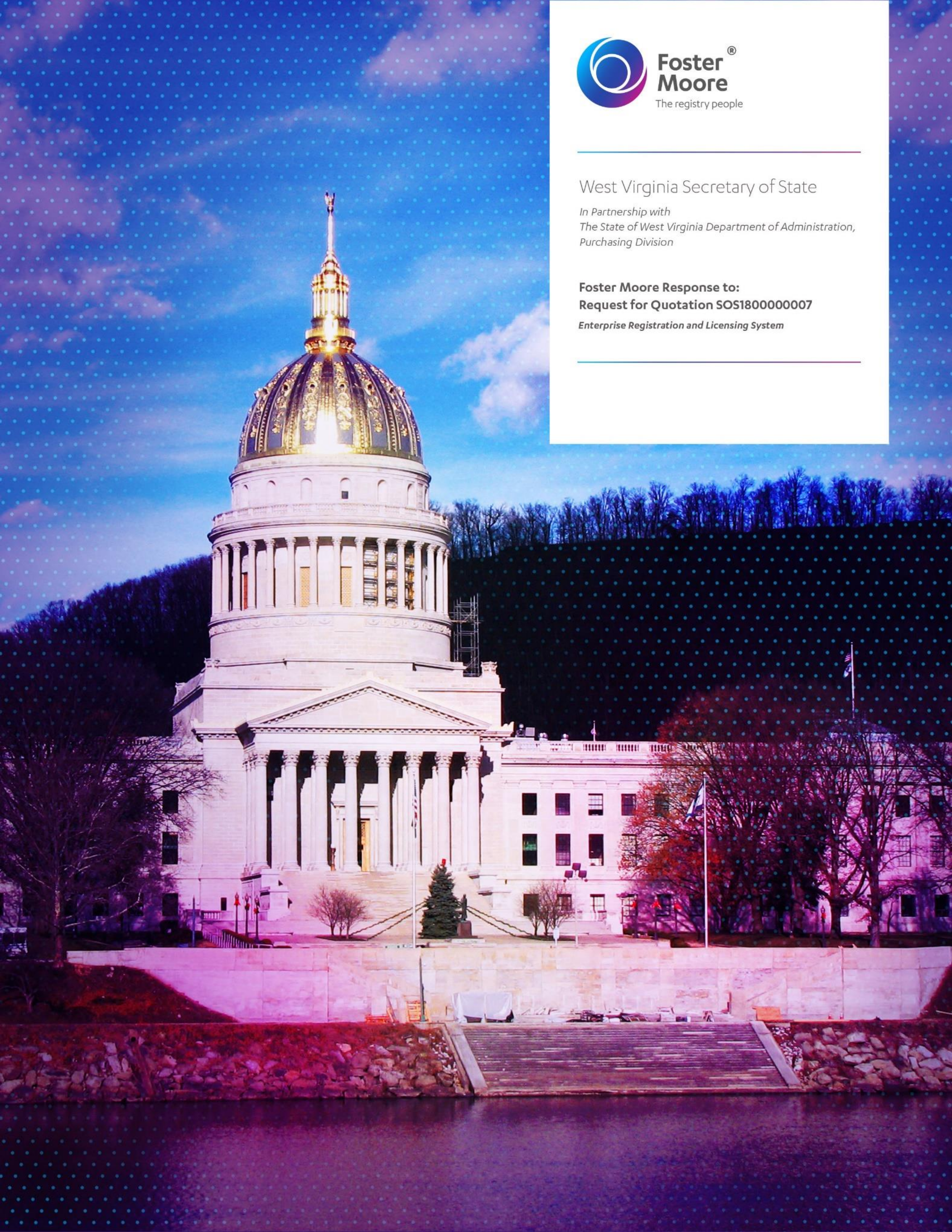
Foster Moore®
The registry people

West Virginia Secretary of State

In Partnership with
The State of West Virginia Department of Administration, Purchasing Division

Foster Moore Response to:
Request for Quotation SOS1800000007

Enterprise Registration and Licensing System



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Addendum Acknowledgement Form

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ SOS1800000007

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1	[ ] Addendum No. 6
[X] Addendum No. 2	[ ] Addendum No. 7
[X] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Foster Moore US, LLC
Company

Kelly Kopyt, VP US Operations
Authorized Signature

July 12, 2018
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Introduction

Foster Moore US, a Limited Liability Company incorporated in North Carolina and a wholly owned subsidiary of Foster Moore International Limited, is excited to present our response to the West Virginia Secretary of State's Request for Quote (RFQ) for an Enterprise Registry and Licensing System. We provide the world's most innovative electronic registry and licensing solutions for government organizations across the globe and look forward being of service to the citizens and administrators of West Virginia soon.

With a US team of over forty employees and growing, our global organization consists of 230+ government registry and licensing thought leaders. Teammates include the former president and board members of the International Association of Commercial Administrators (IACA), the co-founder of the Corporate Registries Forum (CRF), leaders within registry and licensing related government organizations across the world and hundreds of years of combined government registry and licensing experience. We are long term corporate partners and sponsors of the National Association of Secretaries of State and IACA, both in which the WVSOS staff have actively participated for years, and we attribute much of our sustained success and growth to the collaborative relationships afforded by these associations.

Our response to this RFQ is based on a cloud hosted implementation of Catalyst The Registry Manager™, funded via a Transactional Fee model. This allows WVSOS to acquire a solution while minimalizing upfront financial commitments and still maintain the ability to easily scale or add additional registers in the future. Catalyst is our purpose built configurable Commercial-of-the-Shelf (COTS) registry and licensing software solution. Foster Moore built Catalyst for one specific reason; to innovate and improve the ease by which citizens and organizations do business with their governments. Catalyst is the world's most effective, efficient and scalable COTS government registry software, built on the basis of Foster Moore's twenty-three years of experience implementing and supporting licensing and registry solutions for government clients around the globe.

WVSOS needs a strategic partner, with an innovative and mature solution, that is experienced in solving the modernization challenges and meeting the goals of large scale public registry and licensing authorities. Foster Moore's experience in this realm is unrivaled. We are the right partner with the right product that the WVSOS can depend on to provide an efficient, cost effective and streamlined application for the public and administration, alike. We welcome any questions, comments and invitations and look forward to discussing this undertaking in more detail soon.

Attachment A, Process Requirements

1. Create Licensing or Registry

Requirements
Provide external users with online filing options for various types of licensing/registry area and structure (e.g. Charities, Apostilles, Scrap Metal Dealers)
Ability for internal staff to manually create license/registration in the system by uploading a filing image of a paper document, which was scanned outside of the system.
Ability for internal staff to reject submitted applications/documents
Provide external users with the ability to file/process authentications, licenses, registration and other services
Provide external users the ability to file modifications online

1.1 Provide external users with online filing options for various types of licensing/registry area and structure (e.g. Charities, Apostilles, Scrap Metal Dealers)

Catalyst, The Registry Manager is a highly configurable web-based software platform designed to meet the needs of various government registers supported in multiple jurisdictions under differing legislative environments. Catalyst is based on a set of core components that interact with each other to deliver the business functionality required to operate online registries. This extremely flexible platform has been used for our clients in many jurisdictions around the world to deliver a range of registers including notaries, charities, apostille, security guards and trademarks. Catalyst can be configured to enable online filing options for practically any type of register or licensing application, including all service areas required by the West Virginia Secretary of State.

Catalyst is delivered via a browser-based user interface that adheres to industry standards, including responsive design, and is therefore compatible with mobile browsers. In addition to presenting the standard web-based forms on a mobile device, Catalyst can be configured to deliver mobile-specific online applications.

External users are typically members of the public who interact with the online filing system for the purposes of maintaining entities and interests they have as an individual. They have access to integrated search, creation, reservation, registration and compliance functions, as well as online payment facilities. External users may also be agents, such as accountants and lawyers, whose clients have granted them permission to manage their entities on their behalf. Catalyst provides a range of management tools to simplify and improve the efficiency of these agents managing entities for large volumes of customers.

The user interface for external users is based on the premise that many of the public users will visit the online register relatively infrequently. The screens they use must be intuitive, with a priority on ease of use and self-service. These screens also balance this type of usage with the regular usage of the system made by lawyers and accountants who perform transactions on behalf of their clients.

Functionality available to external users is restricted compared to internal users. Public users can maintain their own account information, including contact information, payment information (e.g. credit card) and associated entities. They will also typically perform compliance activities such as annual renewals.

1.2 Ability for internal staff to manually create license/registration in the system

Paper-based forms, including licenses and other transactions, can be managed by Catalyst's Document Receipting module. This module streamlines the intake of paper-initiated transactions into the online workflow system and ensures that paper-initiated transactions follow the same processes as online transactions.

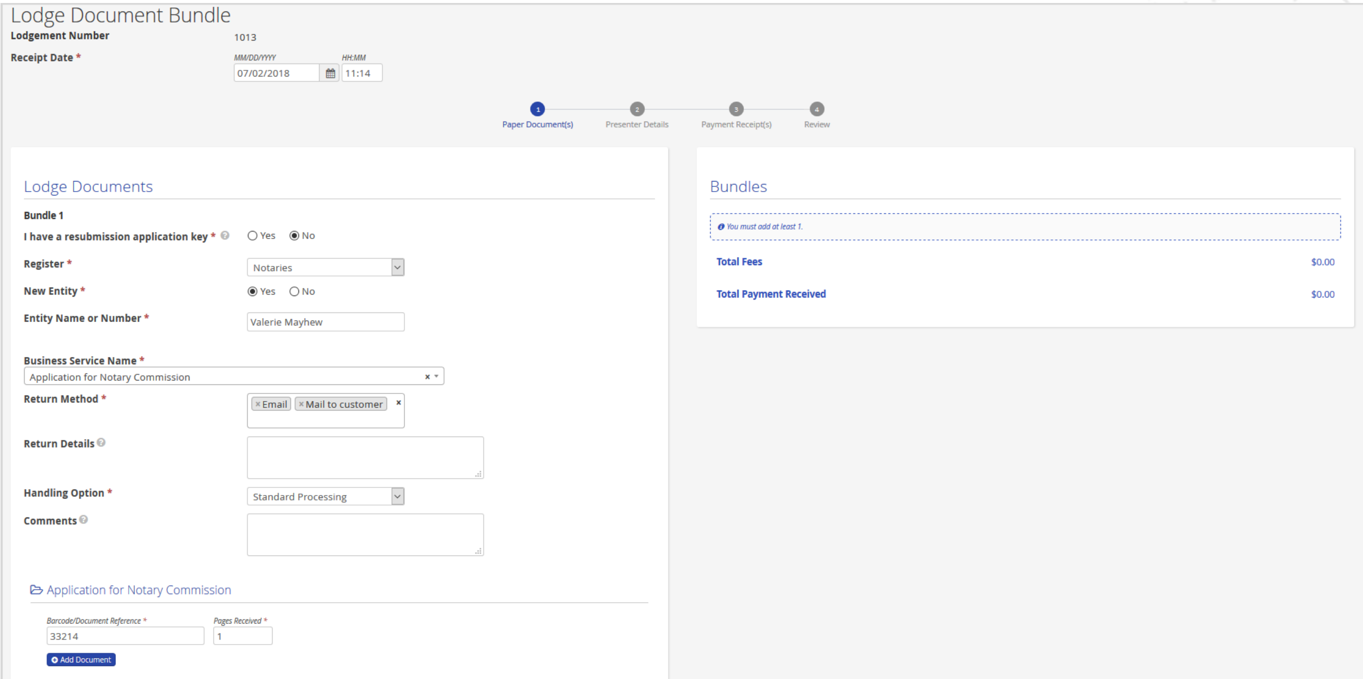

Figure 1. Catalyst - Sample Document Lodgment Screen illustrating the Wizard User Interface

Registry and licensing best practices recommend transitioning as much as possible to an online self-service model, which is promoted by Catalyst. This reduces manual effort within the registry office and improves data quality and responsiveness within the register. However, for some clients, the volume of manual creation is anticipated to be relatively high. This could be for a number of different reasons. For example:

- Low level of access/take-up in respect to internet capability and services
- Customer preferences
- In situations where high overall volumes will mean that even a small percentage of offline lodgments will create significant workload

The Catalyst Document Receipting module enables internal Registry staff to meet client expectations and needs and minimize the workload on front-office Registry staff. From a customer perspective, Document Receipting can significantly minimize the waiting time for walk-in customers at front counters. Customers simply lodge their paper applications, pay any associated fees and receive a receipt as proof of lodgment & payment; no need to wait for their application to be processed in its entirety.

Like an online application, notifications can be configured to be sent to the filer informing them of the progress of their application. The Document Receipting module assigns a unique identifier to each paper document and uses this identifier (attached to the paper document as a barcode) to link the paper document to the filing entity.

Once the document has been lodged within the system, the data is loaded into the system. This can be done manually, or the document can be scanned and processed by an optical character recognition (OCR) system to automated conversion to electronic data (integration with third party OCR software required).

Alternative Solution

Where the number of paper based forms is expected to be relatively low it may be decided not to use the document receipting module. Catalyst allows an internal user to invoke a service available to an online user in the same manner as an online filer would do. The system would require the internal user to enter the filer name and address before presenting them with the online form for data entry. The paper documents will need to be scanned and available for uploading when completing data entry. A data entry task will be created if the internal user saves a draft version of the application.

1.3 Ability for internal staff to reject submitted applications/documents

Internal users are staff of the register responsible for operating the online filing systems and registers implemented with Catalyst. Depending on the system permissions each individual is assigned, these users have access to almost all functions within the system. Principally these users are responsible for performing activities identified in the system's work queue.

Unlike external users, internal (private) users receive formal training in the use of the system, and they also need to be able to perform repetitive functions many times each day with high efficiency. For these reasons, their user interface is designed to ensure maximum usability and efficiency in performing these repetitive and often complex tasks.

Catalyst provides an advanced browser-based application for use by staff within the registry office. This application is focused on efficiently supporting the day-to-day administrative and management functions they perform against the registry (e.g. approval of incorporations and management of overdue activities).

Catalyst provides an integrated task management system that supports the assignment of tasks and activities to teams and team members. A fully interactive task list provides each user with a view of outstanding tasks, allowing them to select, update and complete tasks online. Registry staff can create and send correspondence on demand based on a range of templates. Staff select a correspondence template as the basis for a document and may edit the correspondence body prior to its delivery by email, printing or fax.

On submission of the application, a defined workflow will trigger tasks to notify internal staff of the application, prompting them to review the application and to approve or reject it.

Once the application has been submitted by the user, it will be subject to the workflow configured within Catalyst for that entity type being created. This may include a manual review within the registry office.

- Acceptance/Rejection – a typical application review process, whereby the contents of an application and/or supporting documentation need to be checked visually for correctness and/or completeness. The subsequent workflow may alter based on the result of the review. On submission or re-submission of an application, the appropriate review task is created and assigned to the internal registry users' work queue.

  On an internal user's approval of an application, the requested changes are applied to the register and the filer sent an email confirmation of the completion of the service.

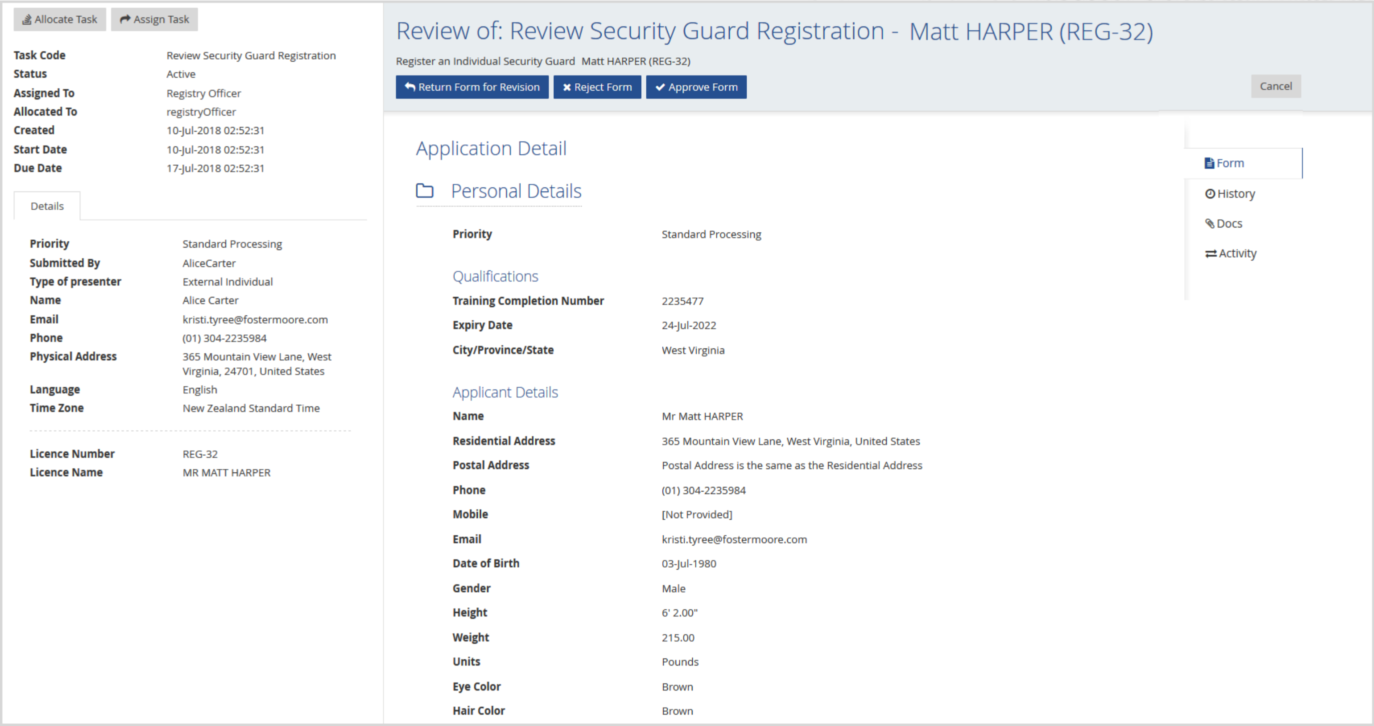

Figure 2: Catalyst - Occupational Register Service Review Screen

On rejection of an application, an internal user specifies at least one rejection reason (dynamically presented as a list on the Review screen, depending on the form, along with a free-form text box in which other non-standard rejection reasons may be given). The filer receives an email notification of the rejection, with the reason(s) for rejection stated within the email.

Applications that do not require an internal review will be marked as registered on payment of the fees. The requested changes will be automatically applied to the Register at that point.

- Re-submission – on rejection of an application, a filer may be allowed to rectify any errors and re-submit the application within a re-submission period. This period is defined per application that requires internal review. This states the number of days within which a filer must re-submit a rejected application, from the date of its rejection. After this period, the rejected application will no longer be available for re-submission. An internal user retains visibility of rejected applications via the company search functions.

  Applications that cannot be re-submitted will remain in their final state of 'Rejected.'

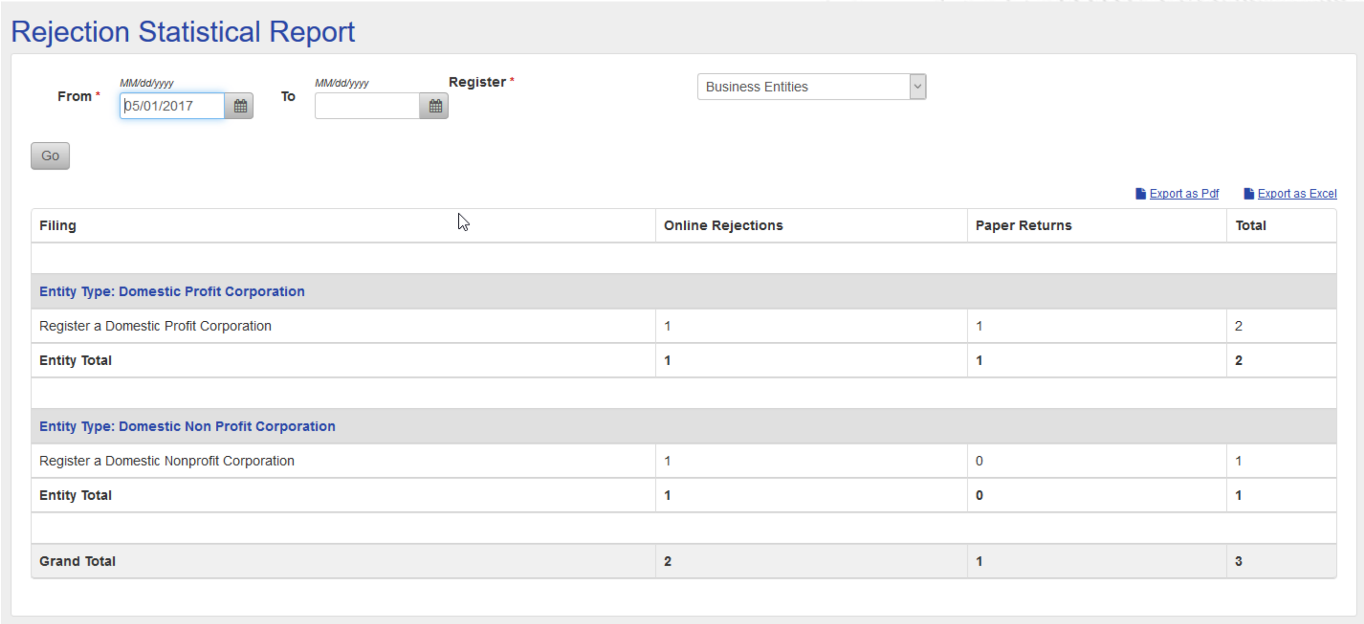

Figure 3. Catalyst - Rejection Statistical Report

1.4 Provide external users with the ability to file/process authentications, licenses, registration and other services

External users are typically members of the public who interact with the online filing system for the purposes of maintaining entities and interests they have as an individual. They have access to integrated search, creation, reservation, registration and compliance functions, as well as online payment facilities. External users may also be agents, such as accountants and lawyers, whose clients have granted them permission to manage their entities on their behalf. Catalyst provides these external users the ability to file/process authentication, licenses, registration and any other Registry and Licensing services required by the West Virginia Secretary of State.

The user interface for external users is based on the premise that many of the public users will visit the online register relatively infrequently. The screens they use must be intuitive, with a priority on ease of use and self-service. These screens also balance this type of usage with the regular usage of the system made by lawyers and accountants who perform transactions on behalf of their clients.

Functionality available to external users is restricted compared to internal users. Public users can maintain their own account information, including contact information, payment information (e.g. credit card) and associated entities as well as complete compliance activities such as annual license renewals.

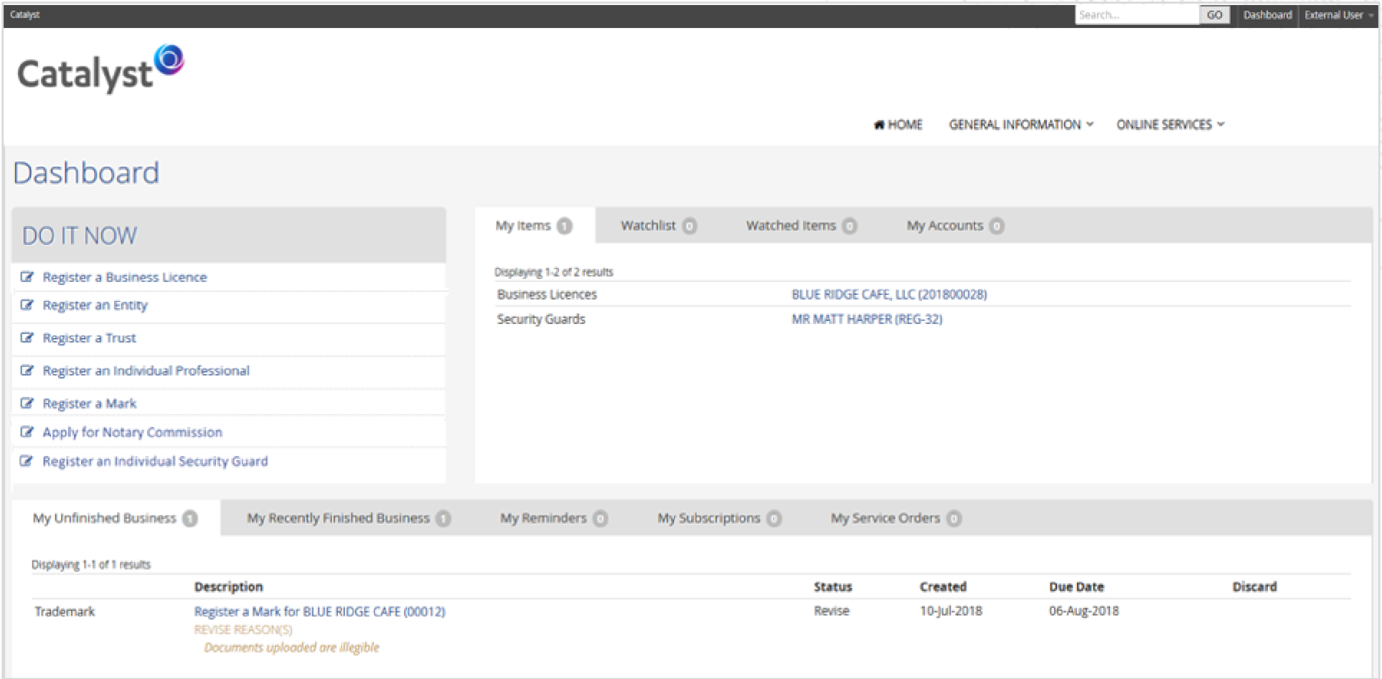

Figure 4. Catalyst - External User Homepage

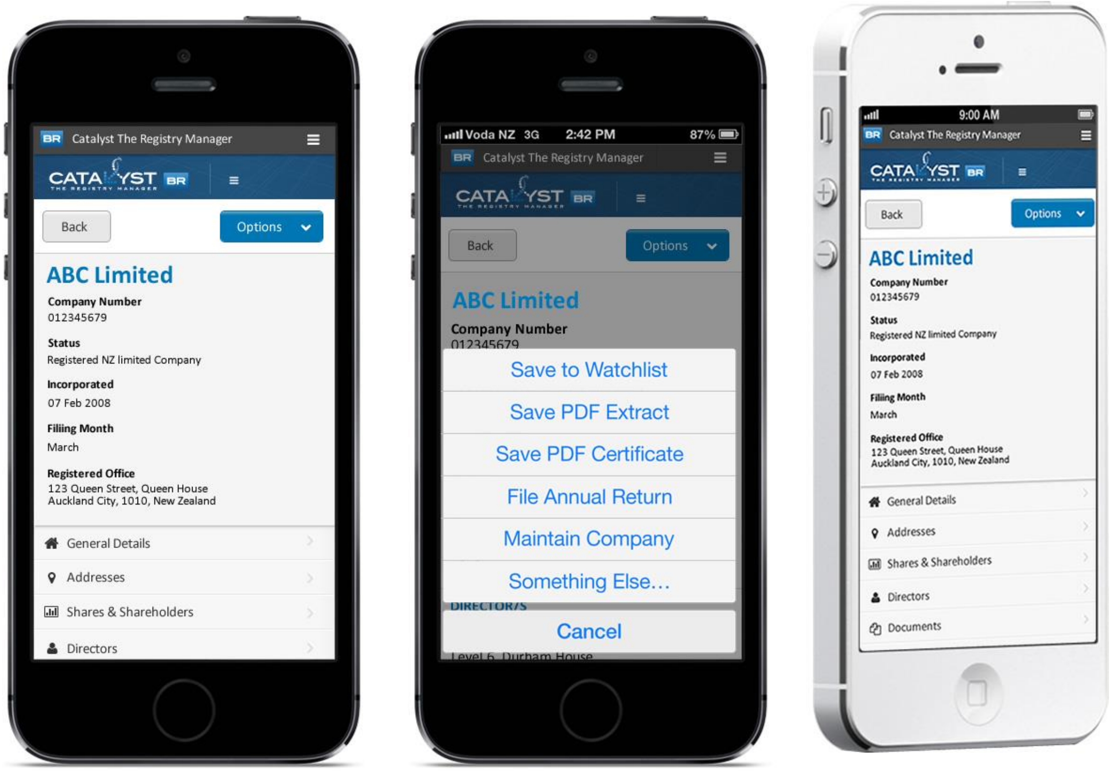

Figure 5. Catalyst - Sample Mobile Search and Detail Screens

1.5 Provide external users the ability to file modifications online

The Catalyst dashboard for external users provides an overview of the entities the users are associated with, the compliance activities they need to manage and business services available to them. The dashboard spans all registers and systems delivered by Catalyst within the client's site and provides integrated, consistent and seamless access across all registers.

For external users, Catalyst provides the following information on their dashboard.

- Quick links to business services;
- Details of applications have outstanding (that are pending, awaiting review or have been returned);
- Details of applications that have recently been submitted;
- A list of reminders such as an Annual Renewal due;
- Widget to identify if they are acting as an individual or on behalf of an organization
- List of entities the user has selected to watch;
- List of entities that a user or their organization has authority over, includes links to provide users with quick access to the entity profile information;
- List of payment accounts that the user or their organization is linked to.

Once a profile or record is accessed that a logged in user has authority to modify, all relevant modifications for that type of record are available via the Maintenance menu, as shown below. Maintenance menu options are also conditionally driven by the status of the record. For example, if a Security Guard registration has expired, the option to perform a name change will not be available, depending on the state's requirements.

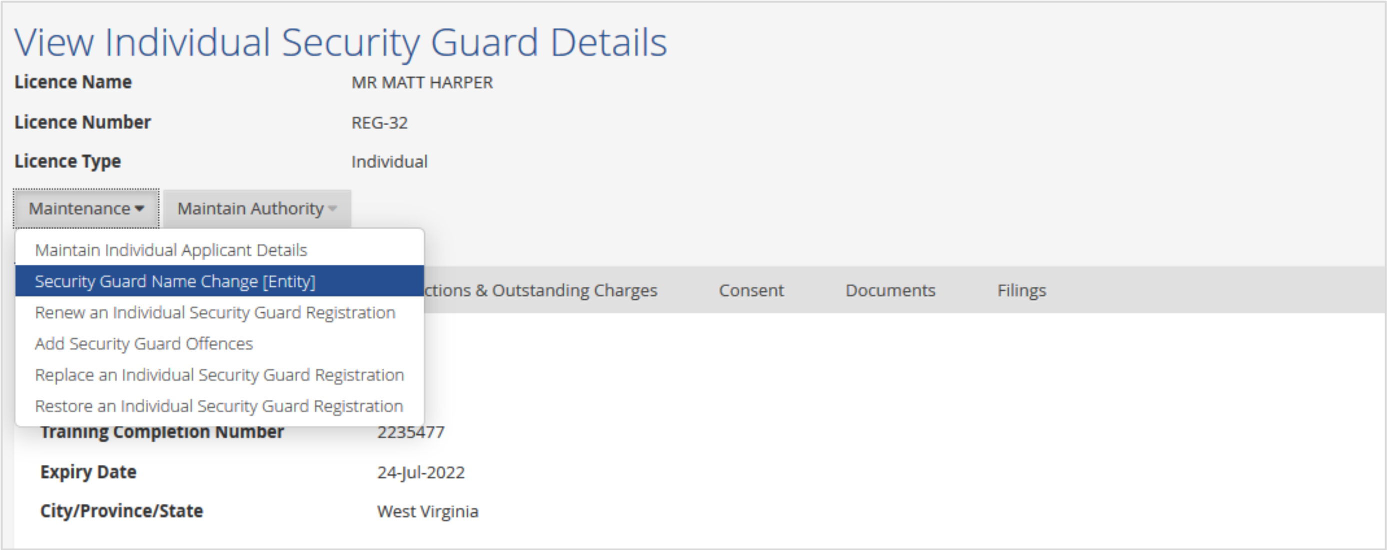

Figure 6. Catalyst - Sample Screen, Modify Security Guard Profile

2. Modify Licensing or Registry

Requirements
Ability for external user to manage/change information
Ability for external user to submit a request to renew, reinstate or withdraw an application
Ability to request a certificate of status or additional copies of a certificate of status
Ability to request and obtain a certified copy of a filed document
Ability to upload attachments with online filings

2.1 Ability for external user to manage/change information

The user interface for external users is based on the premise that many of the public users will visit the online register relatively infrequently. The screens they use must be intuitive, with a priority on ease of use and self-service. These screens also balance this type of usage with the regular usage of the system made by lawyers and accountants who perform transactions on behalf of their clients. External users can maintain their own account information, including contact information, payment information (e.g. credit card) and associated entities as well as complete compliance activities such as annual license renewals.

Manage Business Entity or Licensing Profile Information

To access business information, users select the business' profile to see current and previous information, filing history and to request copies and certificates. The current information is presented in a tab structure which will match the set of data that was entered during the creation filing. Each data entry step encountered during the creation filing will have its own tab: General Details, Principals and Documents. The user may select each tab to view the current information and previous information such as name history.

History Details

In addition to the current information, a History Details tab will be shown. The user may select this to view all filings and actions performed related to the entity. Each filing is presented in descending order, with a link to view entity details that were changed by the filing. At the bottom of the history details page is a section which contains any filings which have a future effective date, hence are not currently active in the system and the contents of which do not yet display on the register.

To view details for a filing history, the user clicks on the filing name, which displays the filing content in a popup for review. The popup contains all information entered for the filing, including who submitted the filing, and the receipt date/time. The user may export the filing to PDF, for easy viewing or printing. Depending on the project configuration, the user may access a copy of the filing image.

Maintenance Services

Users profiles with permission to maintain the entity provide options to manage authority and submit maintenance services such as contact information, physical locations, payment information, assignments, changes of names and cancellations. User maintenance access will be dependent on the status of the entity as well as the authority given to the online user performing the changes. If the user is unable to access these options due to authority and believes this to be in error, they may request authority to maintain the entity. This important security measure ensures registry database integrity by minimizing fraudulent filings.

2.2 Ability for external user to submit a request to renew, reinstate or withdraw an application

Catalyst provides the following core functions to external users to support the creation and maintenance of registrations and licenses:

- Apply for Registration or License - Allows practitioner to apply to be placed on the Registry.
- Apply to enter qualification process - Allows an external user to apply to enter a qualification process (e.g. Licensure Exam).
- Change Licensee Name - Allows a user to apply to change licensee name.
- Apply to Restore/Reinstate Registration or License - Allows a user to apply to restore a registration or license that has been removed from the register.
- Renew Registration or License - Allows a user to renew a registration or license.
- Maintain Details - Allows user to update details about a registration or license.
- Upload a Document - Enables a user to upload mandatory or supporting documents, e.g. proof of identification, certifications etc.
- List My Unfinished Business - Allows a user to view a list of pending or returned applications and select one in order to submit, resubmit or withdraw. A user can view a list of applications that are awaiting review or have been approved.
- Create Applicant - Allows a user to create a new applicant.
- Remove from Register - Provides the ability for a licensee to request their removal from the register.

2.3 Ability to request a certificate of status or additional copies of a certificate of status

A business service called 'Request for Business Certificates' will be available online or via document receipting for paper requests. This business service will be available within the context of a business entity. This service will list certificates that may be requested, for example:

- Certificate of Good Standing
- Certificate of Existence
- Certificate of Authorization
- Certificate of Fact
- Certificate of Registration

On submission of the service and payment of any requisite fees, Catalyst will generate the requested certificate as a PDF document and email it directly to an external user for an online submission or paper submission with return method by email. For other types of returns, the output documents may be printed by the processing officer.

Catalyst can be configured to create certificates at key points in an entity's lifecycle (e.g., at time of license acceptance). Such certificates are created based on a configurable template and are distributed based on configurable communication rules (e.g. e-mail), as well as being available for download at any time.

Certificates can be configured to include watermarks, stamp/crests, signatures, verification codes, QR codes and other security features. QR codes will allow for verification of the certificate via an embedded URL that will take the viewer to the "View Entity Details" screen in Catalyst.

Catalyst stores details about all new, altered, or deleted data. Catalyst also stores “before images” of all data before it is updated or deleted. This allows authorized users to view a complete change history of all data within the system. Through the data that is stored in a versioned state, the user will have the ability to request an extract for each entity at any point in time (post Catalyst implementation). This same feature can also be used to generate a certificate for an entity at a point in time.

2.4 Ability to request and obtain a certified copy of a filed document

Catalyst makes all filings defined as available to the public visible for copies requests. All filings for the business appear and users can select them individually or select all for the copies request. An additional option appears for Certification to allow the copies to be accompanied by a certificate provided by the jurisdiction. Jurisdictions define the fee structure for these requests and any additional fee for the certification.

For copies, the same delivery method options and functionality exists as for Certificates Requests, allowing the user to view downloads while remaining in Catalyst and/or having them emailed.

A unique document verification code will be assigned to each document. The standard Catalyst online service, ‘Verify Document Code,’ authenticates the validity of the document given the document verification code.

2.5 Ability to upload attachments with online filings

Document uploads can be set to required, optional or conditional per online service. The client jurisdiction defines the number of documents that can uploaded per requirement, the document types allowed and any size restrictions. Document uploads are visible to internal staff during the review process and can be split off as a separate task for review, at the discretion of the internal user or in accordance with office workflow requirements.

3. Fiscal Processing

Requirements
Ability to accept credit card payments
Ability to associate a payment to an entity for online and manual filings
Provide audit tracking for all financial processing associated to an entity
Ability to search, review and modify payment information associated to an entity
Ability to process refunds and reconcile payments received

3.1 Ability to accept credit card payments

Foster Moore has extensive experience in online payment processing, with virtually all registry solutions we design and build allowing for credit card payments. In all Catalyst implementation, payments are handled by an external gateway and data related to the credit card is not stored within Catalyst. Our solution meets the appropriate requirements of the PCI-DSS and PA-DSS standards.

Where actions such as registration, licensing and renewal incur a fee, the user must complete the payment online before the transaction is accepted by the system.

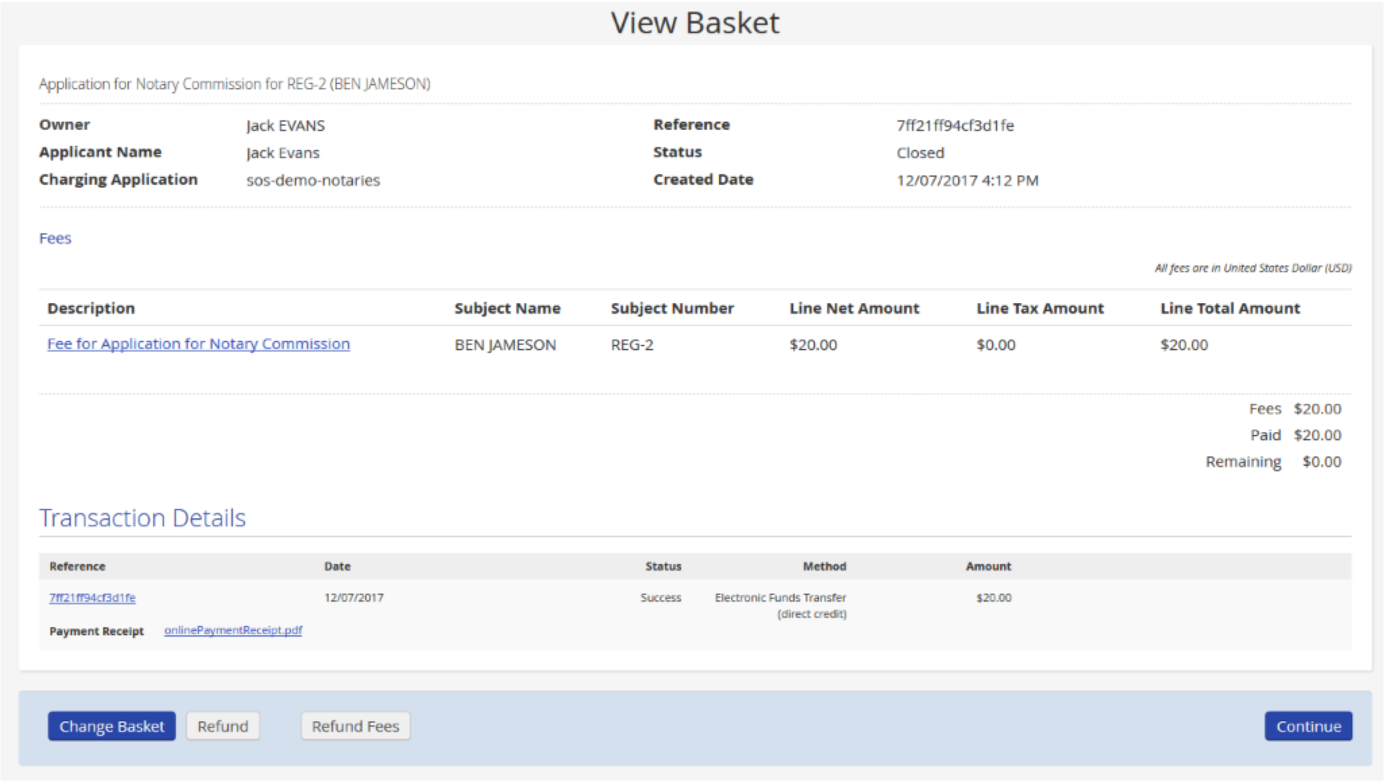

Figure 7. Catalyst - Collection of Fee from External User

3.2 Ability to associate a payment to an entity for online and manual filings

Catalyst includes a flexible fee schedule that manages the collection and processing of fees for registry services. The system calculates and allocates fees based on pre-defined business rules and includes support for flat fees, sliding-scale fees and late fees. Catalyst also manages the generation of invoices and the processing of receipts.

Catalyst provides for collection and processing of fees in the following methods:

- Credit Card Payment - Integration with a third party payment provider enables credit card transactions.
- Pre-paid account - An account balance is maintained per user account. This account balance is incremented online by an internal user, based on a payment receipt (transacted either at an authorized office, e.g. Registry Office, Ministry of Finance or bank branches). There must be sufficient funds in the account to cover filing of a notice.
- Billing account - Post-paid account where funds are not pre-allocated. Pre-approved users will be automatically invoiced monthly by the Register. Non-payment may result in de-activation of the account.
- Cash, Checks, Bank Draft, Other - These payment methods are available to internal users only entering paper applications on behalf of the customer.

Fees and penalties are configured within the workflow and are charged on submission of a business service. Where the application and related payments are not concluded within the configured timeframe, then compliance routines can trigger the termination, cancellation or revocation of entities. An authorized internal user may waive the partial or full penalty fee as client rules and regulations allow.

Catalyst generates daily revenue summary worksheets used for reconciliation purposes. Sample reports as follows:

- Revenue summary by payment type on payments that are collected via the various branch offices for transactions processed by internal staff.
- Revenue summary for external payments that are made by public users.

All transactions within Catalyst are linked to the original register event to which they relate and to a customer account, based on the logged in user who initiated the transaction. This is handled by Catalyst’s payments module.

3.3 Provide audit tracking for all financial processing associated to an entity

Catalyst maintains audit logs of all activities that take place within the system, financial and otherwise. Audit trails cover business activities as well as system and security events. The audit log is a standard facility that requires no customization or configuration to enable. Catalyst stores details about all new, altered or deleted data. Catalyst also stores “before images” of all data before it is updated or deleted. This allows authorized users to view a complete change history of all data within the system.

Catalyst provides three distinct product features which facilitate the monitoring and auditing of activity within a register:

1. Audit logging - Catalyst maintains audit logs of all activities that take place within the system. Catalyst creates audit trails covering business activities as well as system and security events. Catalyst’s audit log is a standard facility that requires no customization or configuration to enable.
2. Versioning & Snapshots - Catalyst stores details about all new, altered or deleted data. Catalyst also stores “before images” of all data before it is updated or deleted. This allows authorized users to view a complete change history of all data within the system.

3. <u>Business Service Activity Counters</u> - Catalyst uses business service counters to record the activities that take place across the entire register and provides reports of the activity counters by activity type. Business activity counters capture and report on activity across the system and are not entity-centric; providing a system-wide view of activity across the entire register.

3.4 Ability to search, review and modify payment information associated to an entity

In addition to the collection and processing of fees, Catalyst supports the ability to manage payments after they have been collected. An internal user with the appropriate permissions can search for and locate a fee and associated payment and, based on the jurisdiction's enabled options, change fee information and adjust or refund a payment.

Change Fee Information

Once the fee and associated payment are found, the user can select Change Basket to modify information related to the fee. This functionality can be limited to the appropriate users and are typically administrative functions that are only used / approved if a mistake is made. If a change is made, full auditing is tracked to ensure for accountability and reconciliation purposes. By providing this function within Catalyst, jurisdictions may complete their own corrections without the need for a support request.

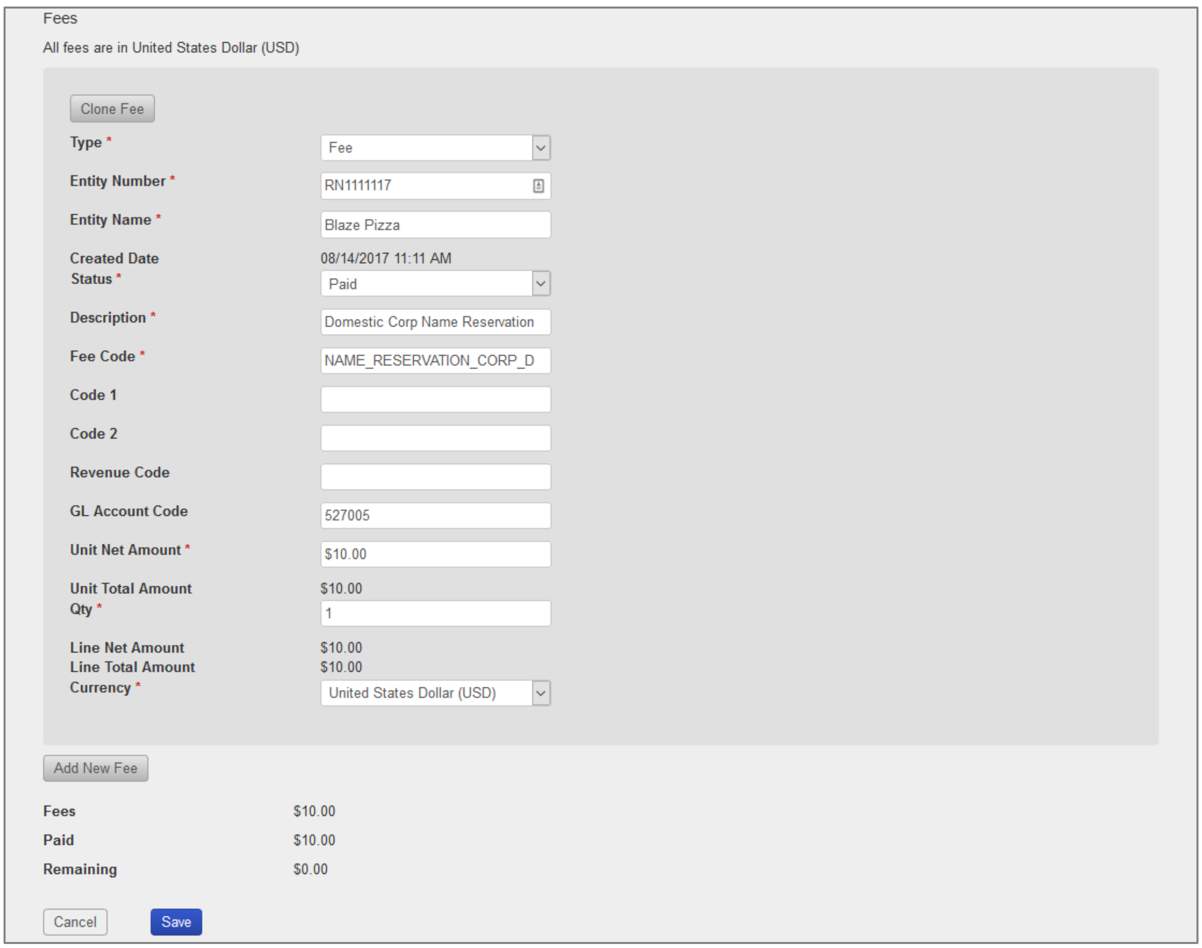

Figure 8. Catalyst - Transaction Edit Screen

Administration - Create and Edit Fees

A user with appropriate permissions, typically an administrator, can create and/or edit fees. This provides administrators the ability to edit a fee description, total amount, tax, GL codes, or penalty fees. This functionality allows for the jurisdiction to handle fee and reconciliation changes over time, without the need for a support request.

Changes to a fee will only affect new filings and services, not items in progress. This is done to preserve data integrity, ensuring reconciliation is not affected.

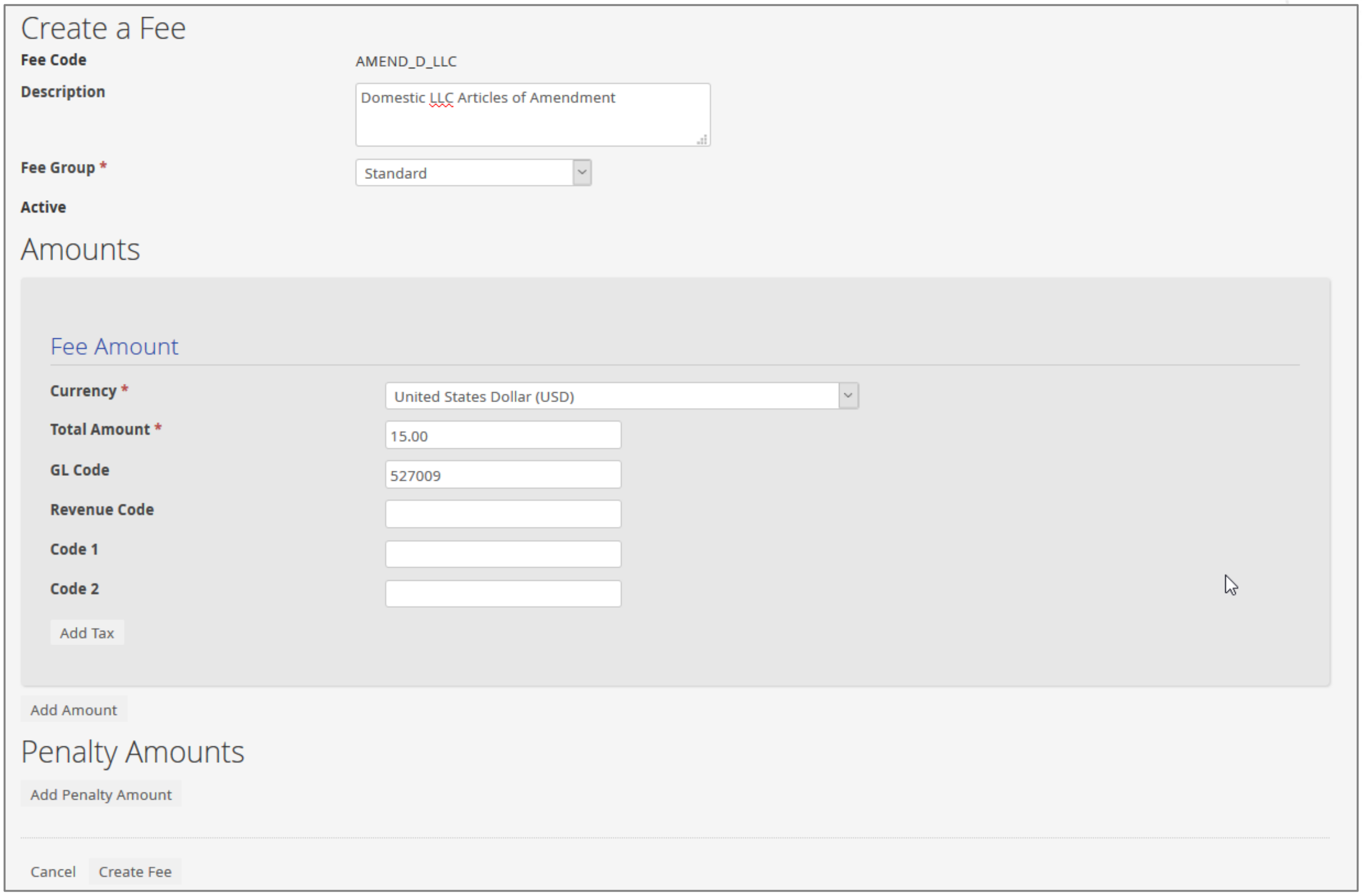

Figure 9. Catalyst - Fee Creation

3.5 Ability to process refunds and reconcile payments received

Refund Payment

If a fee needs to be refunded, an internal user with the appropriate permissions can perform a partial or full refund. As part of completing the refund, supporting information can be supplied such as a refund reason, comment, or method of return. The GL Code is also captured for reconciliation in the event the GL Account differs based on the type of refund performed.

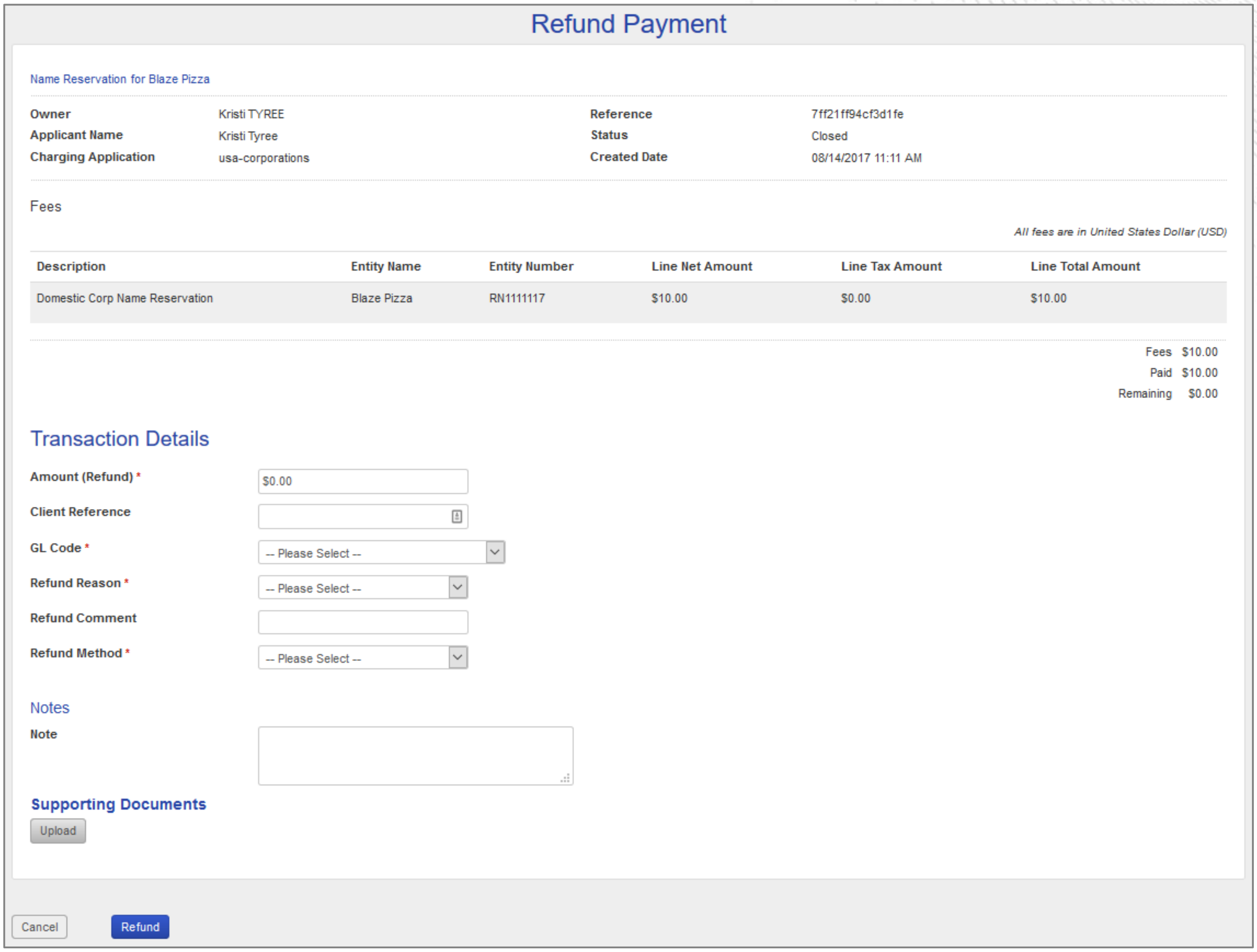

Figure 10. Catalyst - Refund Payment Screen

Adjust Payment

If all or part of a payment needs to be adjusted to a different GL Account, Catalyst allows for the moving of funds from one GL Account to another through an adjustment. Along with the adjustment amount, Catalyst captures the type (credit or debit), the GL Code and the adjustment reason.

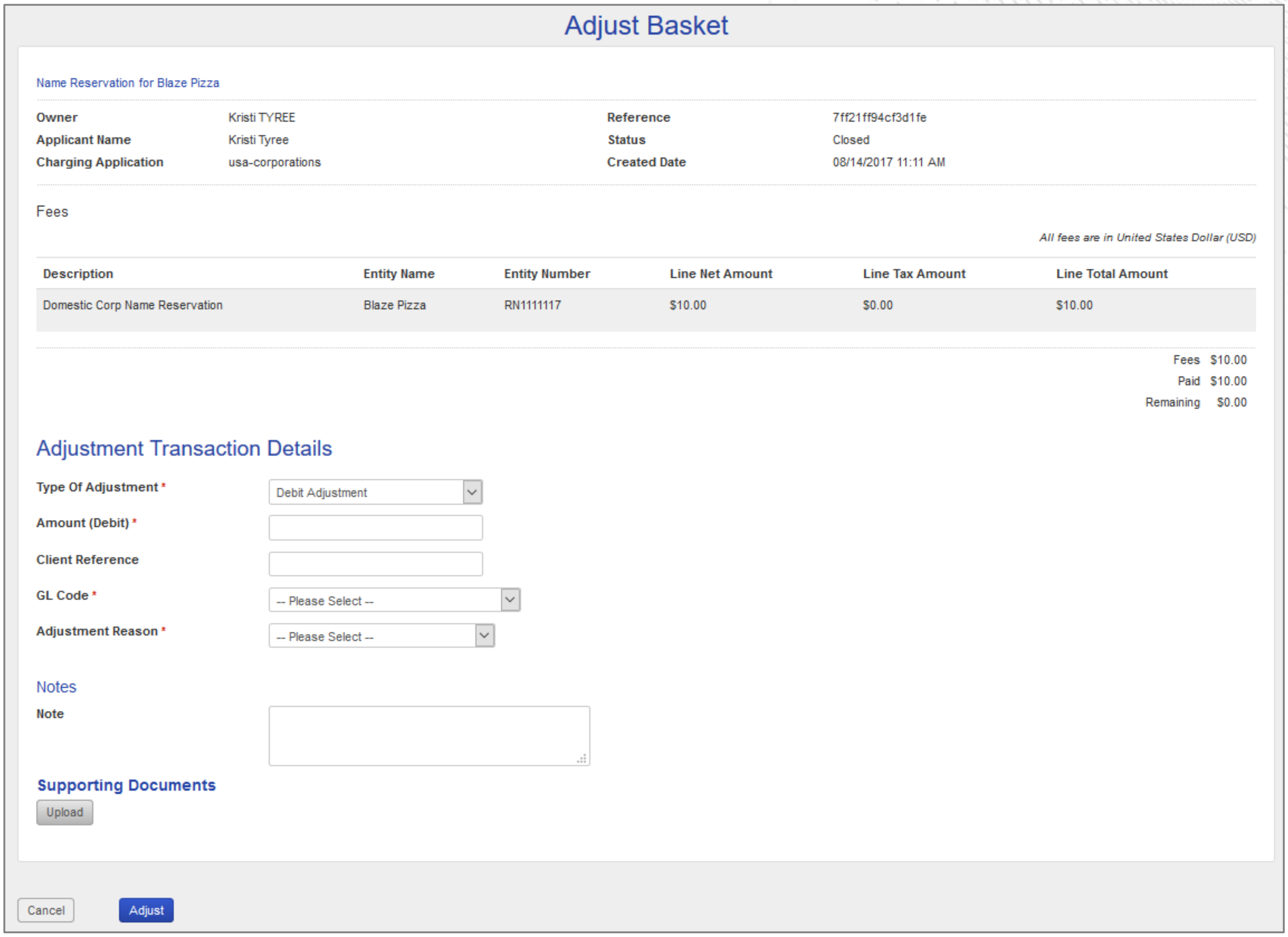

Figure 11. Catalyst - Adjust Basket Screen

Reconciliation of Payments Received

Catalyst generates daily revenue summary worksheets used for reconciliation purposes. All transactions within Catalyst are linked to the original register event to which they relate and to a customer account, based on the logged in user who initiated the transaction. This is handled by Catalyst's payments module. The following standard reports assist in day end reconciliation and provide information on payments received during a given time period.

- Daily Reconciliation Report by User - this report provides the receipting staff member with details of payments receipted for a particular period. The report can be run for a single day and can be filtered by a particular registry staff member.
- Receipts by Payment Type - this report provides the receipting staff member with a summary of payments receipted for a particular period. Payments are grouped by payment method and then grouped into those that will be deposited and those that will not.
- Payments Received Report - This report provides the receipting staff member with a list of payments receipted for a particular period, by default this is set to the beginning of the current day and the current date and time. Payments are grouped by payment method and details of each payment are shown

4. Scanning/Imaging Paper Documents

Requirements
Ability to upload documents which were scanned outside of the system and associate them to an entity

4.1 Ability to upload documents which were scanned outside of the system and associate them to an entity

Paper-based forms, including lodgments and other transactions, can be managed by Catalyst's Document Receipting module. This module streamlines the intake of paper-initiated transactions into the online workflow system and ensures that paper-initiated transactions follow the same processes as online transactions. The image below highlights the ability to add unlimited forms per filer submission. On the left of the screen, users order forms, indicate the associated entity and scan documents. On the right of the screen, users can review all documents ordered within the submission and the running total of fees.

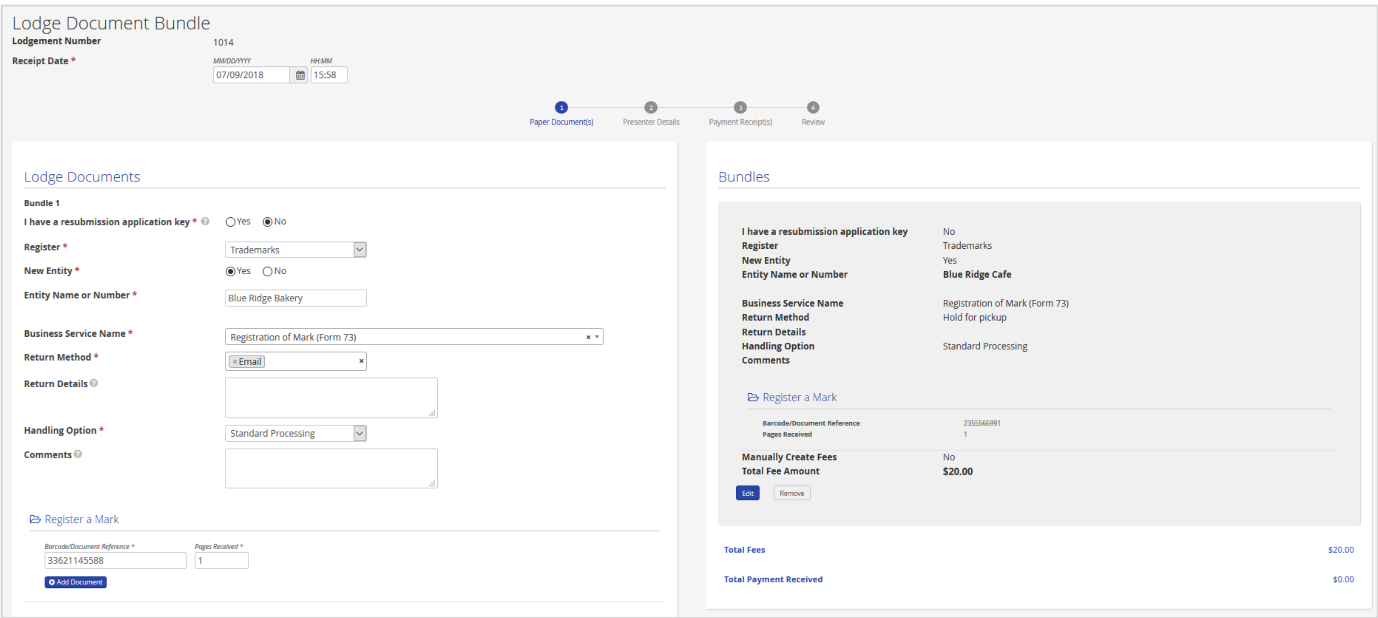

Figure 12. Catalyst - Sample Document Lodgment Screen Illustrating the Wizard User Interface

Document Receipting Module

The Catalyst Document Receipting module enables internal Registry staff to meet client expectations and needs and minimize the workload on front-office Registry staff. From a customer perspective, Document Receipting can significantly minimize the waiting time for walk-in customers at front counters. Customers simply lodge their paper applications, pay any associated fees and receive a receipt as proof of lodgment & payment; no need to wait for their application to be processed in its entirety.

Like an online application, notifications can be configured to be sent to the filer informing them of the progress of their application. The Document Receipting module assigns a unique identifier to each paper document and uses this identifier (attached to the paper document as a barcode) to link the paper document to the filing entity.

Once the document has been lodged within the system, the data is loaded into the system. This can be done manually, or the document can be scanned and processed by an optical character recognition (OCR) system to automated conversion to electronic data (integration with third party OCR software required).

The following steps outline the typical process followed by the Catalyst Document Receipting Module:

1. Lodge Documents
2. Check Documents and Payment
3. Capture Offline Lodgment
4. Generate Lodgment Receipt
5. Scan Lodged Document
6. Link Scanned Document
7. Create Business Service Instance and Work Queue Task
8. Action Work Queue Task
9. Process Business Service Instance

Alternative Solution

Where the number of paper based forms is expected to be relatively low it may be decided not to use the document receipting module. Catalyst allows an internal user to invoke a service available to an online user in the same manner as an online filer would do. The system would require the internal user to enter the filer name and address before presenting them with the online form for data entry. The paper documents will need to be scanned and available for uploading when completing data entry. A data entry task will be created if the internal user saves a draft version of the application. An example of the steps required by an internal user to manage the capture of paper based forms could be as follows:

1. Scan all documents
2. Select Business Service Instance and Enter Presenter Details
3. Action Work Queue Task
4. Process Business Service Instance
5. Enter Payment Details
6. Process Business Service Instance

External Document Scanning Solution

An external component is used to manage the actual scanning and digitizing of paper documents before they are stored within Catalyst's document repository. Catalyst's document receipting and document management modules can integrate with an external OCR component that is configured to enable full-page OCR/ICR/data recognition for forms and documents. This approach allows for the definition of rules that extract metadata from the scanned documents, as well as redacting of documents based on configurable rules. Foster Moore works with each client to assess their requirements in respect to scanning and redaction and their existing infrastructure in this area. Based on this and the long term requirement for scanning as the client moves to an online environment, we assess the available options and costs, including reuse of existing equipment.

Scanned documents are placed in the Catalyst document repository and online searching and viewing is available within Catalyst for all documents, including scanned documents. Each paper document received at the office can be barcoded as part of the document lodgment process. Internal staff members scan the paper documents and upload them against the appropriate entity, along with appropriate metadata.

In addition to the internal document management component, Catalyst can be integrated with an external document management system, such as Documentum and OpenText. Integration with an EDRMS is achieved using Catalyst's existing generic document management system interface, configured to support the selected EDRMS.

5. Correspondence

Requirements
Ability to generate and access specific correspondence templates
Ability to generate correspondence utilizing approved templates
Ability to generate and send a single correspondence and generate and send mass correspondence to specific users (both internal and external)
Ability to log and retrieve all correspondence sent to users regarding their business entity
Ability to provide filing acknowledgements by email regardless of submission method

5.1 Ability to generate and access specific correspondence templates

Catalyst includes a centralized correspondence management system that controls the generation and delivery of internal and external communication. Registry staff can create and send correspondence on demand based on a range of templates. The templates define the basic layout and content of each correspondence item. Staff select a correspondence template as the basis for a document and may edit the correspondence body prior to its delivery.

Appropriately privileged internal users create and manage Correspondence templates, which support the inclusion of Catalyst data fields. When the template is used to generate a correspondence item, the data fields will be automatically populated with the current data from the register. These substitution variables encompass all the attributes of the Entity and also include standard business variables such as current date, time, office addresses and signatures etc. Template configuration includes document formatting, text content, pre-populated data fields and the application of logos and fonts etc.

5.2 Ability to generate correspondence utilizing approved templates

Catalyst supports the generation of correspondence using templates via email, text message notifications and conventional mail and also manages addresses and user information. Appropriately privileged internal users are able to define and maintain which templates are used to support which steps in a business process workflow and which templates are available for the generation of ad hoc correspondence items.

5.3 Ability to generate and send a single correspondence and generate and send mass correspondence to specific users (both internal and external)

Correspondence may be sent to internal and/or external individual or groups of recipients, manually or automatically, from various points in the system (e.g. application review, confirmation of background check, registration acceptance or rejection notices, certifications or renewal notices). Correspondence methods may include email, text message notification, or conventional mail. Attachments may also be added to the correspondence (e.g. PDF containing copy of license approval or search results). The standardization and automation of many correspondence related outputs and tasks assists in the efficient management of communication.

Appropriately privileged users can create official correspondence that are recorded against the entities held on the register. These documents may be internal file notes (e.g. to record details of telephone conversations) or documents that are sent to external parties. Documents may be created automatically or manually.

5.4 Ability to log and retrieve all correspondence sent to users regarding their business entity

All correspondence items created within Catalyst are recorded and logged in individual Documents within the Document Repository.

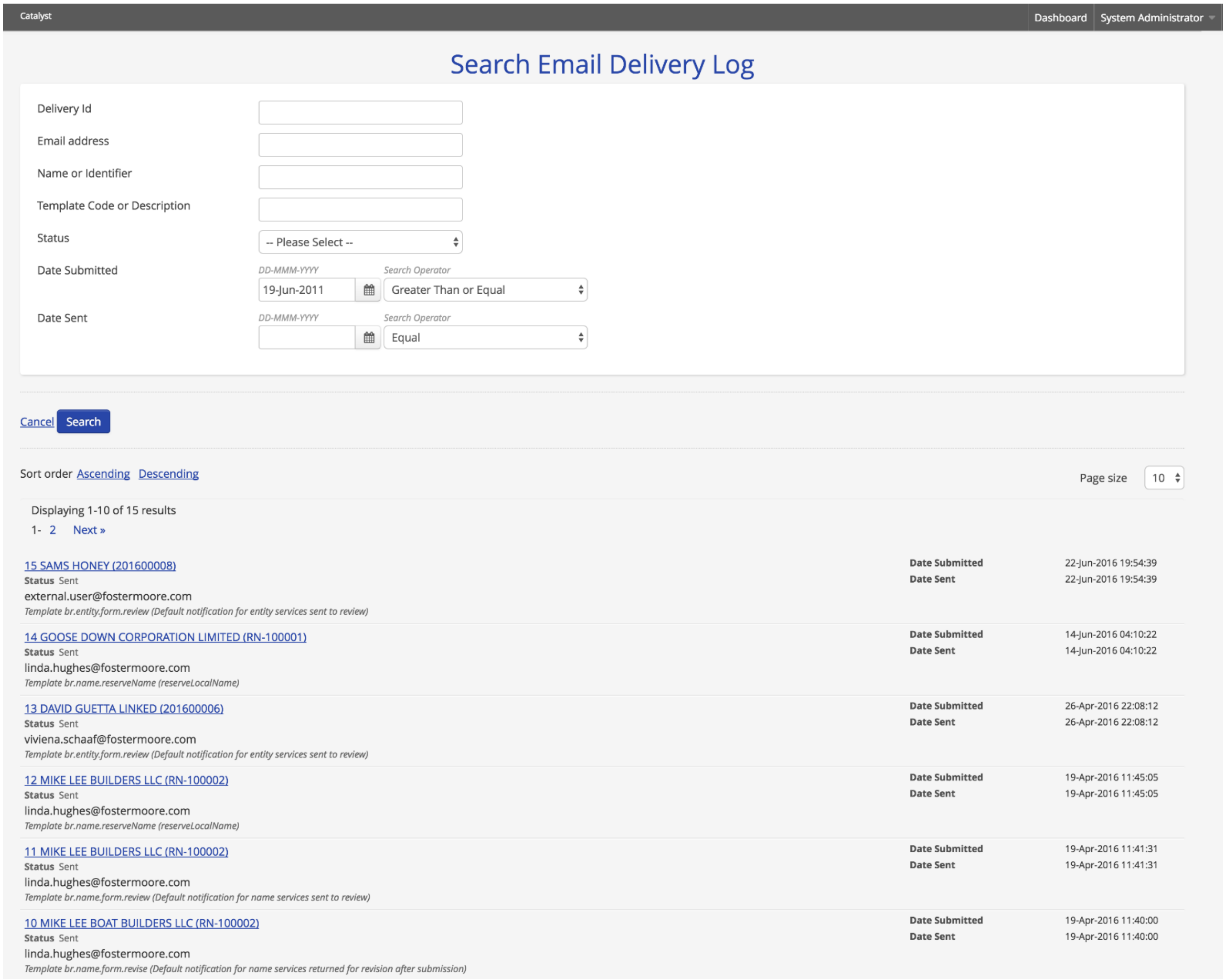

Figure 13: Catalyst - Correspondence Delivery Log

5.5 Ability to provide filing acknowledgements by email regardless of submission method

As previously referenced, Catalyst provides for multiple methods of inbound and outbound correspondence. The method by which a correspondence is initiated does not limit the subsequent responses to that specific method. Workflows can dictate that various criteria, including the method by which a filing was submitted, result in acknowledgment by the correspondence method the registry office desires. Similarly, workflows can be created that require receipt of submissions by a specific methods (e.g. via mail) be automatically routed to a registry staff member to confirm desired acknowledgment method.

6. Reporting

Requirements
Ability to design and run ad hoc, batch, monthly and annual reports for all historical and current data held in the system
Ability to log and retrieve all reports generated in the system
Create and run specific reports for pertinent staff and functional areas (e.g. fiscal reports, administrative reports etc.)
Provide a user dashboard to enable staff to access reports based on user access and permissions

6.1 Ability to design and run ad hoc, batch, monthly and annual reports for all historical and current data held in the system

Catalyst delivers operational and management reports covering registry activities for any time frame for which data exists within the registry. This includes the ability for users to review caseloads and financial information related to the operation of the registries. Reports include those related to the data within the register as well as the performance of staff in meeting work service levels (such as processing volumes and task wait times etc.).

Reports are available online as interactive web pages and as printed reports. The online interactive reports allow a user to search, filter and drill down on the data to suit their purpose. Real-time reporting screens allow for the creation, review and manipulation of standard and ad-hoc reports by authorized users. A standard query and reporting interface is provided and can be used by most users with little or no training.

Pre-Defined Reports

Catalyst provides several pre-defined reports to certain authorized users. The following reports are available within each register:

1. User Activity Calendar (By Services) – This report shows a count of each business service that was instantiated for a given period. Options are available to see activity for the current day or a given week, month or year. The report data is provided in a calendar format. The internal user is able to drill down to view more detailed information about the services that were instantiated.
2. User Activity (By Services) – This report, like the above report, shows a count of each business service that was instantiated between two dates. A start and end date must be entered and a period selected. The periods available for selection are Day, Month and Year. The report data can be exported to HTML or CSV.
3. User Activity Calendar (By Service Group) – Like the User Activity Calendar (By Services), however the services are grouped together. For example, all Register or Incorporation type services can be grouped into a Register Corporation service group.
4. User Activity (By Service Group) – Like the User Activity (By Services), however the services are grouped together.
5. User Activity Summary (By Service Group) - This report lists each service group, showing a count of the services instantiated for the given periods:
    - Current Day
    - Previous Day
    - Current Week
    - Previous Week
    - Current Month
    - Previous Month

- Current Year
- Previous Year

Clicking on the Service Group will provide the user with details of each Business Service within the service group.

6. Service Transition Calendar - This report shows a count of the number of services that was transition from one state to another. For example, the number of services that transition into completed or into review for a given day, week, month or year.
7. Payment Calendar (By Services) – This report shows the sum of fees received per business service for a given period. The report data is provided in a calendar format. The internal user can drill down to view more detailed information about the services.
8. Payment Calendar (By Service Group) – This report, like the above report, shows the sum of fees received per business service between two dates. A start and end date must be entered and a period selected. The periods available for selection are Day, Month and Year. The report data can be exported to HTML or CSV.
9. Payment Summary (By Service Group) – This report lists each service group showing a summary of the fees created for different terms as follows:
   - Current Day
   - Previous Day
   - Current Week
   - Previous Week
   - Current Month
   - Previous Month
   - Current Year
   - Previous Year

Clicking on the Service Group will provide the user with details of each Business Service within the selected service group and the associated fees.

The Catalyst Document Receipting Module provides standard reports to assist in day end reconciliation and provide information on payments received during a given time period. The following reports are available:

- Daily Reconciliation Report by User - This report provides the receipting staff member with details of payments receipted for a particular period. The report can be run for a single day and can be filtered by a particular registry staff member.
- Receipts by Payment Type - This report provides the receipting staff member with a summary of payments receipted for a particular period. Payments are grouped by payment method and then grouped into those that will be deposited and those that will not.
- Payments Received Report - This report provides the receipting staff member with a list of payments receipted for a particular period, by default this is set to the beginning of the current day and the current date and time. Payments are grouped by payment method and details of each payment are shown

All reports provided by Catalyst will be pre-defined in terms of the input parameters, data displayed and presentation layout. Reports can be run by a user on demand and the user will be able to select the destination of reports – to screen, printer or to a file system location (saved as a PDF).

Not all reports will be available to all users. The list of reports displayed for execution by each user will depend on the user group to which they belong. If they belong to more than one user group with different reporting availability, the user will have a combined list of all the reports available to the groups.

Beyond pre-defined reports, users can be provided with the ability to create custom reports through the use of a reporting tool. Foster Moore recommends the use of a third party reporting tool which can be used to design and generate reports, for ad-hoc reporting requirements. The provision of an externally accessible reporting view of the Catalyst data is currently on the Catalyst product roadmap.

6.2 Ability to log and retrieve all reports generated in the system

Catalyst allows users to view, print and save the reports they create. Generated reports can then be printed or exported in a range of formats including PDF, text and Excel (CSV). Reports can be archived and retrieved within the embedded document management system.

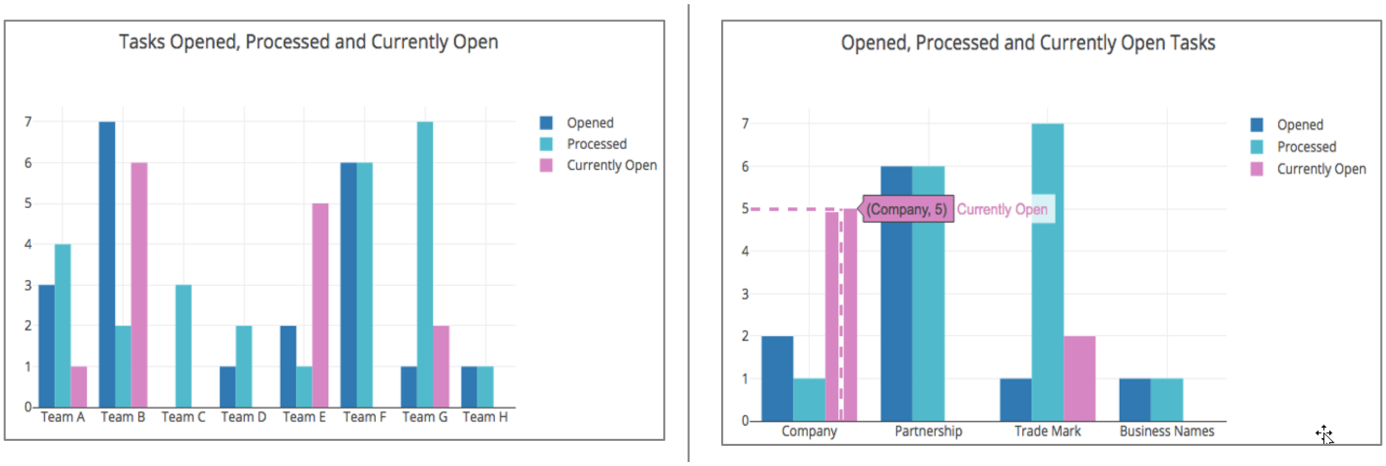

Figure 14. Catalyst - Sample Report for Tasks Opened, Processed and Currently Open by Internal Teams and Register

Catalyst also can be configured to make a register's data available to external systems for the purposes of report creation. Catalyst data is accessed from the database, with access controlled at the database level. This approach allows report writers to continue to use familiar tools to create and maintain reports while accessing data from the Catalyst registers.

6.3 Create and run specific reports for pertinent staff and functional areas (e.g. fiscal reports, administrative reports etc.)

Not all reports may be available to all users. The list of reports displayed for execution by each user will depend on the user group(s) to which they belong. If they belong to more than one user group with different reporting availability, the user will have a combined list of all the reports available to the groups.

Catalyst provides a suite of operational and statistical reporting features out of the box. These reports provide standard statistical and management reports that registry administrators typically require to ensure the registry office is performing optimally and the registry is delivering a highly responsive service to their clients.

Figure 15. Catalyst - Sample Report for Tasks in Work Queue

Reporting on the performance of the internal work queue is standard with all Catalyst implementations. All tasks (documents) that are in the queue(s) are monitored and reported on. Administrators also have the ability to define escalation rules on tasks that can send alerts to teams and people when SLA's are not met and the escalation history can be reported on.

Catalyst's workflow engine stores all relevant events in the database. This history log can be used to monitor and analyze the execution of processes and the key performance indicators. Custom reports can also be defined using the predefined data sets containing all process history information and any custom data sources.

The work queue lists every task and the status of the task. This information can also be rolled up to the business service level (e.g. Notary Registration) and to the queue level also where multiple queues are operating.

Catalyst records the date and time when a task was assigned to a specific member of a registry team as well as the date and time when the task was completed. A productivity report may be generated to show workflow statistics per business service within a given date range.

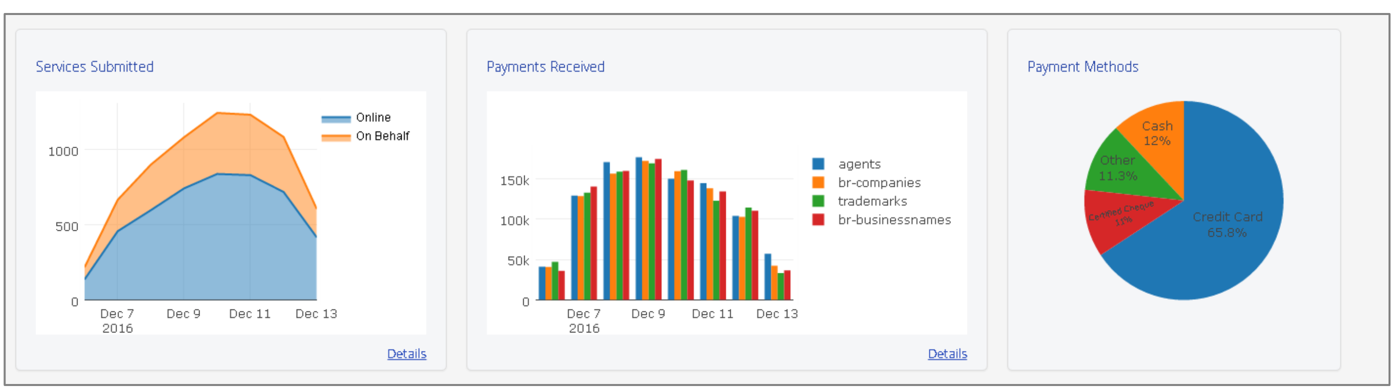

Figure 16. Catalyst - Sample Report for Service Submission Methods, Payments Received by Register and Payment Methods

6.4 Provide a user dashboard to enable staff to access reports based on user access and permissions

Catalyst provides a unified dashboard across all registers delivered from the platform, so that as additional registers are added (e.g. Marriage Celebrants, Private Investigators and Security Guards, Real Estate Appraisers etc.), users have a launching point for services available to users across all registers to which they have access. Online dashboards and query facilities provide real-time access to information for internal and external users.

Not all reports may be available to all users, their respective dashboards are handled in the same manner. Dashboards are available to each user dependent upon the user group(s) to which they belong. If they belong to more than one user group with different information access, the user will have access to the dashboards available to the groups.e

7. Task Management

Requirements
Provide a dashboard for Administrators to organize and assign work assignments for staff
Ability to create a workflow queue with work assignments based on current functional areas
Ability to assign work assignments to specific staff
Ability for staff to manage, sort and route tasks
Ability for staff and administrators to modify work assignments during any phase of the workflow lifecycle

7.1 Provide a dashboard for Administrators to organize and assign work assignments for staff

Catalyst work queue supports the assignment of tasks to teams and team members. A fully interactive task list provides each user with a view of outstanding tasks, allowing them to select, update and complete tasks online. Services to bulk assign, allocate, or approve tasks are available to internal users with the appropriate permission. This allows the work to be quickly allocated to the appropriate user or team. When viewing the internal work queue, options exist to filter by register, returned services waiting to be resubmitted, search by profile name, etc.

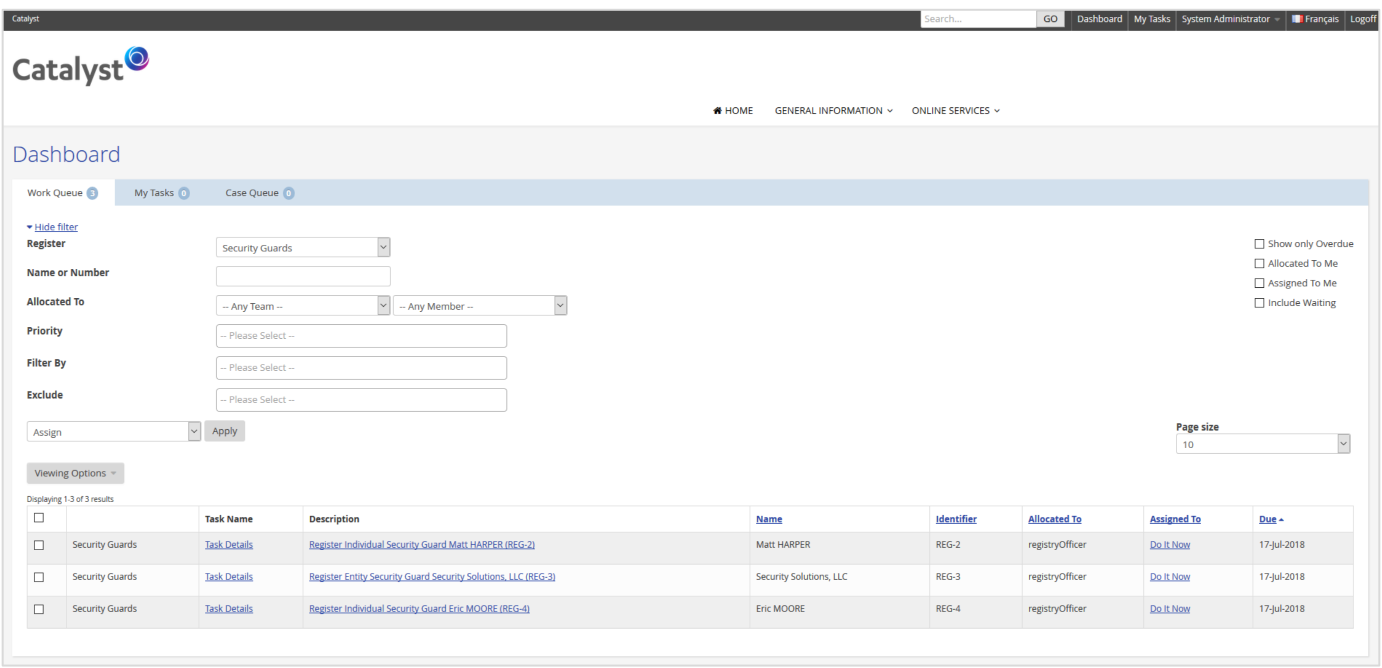

Figure 17. Catalyst - Internal Dashboard with Assignment Permissions, Showing Task Allocations

7.2 Ability to create a workflow queue with work assignments based on current functional areas

Each registry or licensing service within Catalyst is subject to a workflow process. The workflow controls the manner by which the service is invoked, the subsequent 'flow' involved in completing it and the common services that are invoked as part of the process. The workflow rules within Catalyst allow control over the business process that is followed when the services are used. This includes processes such as the registration of new licensees, administration of licenses and completion of regular compliance functions online, such as annual renewal notices.

Catalyst allows for the definition of workflows to control the flow of tasks and data within the system. Workflow processes can be built that involve actions on both internal and external users and provide a seamless flow of information between them. This enables Catalyst to deliver fully managed end-to-end business processes.

For example, a new license request by an external user can initiate a follow-up task with an internal user. Based on the result of this internal action, responsibility can be diverted back to the external user to obtain additional information or to notify them of a filing issue.

A workflow system will be configured to define business processes, tasks and escalation rules. A work queue will be provided to enable internal users to view and execute on outstanding tasks assigned to them. The following functions will be provided:

1) View Tasks – Allows an internal user to view the work queue of open tasks
2) View Task Details – Allows an internal user to:
    a. View task details
    b. Approve a form associated with a task
    c. Return a form to a filer for revision
    d. Reject a form associated with a task
    e. Assign a task to another team or individual
3) Set Due Dates – Allows the office to establish internal processing standards for staff by service type
4) Maintain Calendar – Allows the office to manage days the office is open and closed

On submission of an application, a defined workflow will trigger tasks to notify internal staff of the application, prompting them to review the application and to approve, return, or reject it. The following screenshot shows a user task in process, illustrating the tabbed views on the right of the screen for the internal user to review the data entered, the history of the form and the activities associated with the form such as fees paid or emails sent.

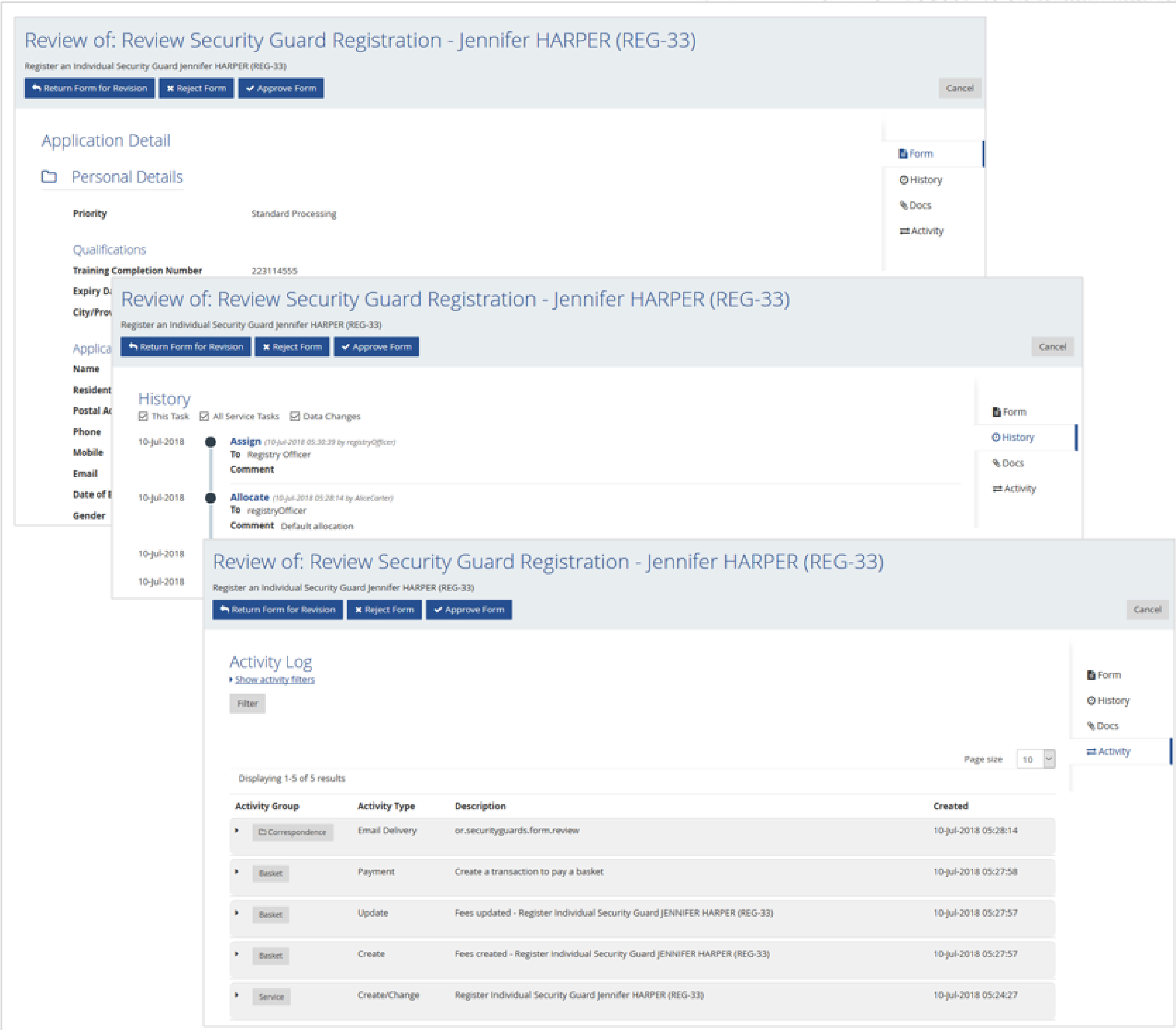

Figure 18. Catalyst - Internal User Action Task Screens (Form, History and Activity Tabs)

7.3 Ability to assign work assignments to specific staff

As tasks are created within the system, they are automatically assigned to users, or teams of users, based on the configured rules and the users' permissions and team memberships. Catalyst supports the monitoring of tasks by management and the automatic alerting and escalation of overdue tasks through a configured hierarchy of users. Services to manually assign, allocate, or approve tasks are available to internal users with the appropriate permission. These options exist within the individual tasks and also within the work queue for bulk changes. The example of bulk assignments is shown below.

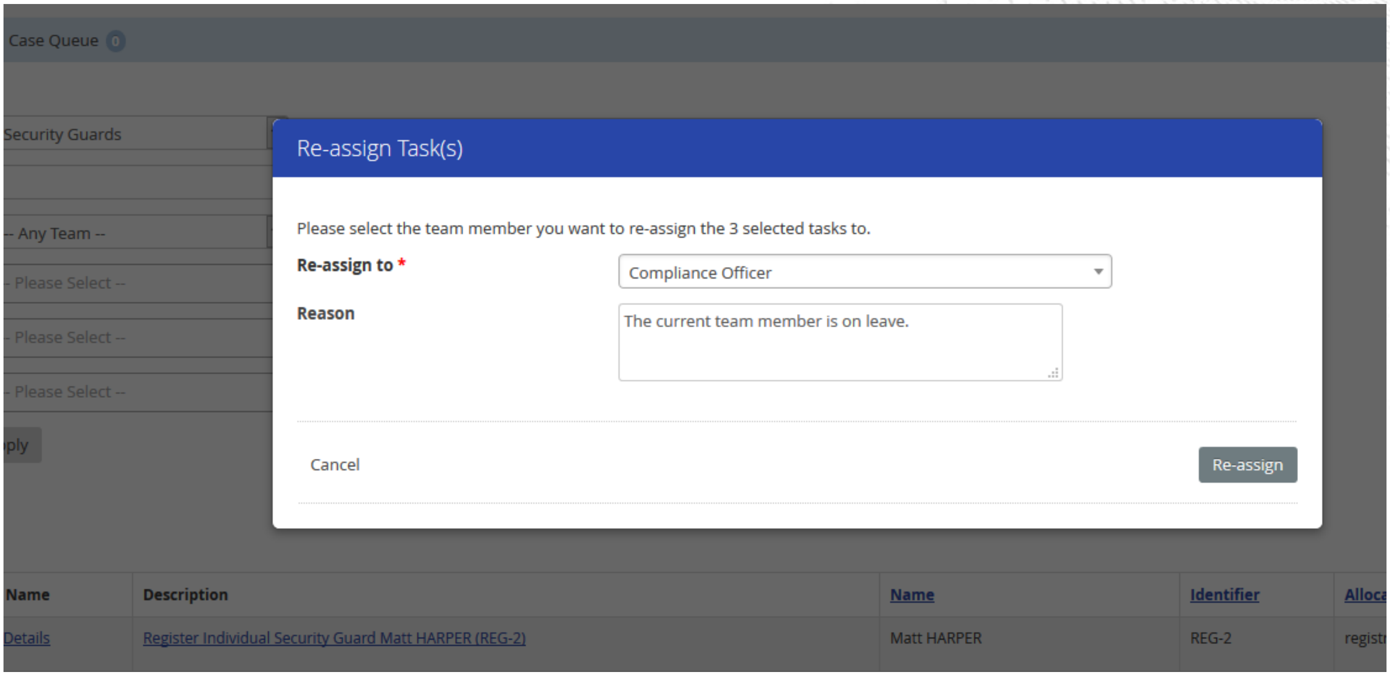

Figure 19. Catalyst - Internal Dashboard with Work Queue Reassignment Option

7.4 Ability for staff to manage, sort and route tasks

As tasks are created they are assigned to users, or teams of users, based on the configured rules and the users' permissions and team memberships. Catalyst supports the monitoring and management of tasks by registry administration and management of and automatic alerting and escalation of overdue tasks through a configured hierarchy of users. Services to assign, allocate or approve tasks are available to internal users with the appropriate permission.

Case Management

The Catalyst Case Management module provides for the capture and management of a ***case***. Within the context of Catalyst, a case represents a logically associated set of activities that are carried out in a controlled, yet ad-hoc manner, to address a business objective and arrive at an appropriate resolution.

The Case Management service supports the activities by providing a set of tools that enable the capture of information relating to the establishment of the case, on-going activity on the case, progress of the case, resolution of the case and closure of the case.

Case Management provides the ability to create a Case Type with a preconfigured structure. When creating a new instance of a case the case type must be selected providing the user with the default structure for the particular type of case. Examples of such case types that may be created include:

- Investigation
- Inspection
- Enforcement
- Audit
- Complaint

In addition to case-specific information, a series of generic tools that capture information on typical office operations, such as correspondence, document upload and storage, file notes and checklists are provided.

Case Management is designed within Catalyst to support the association of cases to entities within the register, to support the establishment of standalone case entries and to support the integration of cases to business specific services that are part of the specific operation of the register.

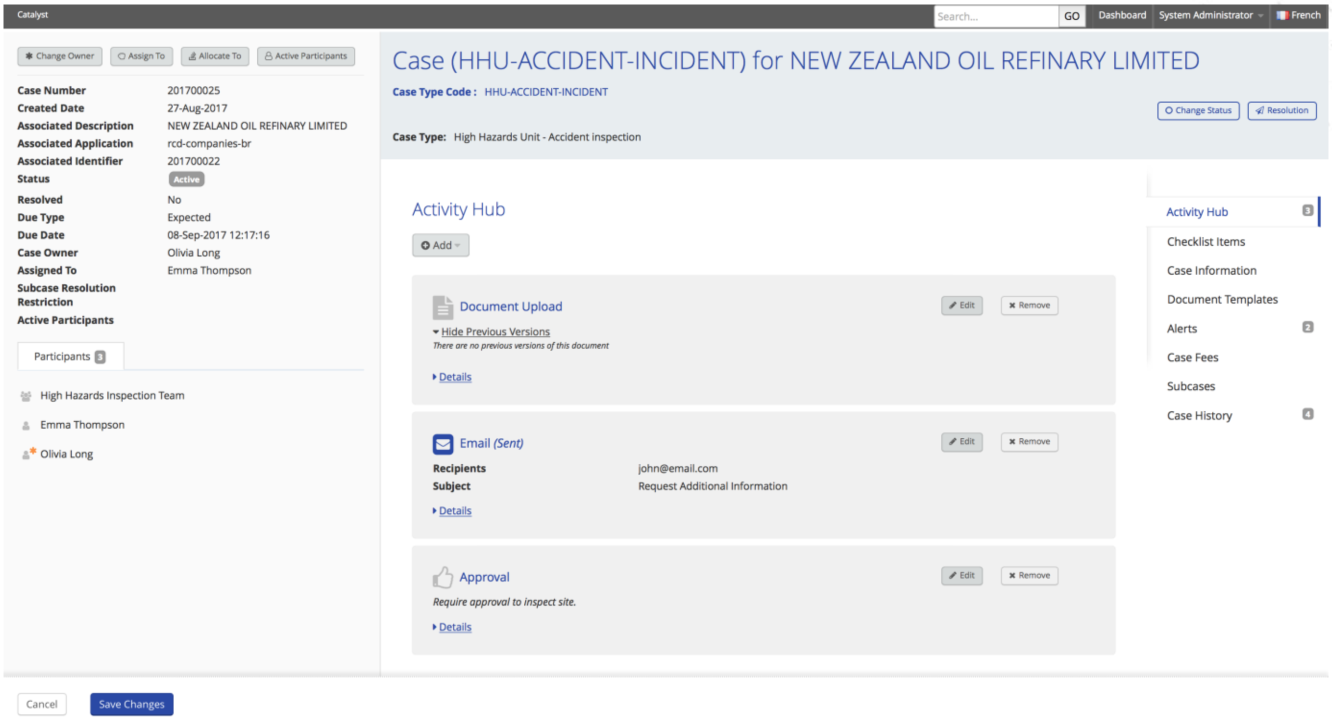

Figure 20. Catalyst - Case Review Screen

A case will consist of a number of elements, these typically being:

- Generic, or standard information that applies to all cases;
- Case type specific information that is determined through the template associated with the case type;
- Case type specific progress information that summarizes where in the type-specific 'life-cycle' the case has got to;
- A list of participants and participant access levels for the case;
- A case owner who can change the structure of the case;
- A set of general information that is stored as a result of typical office processes being carried out, such as research; correspondence and collaboration, document uploads etc.;
- Subcases related to the case.

7.5 Ability for staff and administrators to modify work assignments during any phase of the workflow lifecycle

Catalyst provides an integrated task management system that supports the assignment of tasks and activities to teams and team members. A fully interactive task list provides each user with a view of outstanding tasks, allowing them to select, update and complete tasks online.

All business services within Catalyst follow a standard process that handles the entry, validation, charging of fees and review of the data entered or contained within the service. Within a Catalyst workflow there are a number of configurable attributes that control the flow of a business service and the way it is processed by the system.

At a high level, Catalyst applies the following process to a business service:

- Allow the user to supply the data required for the service and to submit the data, either by submitting an online form or invoking a web service.
- Validate the data against the configured business rules
- Optionally charge a fee for the service (configured as part of the Catalyst workflow configuration)
- Optionally pass the submission to an internal user for manual review (configured as part of the Catalyst workflow configuration)
- Apply the changes to the register once it is submitted and, if necessary, approved by the internal user performing the review
- For those submissions that fail the internal review, reject the change or, when allowable, return the submission to the user to allow them to correct and resubmit.

Catalyst maintains the status of filings through the lifecycle defined within the system's workflow management system. When each entity is created and configured, the lifecycle of the entity is defined within the workflow system, including the definition of the various entity states, regular "renewal" procedures and triggers for status transitions. Catalyst's workflow system manages entities' governance and compliance activities, assigning back office tasks (such as reviews, approvals and authorizations) to registry staff and identifying and managing overdue tasks. These tasks can also be manually assigned, reassigned and modified at any time during the workflow by users with appropriate permissions.

8. User Accounts and Permissions

Requirements
Ability to create, update and manage user roles and permissions for both internal and external users
Ability to control access to sections of the system according to defined permissions and roles
Ability to differentiate between internal and external users
Ability to display access to specific pages and information about business entities and structures to public without a user login

8.1 Ability to create, update and manage user roles and permissions for both internal and external users

Catalyst employs a role-based security model that controls access to the system by registered users. This allows access to data and functionality to be restricted based on user accounts and users' membership to defined roles. Catalyst caters for internal users (staff who work in the registry office) and external users (members of the public with a declared interest in one or more entities) and controls their access accordingly. This security is managed at the register level within a multi-tenanted environment, allowing fine-grained control of access to users across multiple registers.

Authorized users of the system (e.g. system administrators) can add and maintain user accounts, including the assignment of users to one or more roles. Role maintenance is also provided, allowing authorized users to create and edit roles, including setting the available permission levels for a role. Permissions allow control over the functions users have access to, as well as the data they have access to. Data access configuration allows independent control over the entities (rows) and data items (columns) accessible by users. Data access control can also be configured to take into account defined relationships between the user and the entity (e.g. a director of a company).

Authority Management

A key concept within Catalyst is that of authority management. Authority management controls a user's access to entities within the system, the data they can view for those entities and the functions they can perform against them. This access can cover the functions that are required to be performed by external parties such as agents, lawyers and accountants.

Authority management is based around providing services to three distinct types of users:

- Anonymous Users - Users of the system who have not logged in to the system.
- Authorized External Users - Logged in members of the public who already have authority over an entity.
- Unauthorized Users - Logged in members of the public who do not have authority over an entity

External users of the register often need access to data for entities with which their user account has no pre-existing direct association. Catalyst provides control over this through its authority management functions, including delegated authority. Catalyst allows an external user to request authority over an entity. It also allows a user who already has authority over an entity to grant authority to a user who does not. The registrar (an internal user) may also grant and revoke authority to external users based on requests from authorized and unauthorized users.

In some cases, Catalyst will automatically grant an authority against an entity as part a business function (for example when an entity is successfully registered). In other circumstances, authority over an entity can be granted explicitly to a user by an internal user, or by another external user with existing authority over the entity (an “authorized user”). In the same manner, an authorized user or an internal user may revoke a user’s authority on a business entity.

The registrar has the option to suspend external authority management in the event of disputes over an entity. Where an entity has been suspended from authority management, authorized external users will no longer be able to maintain entity details. Suspending authority management does not revoke existing authority, ensuring that once the suspension is lifted all authorized users will once again be able to maintain the entity.

In many cases a register generates an industry in the associated register community, allowing a range of different parties to offer services associated with the maintenance of the register. A typical example of such is the establishment of agencies that perform administrative duties, such as filing, on behalf of business entities.

Catalyst supports agencies through the establishment of organizations within the authority model. Each organization has one or more individuals associated with it and, through a business role, will be linked with one or more entities within the register. This model allows those individuals linked to an organization (known as organization users) to access and maintain the entities over which the organization has authority. As with access for an individual with authority over an entity, the data and functions available to organizational users is determined by the business role granted to the organization.

8.2 Ability to control access to sections of the system according to defined permissions and roles

Access control within Catalyst restricts the entities and sections users have access to and the degree of control and change they can effect over those entities, based on the permissions granted for the users’ specific role(s). While some functions, such as searches, can be performed anonymously, all functions which involve management of an entity (creation and modification etc.) require a user to have a user account.

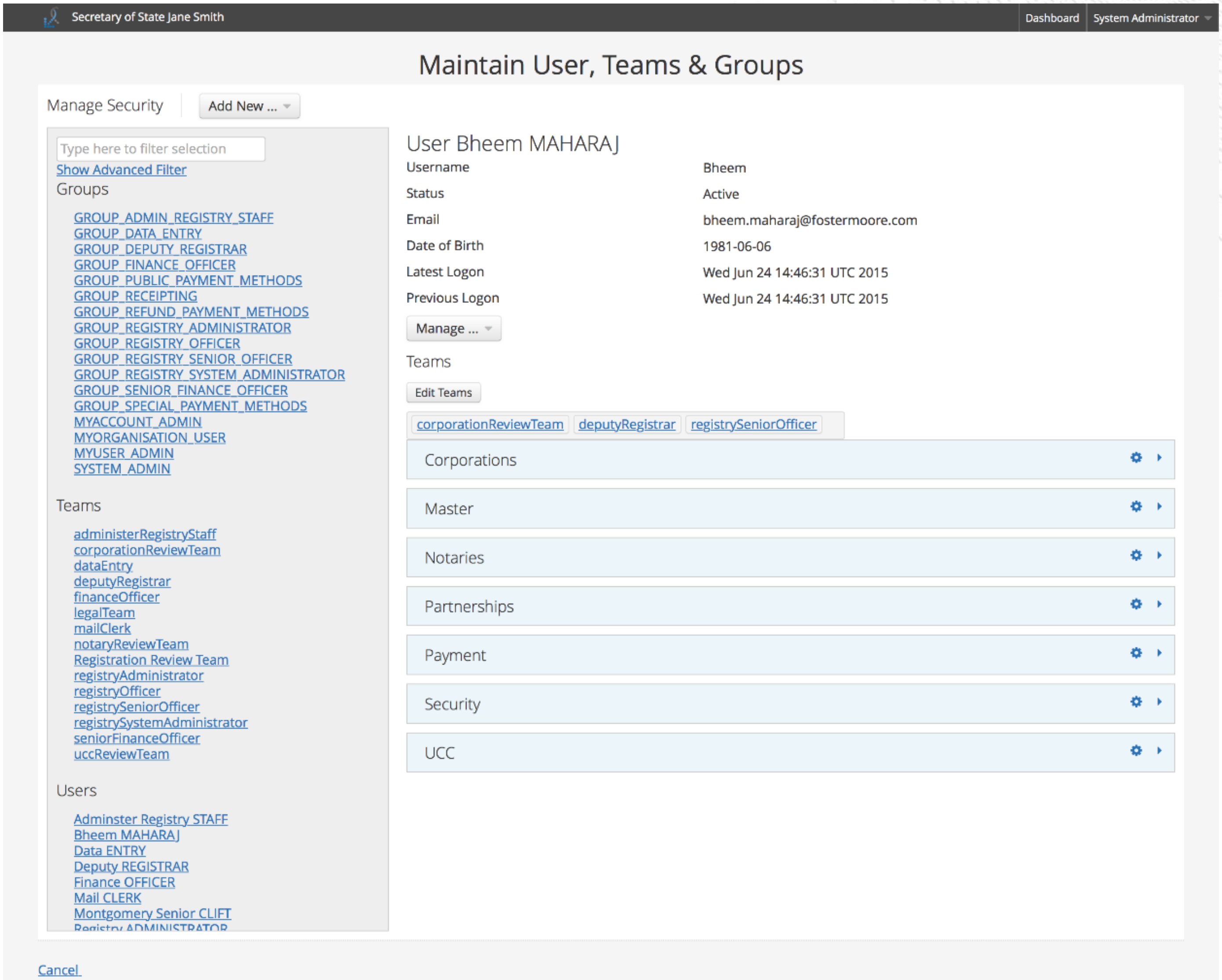

Figure 21. Catalyst - User Account Maintenance Illustrating the Assignment of an Internal User to Groups and Teams

Catalyst ensures all access to functionality and data takes place through the application itself, with access controlled by the Catalyst security model. Foster Moore works with clients through all Catalyst installations to ensure that all servers, including application, web and database servers, are adequately secured from unauthorized access.

8.3 Ability to differentiate between internal and external users

Catalyst provides entry points for both internal users and external users. The system provides different functionality to users based on whether they are an internal or external user, their relationship with an entity and the business or administrative role they play. In addition, internal users can be assigned different access privileges based on their membership to user security groups and to teams within the registry office.

Catalyst provides external users with integrated entity search, creation, maintenance and compliance functions, as well as access to online payment facilities.

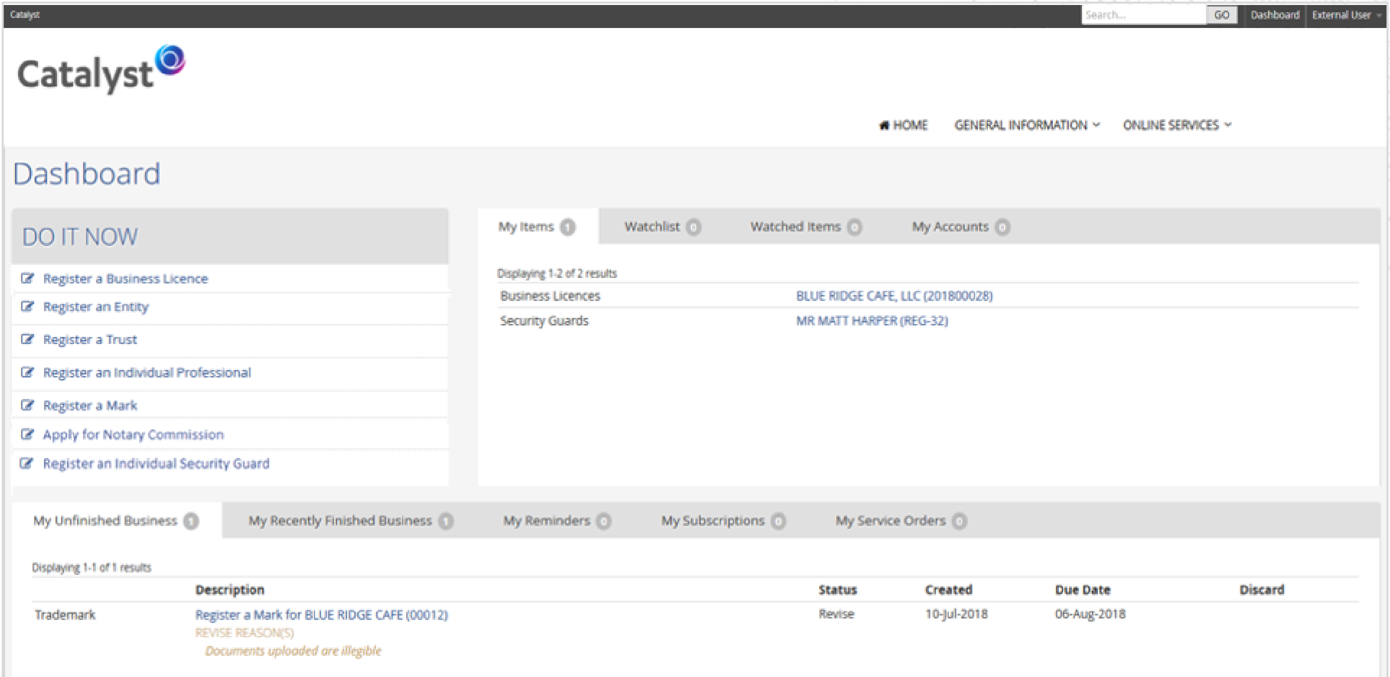

Figure 22. Catalyst - Example External User Homepage

Internal users use Catalyst to carry out the daily functions required to maintain the register. Working from a web-based interactive task list, they complete the tasks allocated to them based on their defined responsibilities and security level. Catalyst provides an advanced browser-based application for use by staff within the registry office. This application is focused on efficiently supporting the day-to-day administrative and management functions they perform against the registry (e.g. approval of incorporations and management of overdue activities).

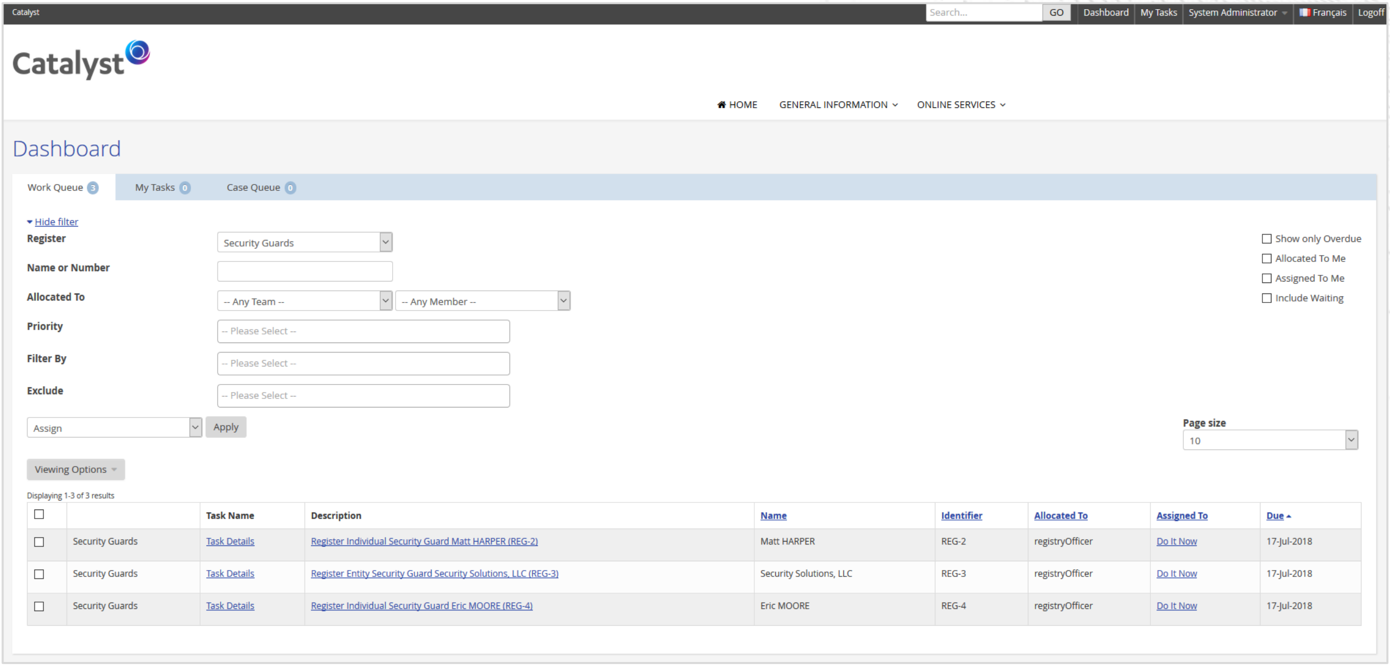

Figure 23. Catalyst - Internal User Dashboard Including Work Queue

8.4 Ability to display access to specific pages and information about business entities and structures to public without a user login

Access control within Catalyst restricts the entities and sections users have access to and the degree of control and change they can effect over those entities, based on the permissions granted for the users' specific role(s). In most Catalyst implementations, some functions, such as searches, can be performed anonymously while functions which involve management of an entity (creation and modification etc.) require a user to have a user account. Access to pages and information that require users to log in versus those that do not are configured based on our clients' requirements for each specific registry.

9. System Processing

Requirements
Ability to integrate and migrate data from existing systems
Ability to import data from other data sources (e.g. FTP; code tables etc.)
Ability to download data files from the system
Ability to update system pages and functionality when federal or legislative changes are received (e.g. biennial report filing)

9.1 Ability to integrate and migrate data from existing systems

9.1.1 Integration

Catalyst provides integration points that enable it to support existing external systems. For example, Catalyst can be integrated with an external document management system or with external components for services such as user identification, authentication and authorization.

Within a client's environment Catalyst can leverage existing database infrastructure, including different relational database management systems and hardware such as SANs, and can be deployed into the customer's existing web delivery environments. Catalyst is delivered with a built-in search engine for entity searching and can also can be configured to integrate with a client's existing search engine technology if required.

Catalyst can be integrated with external systems for the purposes of coordinating governmental activities, such as applications for tax numbers, background checks and other registration actions associated with registration and maintenance of entities within the register.

Catalyst also supports state and national level services such as those providing user authentication and login services. This integration is in place with the State of Montana's ePass, a State-wide access management system for government online services and the State's government finance system. In Ontario, Canada, Catalyst is integrated with ONe-Key for external user authentication and authorization. Integration with the New Zealand Government's RealMe login service is another example of Catalyst's large scale integration capabilities.

When configured, Catalyst automatically constructs a series of business services based on the configured entities and business rules. These business services are then available to be consumed by external systems and validate the data using the same rules as employed in the online application. These web services are delivered thorough product configuration, based on the configuration of the entities managed within the register. The following diagram shows a high level view of a Catalyst based solution including key integration points in the bottom right corner:

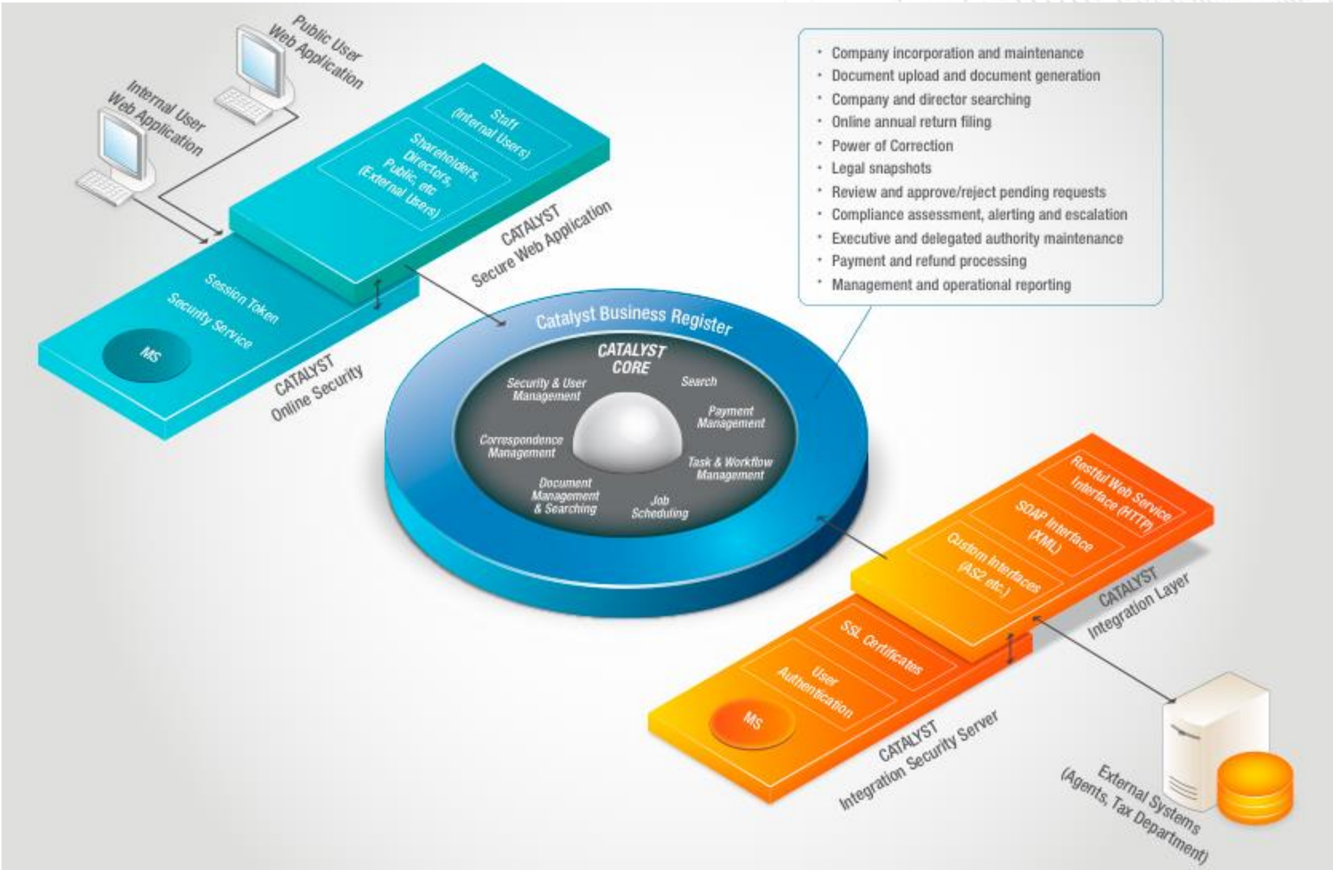

Figure 24. Catalyst - High Level Solution, Including Integration Points

Typical integrations that are implemented as part of a Catalyst project include:

- Payment gateways for processing of payments
- Address and post code validation services
- Financial Management System
- Active Directory / LDAP for authentication of internal users
- State, national or regional identity service for authentication of external users
- Jurisdiction’s taxation service for exchange of new entity details and tax numbers
- External registers for exchange of new and modified entity details
- Scanning and OCR systems for receipt of scanned paper documents for processing
- Document management systems for external storage and retrieval of documents
- Systems of professional organizations such as lawyers and accountants to enable them to administer the register on behalf of their clients

Integration within Catalyst can happen through electronic messaging, whereby Catalyst captures the required information, sends a request to the external system and awaits a response before informing the user accordingly (for example, requesting and receiving a background check for a new Security Quard application). Such an implementation requires that the external system provide an electronic interface, such as EDI messaging or web services.

9.1.2 Migration

Data migration and conversion is a key element of any Catalyst implementation and forms a major part of any project we deliver. Foster Moore has extensive experience in the conversion of data from legacy systems and disparate data sources to new online registry solutions. These migrations have involved significant volumes of data and documents, in a range of formats, with complex data transformation and cleansing activities.

Data elements required by Catalyst are centered on the data captured by the existing paper forms or electronic system and the data requirements of the legislation and regulations in place within the State. Foster Moore works closely with clients during the project to identify the data requirements of the solution.

Our Standard Migration Library (SML) is a set of libraries which align with the standard Catalyst application configuration for a given register type. The library consists of a set of functions, each of which handles the population of a Catalyst domain. A Catalyst domain is a logical representation of physical data, where the logical representation usually represents a business construct such as a 'Licensee' or 'Postal Address' domain.

The Standard Migration Library is the starting point for every data migration for a Catalyst implementation project and can be extended by client specific package(s) to meet each client's individual requirements. Where data is being imported, each import requires careful analysis and implementation to ensure the data available from the existing system can support the new, often more stringent, business rules configured within the new online filing system.

Catalyst supports the migration of existing user accounts to the new online register. For migrated accounts, Catalyst generates a unique entity key that it emails to the entity's official email address. The recipient then uses this key to request authority for such entities, from either an individual or organization account. This process uses the standard Request Entity Authority service outlined below.

The following screenshot illustrates a sample entry field for a unique key, as part of requesting authority within a business register:

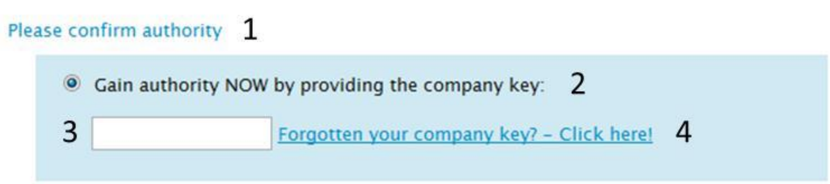

Figure 25: Catalyst - Gaining Authority Using the Unique Entity Key

Foster Moore has established five principles of operation that each Catalyst data migration abides by. These principles are aligned closely to the activities and outputs of the Catalyst Data Migration Methodology. The Catalyst Data Migration Methodology will:

1. Ensure that the scope and the expectations of the client are fully understood and agreed upon with respect to data migration prior to any concrete or binding commercial arrangements.
2. Subject to the scope and expectations, ensure that the client understands the nature of the data that must be provided to support the functionality that the client's configured Catalyst will provide.
3. Subject to the scope and expectations, ensure that the client understands what constitutes compliant and non-compliant data and how non-compliance is addressed. This enables the client to review and agree on any areas of the solution that might be subject to a compromise with respect to functionality. Conversely, Foster Moore can understand any mandatory client requirements that requires non-compliant data to be addressed as part of the migration exercise.

4. Provide a clearly defined set of processes, tools and outputs that allow for the successful migration of compliant data and the management on non-compliant data. This establishes a closely controlled framework for subsequent activities and interactions that mitigates risks associated with data migration.
5. Establish a clear understanding of the sign off protocol and responsibilities from both parties. This enables all parties to plan future steps with greater confidence.

9.2 Ability to import data from other data sources (e.g. FTP; code tables etc.)

Catalyst can accept incoming data, in the form of batch data files, for a range of functions. For example, in Ontario, the solution receives data files containing tax numbers for existing corporations and for defaulting corporations. Such updated files are typically based on a unique identifier for the entity.

Catalyst can also prepare outgoing batch files of agreed data items, with creation of files and records based on configured triggers within the system. Triggers can be coordinated to support the various exports of similar information in different formats. As the identified triggers are initiated, the required data will be flagged for inclusion in the next appropriate export file. Examples of export files that can be configured include the following:

1. Entity master list
2. Entity list based on some pre-defined criteria (e.g. Trademarks with Vehicle related Class codes)
3. Applications for vendor permits and employer health tax numbers
4. New and updated Licensees
5. Business number updates
6. Correspondence and document data for printing and distribution by third parties

For inbound interfaces Foster Moore assumes that some form of data mover will place incoming batch files in a pre-agreed location on a file server from which Catalyst will be able to read the files.

For outbound interfaces Foster Moore assumes that some form of data mover will pick up a flat file created by Catalyst and placed in a pre-agreed location on a file server, moving it to the correct destination location.

9.3 Ability to download data files from the system

Based on our clients' requirements and business rules, Catalyst may be configured to provide for the download of data. Common items include, but are not limited to:

- Certificates (Initial, Renewal, Standing etc.)
- History (Creation, Changes, Payments etc.)
- Reports (Standard and Ad-Hoc)
- Search Results
- Public Records

For each implementation, Foster Moore works with our clients to determine the appropriate level of data their system allows to be downloaded, based on jurisdictional rules and industry best practices.

9.4 Ability to update system pages and functionality when federal or legislative changes are received (e.g. biennial report filing)

It is not uncommon for legislature to add, change, or remove requirements to the filings. Additionally, our clients are consistently looking to take lessons learned and improve their processes and efficiencies. Examples may include a change in the frequency of license renewals or additional automated reminders for actions required to maintain licensure. Catalyst Registry allows the client to make such changes without the need software development. Configuration of the appropriate service allows the collection of whatever new requirement is imposed or the removal of a field from a service through a change to the entity configuration or through a change to the compliance engine. It also allows the maintenance of rules around the service, including internal review and revision.

Catalyst allows clients to tailor the system to their evolving requirements, without the need for involving the vendor. Changes such as those outlined below can be easily made by the client, with a much lower cost than would be required with changes to a custom solution. By changing configuration options, the client can modify the functionality of the Catalyst register to suit changes in legislation, to drive efficiencies within the registry office and also to drive behaviors of external users (e.g. reducing fees for online transactions in order to drive uptake of online filings.) Specifically, Catalyst supports configuration of the following items:

1. Entities
2. Correspondence Templates
3. User Interface Styling (via CSS)
4. Business Calendar
5. Service Configuration. This typically involves the elements identified in the Product Catalogs, such as revise days, review days, draft allowed etc.
6. Task Definitions
7. Fee Definitions
8. Notifications and Templates
9. Labels and Help
10. Job Schedules
11. Catalyst Payments, including:
    a. Management of Accounts
    b. Payment Labels and Help
    c. Payment Notifications and Templates
    d. Job Schedules
12. Catalyst Security, including:
    a. Management of Users, Teams and Groups
    b. Management of Organizations
    c. Labels and Help
    d. Notifications

Attachment B, Functional Requirements

Fit Code Key

Response Code	Code Description
E Existing	The proposed solution fully satisfies the requirement as-written, without modification. This only applies if the proposed software currently exists, is installed and functioning in a production environment and will provide the functionality(ies), capability(ies) and comply(ies) with any constraints specified in the requirement.
EC Existing with Configuration	The proposed solution fully satisfies the requirement as-written, without modification, except for minor configuration changes. This only applies if the proposed solution currently exists, is installed and functioning in a production environment and will provide the functionality(ies), capability(ies) and comply(ies) with any constraints specified in the requirement. The only customization required shall be with the proposed solution's standard configuration utilities (e.g. entering customer-specific information and user-defined parameters). Programming changes to the application shall not be required.
MM Minor Modification	The proposed solution will be modified by the Respondent so that it will fully satisfy the requirement as-written. This only applies if the proposed solution currently exists and is installed and functioning in a production environment. The custom programming and modifications requirement to fully satisfy the requirement shall not exceed 30 hours. Calculated hours include documenting, programming and testing. The Respondent should be prepared to discuss the effect of the minor modification on the upgrade path of the software.
GM Major Modification	The proposed solution will be modified by the Respondent so that it will fully satisfy the requirement as-written. This only applies if the proposed solution currently exists and is installed and functioning in a production environment. The custom programming and modifications requirement to fully satisfy the requirement shall not exceed 60 hours. Calculated hours include documenting, programming and testing. The Respondent should be prepared to discuss the effect of the minor modification on the upgrade path of the software.
TP Third-party Tool	The proposed solution will fully satisfy the requirement, as-written, through the inclusion and integration of a third-party software/hardware tool (e.g. a report writer, statistical analysis tool, etc.). In such cases, the total cost of this third-party tool, including licensing, installation, ongoing support and future upgrades will be the responsibility of the Respondent for as long as the Respondent remains responsible for providing such support for the core application. These costs shall be included in the Cost Schedules. The Respondent shall explain how the third-party tool will be integrated into the overall proposed solution in the appropriate sections of the proposal.
CM Complete Modification	Custom development will be used to satisfy this requirement, either by making major modifications to existing software, or by developing new custom software or modules. Major modifications or custom development are defined as application changes or additions that will require programming effort more than 90 hours.
UP Unable to Provide	The feature, functionality, or constraint described in the requirement is not available in the proposed solution.

1. Inquiry/Searches

Requirement	Fit Code
The system is to have the ability to search Marriage Celebrant name, address and other details	EC
The system is to have the ability to search for Notaries Public by Name, Notary ID, and Commission Number	E
The system is to have the ability to search for Athletic Agents by full business name, full business name, concatenated name, date of initial filing, Last Name of Officer, Last Name of Registered Agent, Zip code, Address, Document Number, Entity Type, effective date, and other details	EC
The system is to have the ability to search Private Investigator and/or Security Guard licensee by responsible agent, firm name, City or County of service, and other details	EC
The system is to have the ability to search trademark, service, collective or certification marks by name, registry, ID number and other statutorily required information	E
The system is to have the ability to search for Scrap Metal Dealers by Name, Number, City or County of service	EC
The system is to have the ability to search Charitable Organization by name, concatenated name, Doing Business As (DBA) name, Last Name of Registered Agent, Registration, zip code, address, effective date, and other details	E
The system will disallow the filing of two entities with the same name matched on any of the matching criteria in accordance with statutory laws/rules	E
The system will provide ability to conduct name searches that are not case specific	E
The system must provide ability to inquire by business name, Officers, Registered Agents, Document Number, and other details	E
The system shall provide ability to perform special searches, such as, "Check Name Distinguishability" which allow consumer and Agency users to search for and test the uniqueness of a entity name against Agency records, and searches by names of individuals, for example, registered agent officer and director.	E
The system must provide ability to restrict certain filings from public display as required by law	E
Provide to be able to search by Notary ID, Commission Number or Name and display entire the record.	E
The system will allow for the parsing and concatenating of names to include the removal of spaces, definite and indefinite articles, and special characters and searching on both the entered name and parsed/concatenated name.	E
The search option within the system will allow for "is", "begins with", and "contains" searches	E

Catalyst Search Features

Catalyst, The Registry Manager is a highly configurable web-based software platform designed to meet the needs of various registers in different jurisdictions. Each implementation of Catalyst includes various search tools to allow internal users and the public to access the required level of registry data for viewing and maintenance. Catalyst's embedded search engine uses Elasticsearch, a leader in scalability and distributed databases, organized to deliver a robust and efficient search across large data sets without impacting performance. As most registries contain substantial sets of current and historical data, the Elasticsearch platform delivers a proven methodology for querying registries in real-time and retrieving large sets of results.

Catalyst supports the identification of entities and profiles by using standard search criteria across both basic and advanced search options. The search tools facilitate the identification of an entity based on either a full or partial string being provided by the user. By default, Catalyst displays basic search options with the ability to display advanced search options which provide a variety of additional criteria, e.g. entity type, entity status, filing date range, address keywords, etc. Search criteria can also be configured to conditionally display registry specific options. For example, if a user opts to search specifically within the Notary Register, data fields that apply only to notaries will display. Unique search tools per individual registry can also be implemented. Regardless of where the search is accessed or the various criteria and logic implemented, Catalyst search functionality displays real-time data unless otherwise indicated.

Once a search is executed, the results are displayed in an easy-to-read format with relevant data to allow the user to correctly locate the appropriate item. Jurisdictions can define what that data is, such as registration date or address, based on the record type. The details presented to the user will depend on their access privileges:

- External users with no authority over the entity, including anonymous users, will receive a limited amount of information about an Entity, based on what is considered 'public information.'
- External users with authority over the entity (i.e. who hold a particular role) will obtain full external data associated with their entity.
- Internal users will receive a much richer set of information about an Entity, including associated documents in the Entity's document repository, file notes and other information that is not available to the public.

Catalyst search also includes the following features:

- Advanced searching that enables filtering by a range of configured attributes e.g. entity status, entity type, effective date, document number etc.
- Name reservation searching will enable current name reservations to be reviewed.
- Role searching is also available. For example, a user may search on individuals acting as officers in one or more Private Investigator firm or for Registered Agents acting on behalf of organizations.
- To protect a person's security, registry staff may suppress residential address from the public searches.
- Sort options are available on the search results list to re-order the results differently from the default sorting based on entity name.
- Users can print the search results and entity details as well as save them as a PDF or CSV.
- Searching within Catalyst can use either the database management system or the Catalyst Search Index. The Catalyst search index is based on Elasticsearch and allows for more powerful queries including phrase queries, wildcard queries, proximity queries, range queries etc. By default, the Catalyst Search Index returns results by ranking with the best match being returned first.

Search Logic Configuration

Searches within Catalyst can be configured to adopt the specific logic required by the jurisdiction, such as:

- Provide search criteria as required, this could include but is not limited to the following search options:
    - Exact name match
    - Name start with specific string
    - Name is similar
    - Name contains specific keywords
    - Logical search (keywords or phrases connected by logical operators AND, OR and NOT)
- Configure rules for returning terminated, cancelled or revoked entities in response to searches.
- Configure data available for a fee in the public searches.
- Products can be certified or un-certified, with certified ones incurring an additional fee.
- All certificates and certified products will bear the signature of the Registrar and include a certification statement.
- Certificates, reports and extracts may be printed, emailed, or saved as PDF files.

Identical name rules are applied to the search string before performing the search:

- All double blanks are removed.

- All special characters: ‘ ~ # ! “ ‘ $ % ^ * ( ) \ / + - _ . , : ; < = > ? @ { } [ ] | are removed.
- All single spaces between any single characters are removed (e.g. A B C Travel Limited should become ABC Travel Limited).
- The following words are replaced with the given substitutions:
    - CORPORATION - CORP
    - INCORPORATED – INC
    - LIMITED – LTD

These Identical name rules would be enhanced to include the words in the NAME AVAILABILITY list

Unified Searching

Catalyst searches can be configured to operate across multiple registers, resulting in a unified search. Results returned will depend on the attributes searched (i.e. entity types will only be returned if the search is executed against attributes that apply to them).

Search Limiting / Throttling

To safeguard clients against malicious external sources that misuse the register, such as data mining bots and screen-scrapers, Catalyst features a User/Activity Filter that can be configured to deter these activities and mitigate against such behavior.

Catalyst configuration allows control over the volume of activities (requests per minute) that will trigger a range of warnings, errors and redirection to a CAPTCHA service. The filter can be configured to exclude certain user roles from the throttling.

The other approach to protecting registry data from data mining is to place “valuable” search data behind a pay wall. Catalyst supports this concept and it is a business decision as to which data is made freely available versus which data is charged for.

2. Licensing and Registry

Requirement	Fit Code
The system will provide the ability for users to submit new applications, subsequent filing requests, and updates using online forms, mail or counter intake.	E
System workflow processing will be configured in the system to accommodate West Virginia-specific forms, fields, and rules to comply with West Virginia statutes.	E
The system shall provide the ability for public users to review their screens before submission	E
The system must provide external users with online filing options for various types of service areas (e.g. Notaries, Scrap Metal Dealers, Charities etc.)	E
The system must provide ability for internal staff to manually receipt paper filings in the system, by uploading a scanned image	E
The system must provide ability for internal staff to reject submitted filings	E
The system must provide ability to display application status to external users via user login credentials	E
The system shall provide ability to identify registration filings that should or must be marked for review by internal staff	E
The system must provide external users with the ability to file modifications online, including initial application or renewals	E
The system shall provide ability to verify that the entity type is correct for the entity filing requested.	E
The system must provide a method to determine and identify duplicate filings and not allow the filing of a duplicate name	E
The system must provide a way to verify data entered on a form to make sure it is accurate for the type selected	E
The system must provide ability to require specific information for a registered agent is entered during the time of filing	E
The system must track when a filing has been rejected	E
The system must provide ability to file a renewal for all licenses and registrations online	E
The system must provide ability to manage/change existing information (e.g. address updates etc.)	E
The system must provide ability for external users to submit an online request to amend or reinstate a license/registration	E
The system must provide ability to request and retrieve a certificate of status or additional copies of a certificate of status online	E
The system must provide ability to request and obtain a certified copy of a filed document online	E
The system must provide ability to upload attachments when submitting an online filing.	E
The system must provide ability to modify a registered agent and/or registered office on multiple licenses/registrations simultaneously.	E
The system must provide ability to update or alter any event or filings under a fictitious name without modifying the history	E
If processing a business or firm license/registry, the system must provide ability to determine if the business is active or non-active in the state of West Virginia while processing	E

The system must provide ability to generate an acknowledgement correspondence to send the user information about their application and any certified copy requests	E

Catalyst is based on a set of core components that interact with each other to deliver the business functionality required to operate online registries. This extremely flexible platform has been used for our clients in many jurisdictions around the world to deliver a range of registers including notaries, charities, apostille, security guards and trademarks. Catalyst can be configured to enable online filing options for practically any type of register or licensing application, including all service areas required by the West Virginia Secretary of State.

Catalyst provides an online, browser-based solution for access by both members of the public performing online transactions and by back-office staff responsible for the management and operation of the register. Catalyst provides members of the public with integrated search, reservation, registration, renewal, status and compliance functions, as well as access to online payment facilities. Back-office staff use Catalyst to carry out the daily functions required to maintain the register; working from an online interactive task list they complete the tasks allocated to them based on their defined responsibilities and security level.

Within this framework, Catalyst configuration easily supports the intake of documents via paper (mail), walk-in or online. Once filings and documents are captured in the system according to the jurisdiction's legislative requirements, further configurations define when services should be reviewed by back-office staff, when and what correspondence is delivered to relevant parties, etc. At a high level, Catalyst applies the following process to a business service:

- Allow the user to supply the data required for the service and to submit the data, either by submitting an online form or invoking a web service.
- Validate the data against the configured business rules and database.
- Optionally charge a fee for the service (configured as part of the Catalyst workflow configuration).
- Optionally pass the submission to an internal user for manual review (configured as part of the Catalyst workflow configuration).
- Apply the changes to the register once it is submitted and, if necessary, approved by the internal user performing the review.
- For those submissions that fail the internal review, reject the change or, when allowable, return the submission to the user to allow them to correct and resubmit.

Catalyst provides an integrated task management system that supports the assignment of tasks and activities to teams and team members. A fully interactive task list provides each user with a view of outstanding tasks, allowing them to select, update and complete tasks online.

Catalyst maintains the status of filings through the lifecycle defined within the system’s workflow management system. When each entity is created and configured, the lifecycle of the entity is defined within the workflow system, including the definition of the various entity states, regular “renewal” procedures and triggers for status transitions. Catalyst’s workflow system manages entities’ governance and compliance activities, assigning back office tasks (such as reviews, approvals and authorizations) to registry staff and identifying and managing overdue tasks. Additionally, entities and profiles only have access to the services that are specific for their type and their current status.

3. Financial

Requirement	Fit Code
The system will allow for the acceptance of payments by major credit cards and interface with current third party vendor	E
The system will allow for online payments by credit card accounts	E
The system will provide ability to create a fiscal record for every payment received and create an audit trail	E
The system will provide ability to associate one payment to multiple documents received	E
The system will provide ability to associate multiple payments to one or more documents received	E
The system will provide ability to integrate with a third party software vendor for credit card processing	E
The system will provide ability to associate a payment to a business entity and structure for online and paper filings	E
The system will provide audit tracking for any and all financial processing associated to a business entity or structure	E
The system will provide ability to search, review and modify payment information associated to a business entity or structure	E
The system will provide ability to determine and modify the next business day for processing in the system	E
The system will provide ability to assign a receipt date and validation date separately	E
The system will provide ability to create and modify a fee schedule based on specific categories	E
The system will provide ability to process refunds and reconcile payments received	E
The system will provide the ability to create daily deposit and cash summary reports	E
The system will provide ability to create and generate ad-hoc fiscal reports in the system	E
The system will provide ability to create and add new fiscal categories & object codes to the system	E
The system will provide ability to link to, validate, and reconcile on both current date (date funds received) and date of filing	E
The system must maintain financial transaction data (e.g., document fee, tracking number, document type, payment amount, applicable record, and payer name for tracking and audit purposes	E
The system will provide ability to search for payments by data captured (e.g., login ID, transaction date, payment number)	E
The system must provide the capacity for printing all search returns	E

Catalyst Fees and Payments Modules

Core functionality within Catalyst fully supports the financial processing requirements for charging fees, in taking payments and managing those transactions on a daily basis. At the time of implementation, all required fees are established and office administrators have the ability to update those fees as needed or add new fees to the system. Payment methods are also determined during the implementation process to ensure all required options are in place, including interfaces to third party payment processors. Catalyst also provides the various tools to search for and track payments, including modifications and refunds and generate reconciliation reports.

Fee Schedule

Catalyst includes a flexible fee schedule that manages the collection and processing of fees for registry services. Catalyst calculates and allocates fees based on pre-defined business rules and includes support for flat fees, sliding-scale fees and late fees. Catalyst also manages the generation of invoices and the processing of receipts.

When services are processed through the system, Catalyst can also implement conditional fees based on how the user interacts with the forms. Once the user is taken to the payment screen, detailed descriptions of what is being charged are displayed and individual line items can break fees out to ensure the user understands what the total amount reflects.

System administrators in Catalyst have full access to manage, update and create new fees. With this functionality, users can indicate the appropriate GL codes, set more than one payment amount per transaction and add taxes and penalty amounts. The image below depicts the Create Fee option for a Notary application.

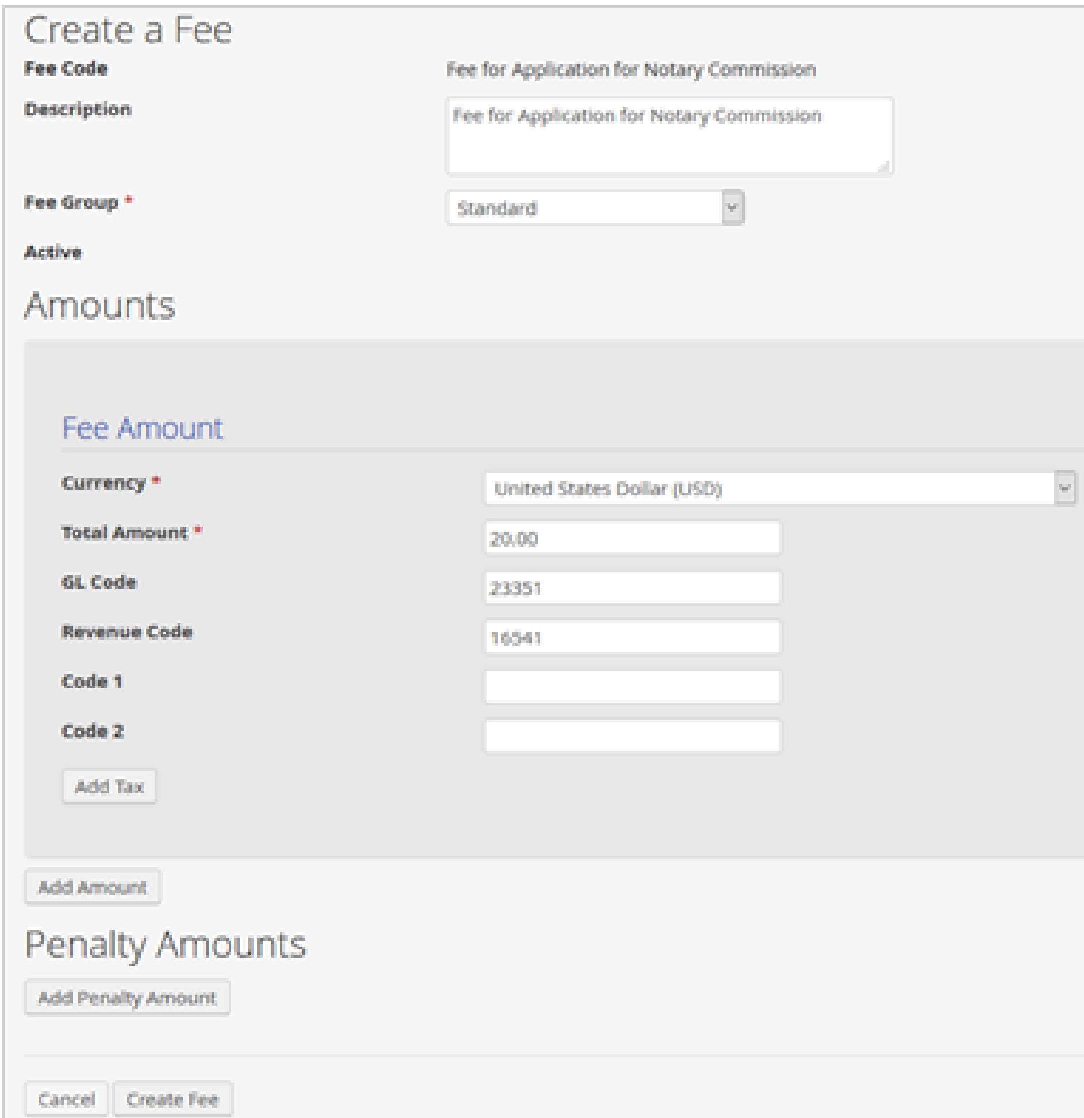

Figure 26. Catalyst - Back Office, Create a Fee for Notary Application

Shopping Cart

Transactions within a session are assembled in a shopping cart, allowing the user to pay for multiple documents or submissions with a single payment. Note that no submissions will be finalized until such time as payment is made. Alternatively, customers with pre-paid or billing accounts can perform multiple transactions and then pay for them with a single payment to their account. These accounts are described in more detail in the following sections. Catalyst also provides a shopping cart widget that is visible on a user's toolbar. The widget displays a shopping cart icon, the total number of items in the shopping cart and total cost.

Payment Processing

The standard Catalyst implementation methodology ensures all required payment processing options are fully defined and third party interfaces are thoroughly documented and tested prior to Go Live. Core functionality in Catalyst provides for collection and processing of fees in the following methods:

- Credit Card Payment - integration with a third party payment processor allows credit card transactions to occur within the system.
- Pre-paid account - an account balance is maintained per user account. This account balance is incremented online by an internal user, based on a payment receipt (transacted either at an authorized office, e.g. registry office or bank branches). There must be sufficient funds in the account to cover the services being paid for. For jurisdictions that do not allow this type of account, this feature can be disabled.
- Billing account - post-paid account where funds are not pre-allocated. Pre-approved users will be automatically invoiced monthly by the Register. Non-payment may result in de-activation of the account. For jurisdictions that do not allow this type of account, this feature can be disabled.
- Cash, Checks, Bank Draft, Other - these payment methods are available to internal users only entering paper applications on behalf of the customer. Registry staff can receipt such payment types against a transaction and Catalyst provides a bank lodgment report to facilitate banking of the cash/check/other manual payments.

For a payment transaction, Catalyst records details such as the client account number, associated document (if any), payment type, amount, receipt date, reference number and any comment entered. Depending on the payment type, Catalyst also records additional data such as credit card type, authorization code, bank name for a credit card payment or check number, issuer, issue date for a check payment and other details as applicable.

The system automatically updates the payment status on a successful completion of a payment. Payment receipts are generated and delivered as correspondence to the filer via email or printing. Under certain conditions, an authorized internal user maintains the payment status at the time of processing the payment.

Catalyst provides the ability to record a returned check against a payment, capturing details such as amount, issuer, date received, reason for the check being dishonored etc. Catalyst also captures any repayment made against the returned check, capturing details such as invoice number, repayment amount and waivers (as applicable).

Managing Financial Transactions

Catalyst provides a wealth of search options within the system to allow internal users to locate specific fees, payments and access to the full record of the transaction. With the appropriate permissions, users can manage transactions in various ways to ensure all financials are recorded appropriately in the system for daily reconciliation. The image below shows the Search Payments screen, allowing the user to search across Account Payments, Shopping Baskets, Fees and Payments. Search criteria for this tool can be updated to reflect any specific jurisdictional requirements. In the image below, the receipt number is used to query the system and the results show all elements of the transaction. All search results can then be exported to PDF or Excel.

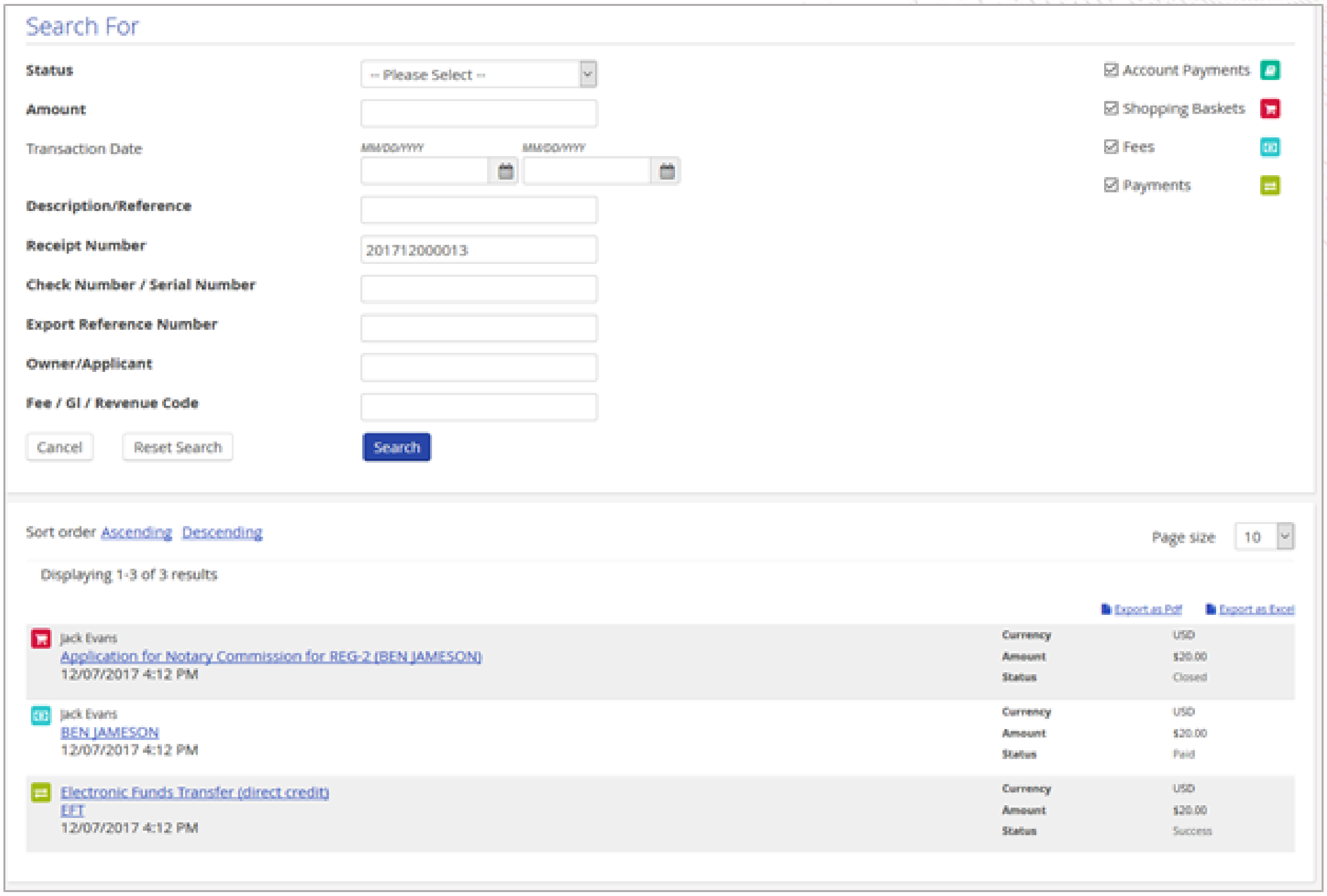

Figure 27. Catalyst - Search Payments Screen

Once the specific transaction is located during a search, changes and modifications can be made based on jurisdictional processing standards and requirements. The image below shows the View Basket screen for the Shopping Basket transaction of a Notary application.

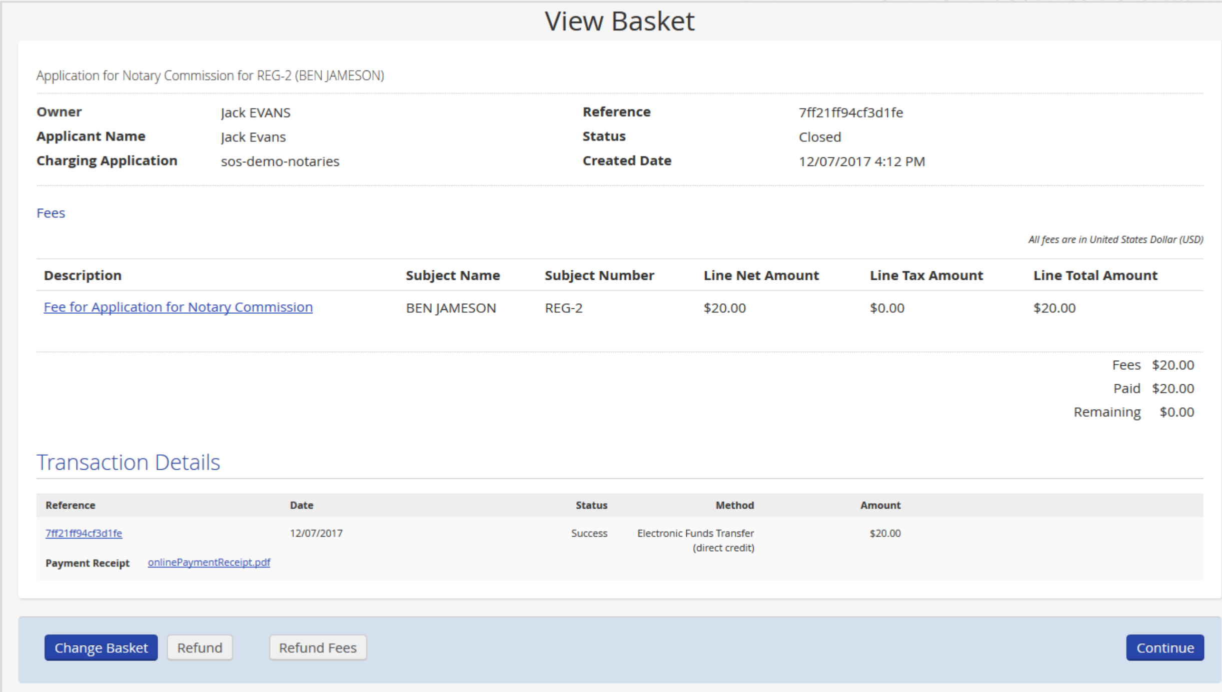

Figure 28. Catalyst - View Shopping Basket

The user can change the basket to modify the fee that was associated for the transaction, whereby the system calculates any amount outstanding or over paid. Refunds can then be provided for all or part of the transaction, allowing the user to indicate the reason for the refund, comments, notes and any supporting documentation.

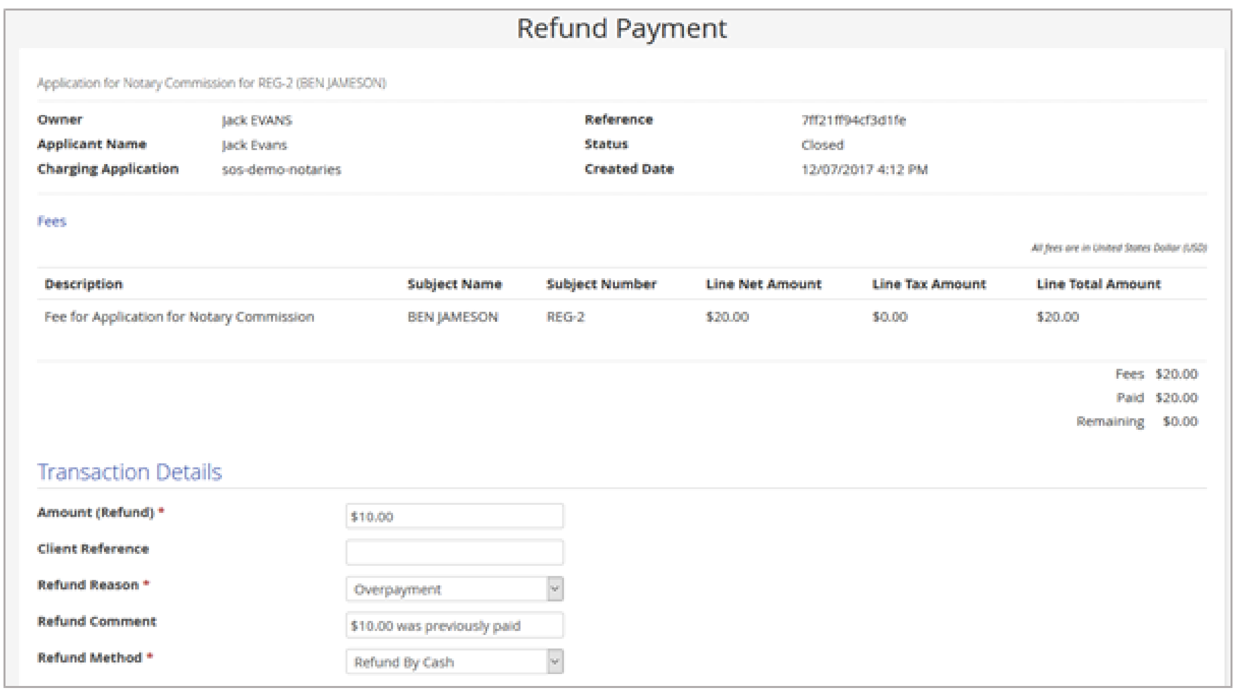

Figure 29. Catalyst - Refund Payment Screen

Any modifications to fees and payments are fully recorded in the system for full audit tracking. All transactions within Catalyst are linked to the original register event to which they relate and to a customer account, based on the logged in user who initiated the transaction. In addition to refunds, users can waive and modify fees for services that are receipted through the mail or from walk-ins. All activities for these actions are fully recorded in Catalyst.

When documents are manually lodged within Catalyst for paper filings, a user's role within Catalyst determines the functions they can perform, including manually processing filings. As part of this document lodgment workflow the user will record the receipt of payment.

Financial Reporting and Transaction Exports

Catalyst generates daily revenue summary worksheets used for reconciliation purposes. Sample reports as follows:

- Revenue summary by payment type on payments that are collected for transactions processed by internal staff.
- Revenue summary for external payments that are made by public users.
- Daily Reconciliation Report by User provides the receipting staff member with details of payments receipted for a particular period. The report can be run for a single day and can be filtered by a particular registry staff member.
- Payment Receipted and Not Reviewed Report provides the receipting staff member with details of payments receipted for a specified date but the corresponding service is still in the work queue to allow for reconciliation with the accounting system. This accommodates a differentiation between receipt date and validation date.

Catalyst has an interface that enables integration with external financial management systems, providing for the exchange of accounts receivable and credit note (refund) data between the systems. Catalyst produces a detailed transaction extract for sending to the external finance systems.

The Catalyst Payments Module can be configured with the client's accounting system's codes used for each of the identified transaction types created within the system. These codes can then be included in the data transferred to the accounting system via the payment system interface.

All reports in Catalyst can be executed on a schedule or on an ad hoc basis. Catalyst's Business Intelligence tool also allows jurisdictions to run sophisticated analytical reports where needed to assess financial management within the organization.

4. Imaging

Requirement	Fit Code
The system will allow for the ability to upload scanned documents and associate them to a business entity or structure	E
The system must store Images as compressed .tif or .pdf files	E
The system must store all documents as a single file linked to the entity and filing	E
The system must provide ability to store all documents in perpetuity for active and inactive entities	E
The system will provide ability to upload scanned documents and associate them to a business entity, structure	E
The system will provide ability to view or remove a scanned/imaged document	E
The system will provide ability to create and recreate any and all certified documents	E
The system will provide the ability allow external users to upload documents per service area	EC
The system must provide the ability for optical scanning capabilities to identify and automatically read barcodes printed on incoming documents for indexing purposes for both batch and individual scanning	EC
The system must adhere to the Agency requirements in compliance with West Virginia State Law and the Americans with Disabilities Act (ADA)	EC
The system shall be designed for American English speakers	E
The system will support deletion of scanned images	E

The Catalyst Document Receipting Module assigns a unique identifier to each paper document and uses this identifier (in the form of a barcode) to link batches of paper documents to the Entity. Once the document has been lodged, the associated filing data can be entered.

Document uploads can be set to required, optional or conditional per service. The jurisdiction defines the number of documents that can be uploaded per requirement, the document types allowed and any size restrictions. Document uploads are visible to internal staff during the review process and can be split off as a separate task for review if the internal user decides to do so. File size uploads within Catalyst are subject to a configurable system property that is tested when the file is selected for upload. Catalyst can also be configured to check the file type being uploaded, using the MIME type, to ensure that only allowed files types are uploaded (e.g. PDF, XML, DOC EXE etc.).

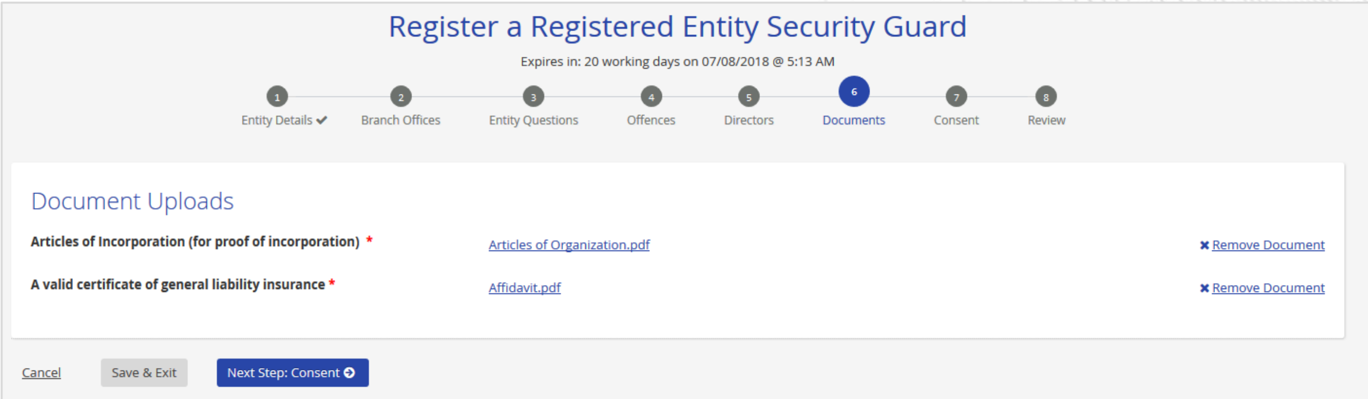

Figure 30. Catalyst - Upload Supporting Documents Screen

Catalyst includes an integrated record and document management system that is used for the storage and retrieval of documents. All documents are associated with a single entity and are stored and retrieved by Catalyst. The uploaded scanned documents are stored as a single .pdf file. Uploaded scanned documents can be sent to a work task for internal review which will allow for the deletion of the image, if necessary.

Documents in the document management system can be retrieved by any configured metadata item, including document identifier, entity identifier and author. Catalyst presents an entity-centric view of all data from within the register, including documents held in the document management system, in the entity view.

Catalyst can be configured to create or recreate certificates at key points in an entity's lifecycle (e.g., at time of Licensure). Such certificates are created based on a configurable template and are distributed based on configurable communication rules (e.g. e-mail), as well as being available for download at any time.

Certificates can be configured to include watermarks, stamp/crests, signatures, verification codes, QR codes and other security features. QR codes will allow for verification of the certificate via an embedded URL that will take the viewer to a screen to view the entity/structure details in Catalyst.

A business service called 'Request for Business Certificates' will be available online or via document receipting for paper requests. This business service will be available within the context of a business entity and will list certificates that may be requested, for example:

- Certificate of Good Standing
- Certificate of Existence
- Certificate of Authorization
- Certificate of Fact
- Certificate of Registration

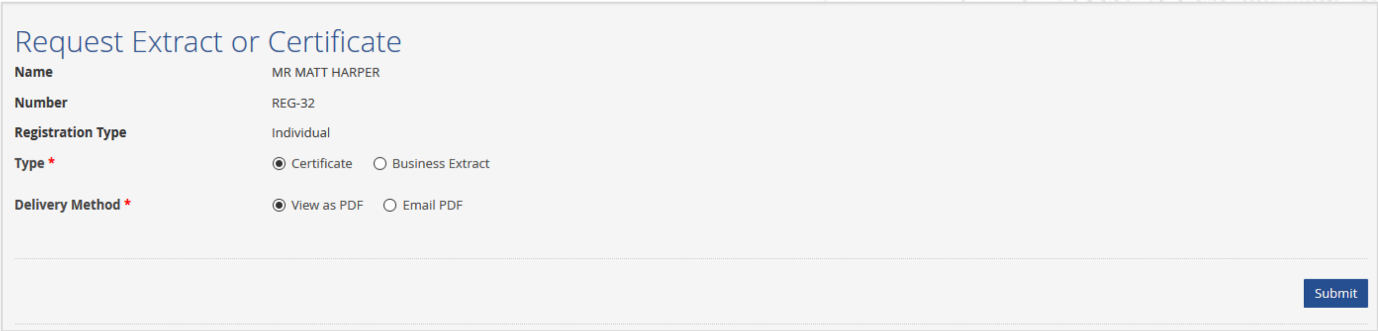

Figure 31. Catalyst - Request Extract of Certificate

On submission of the service and payment of any requisite fees, Catalyst will generate the requested certificate as a PDF document. It will then email it directly to an external user for an online submission or paper submission with return method by email. For other types of returns, the output documents may be printed by the processing officer.

Catalyst is complaint with WCAG 2.0 Level AA, a standard that is analogous to and directly comparable with the requirements of the Americans with Disabilities Act.

5. Correspondence

Requirement	Fit Code
The system will allow for the generation and access specific correspondence templates	E
The system will allow for the generation of correspondence, by authorized Division users utilizing approved templates	EC
The system will allow for the communication with business owners and/or contacts via email	EC
The system will allow for the generation and sending of a single correspondence and generate and send mass correspondence to specific users (both internal and external)	EC
The system will allow for the logging and retrieval of all correspondence sent to users regarding their business entity	EC
The system will allow for the filing of acknowledgements by email regardless of submission method	EC
The system will provide the ability for certified certificates of status to be available for download as PDF files and include a watermark and the information for the Secretary of State at the time of initial certification.	EC
The system must store all correspondence generated and provide the ability for future retrieval	EC
The system must auto generate confirmation or tracking numbers and status information for online submissions via email to all users associated to an entity	EC
The system must generate renewal and expiration notices and change record status	EC
The system must provide functionality for internal staff to manage periodic forms and notices for mailings	EC
The system must provide ability to integrate signature fonts or signature images to be reflected on certificates and correspondence	EC
The system is to provide an option to reprint previously generated certificates, rejection letters and receipts.	E

Correspondence, Communication and Templates

Catalyst includes a centralized correspondence management system that controls the generation and automatic or manual delivery of internal and external communication. Registry staff can create and send correspondence on demand based on a range of templates, which are created and maintained within Catalyst. The templates define the basic layout and content of each correspondence item. Staff select a correspondence template as the basis for a document and may edit the correspondence body prior to its delivery.

Variables can be referenced within the templates and sourced from registry data and system values. Template configuration includes document formatting, text content, pre-populated data fields and the application of logos and fonts etc. These variables encompass all the attributes of the Entity and also include standard business variables such as current date, time, office addresses and signatures, etc. Attachments may also be added to the correspondence (e.g. PDF containing the latest entity details or PDF containing search results).

Catalyst supports the generation of correspondence using templates via email, text message notifications and conventional mail and also manages addresses and user information. Appropriately privileged internal users are able to define and maintain which templates are used to support which steps in a business process workflow and which templates are available for the generation of ad hoc correspondence items.

Appropriately privileged users can create official communications that are recorded against the entities held on the register. These documents may be internal file notes (e.g. to record details of telephone conversations) or documents that are sent out to various external parties, including directors and shareholders. Documents may be created automatically or manually.

All correspondence items created within Catalyst will be recorded and logged in individual Documents within the Document Repository.

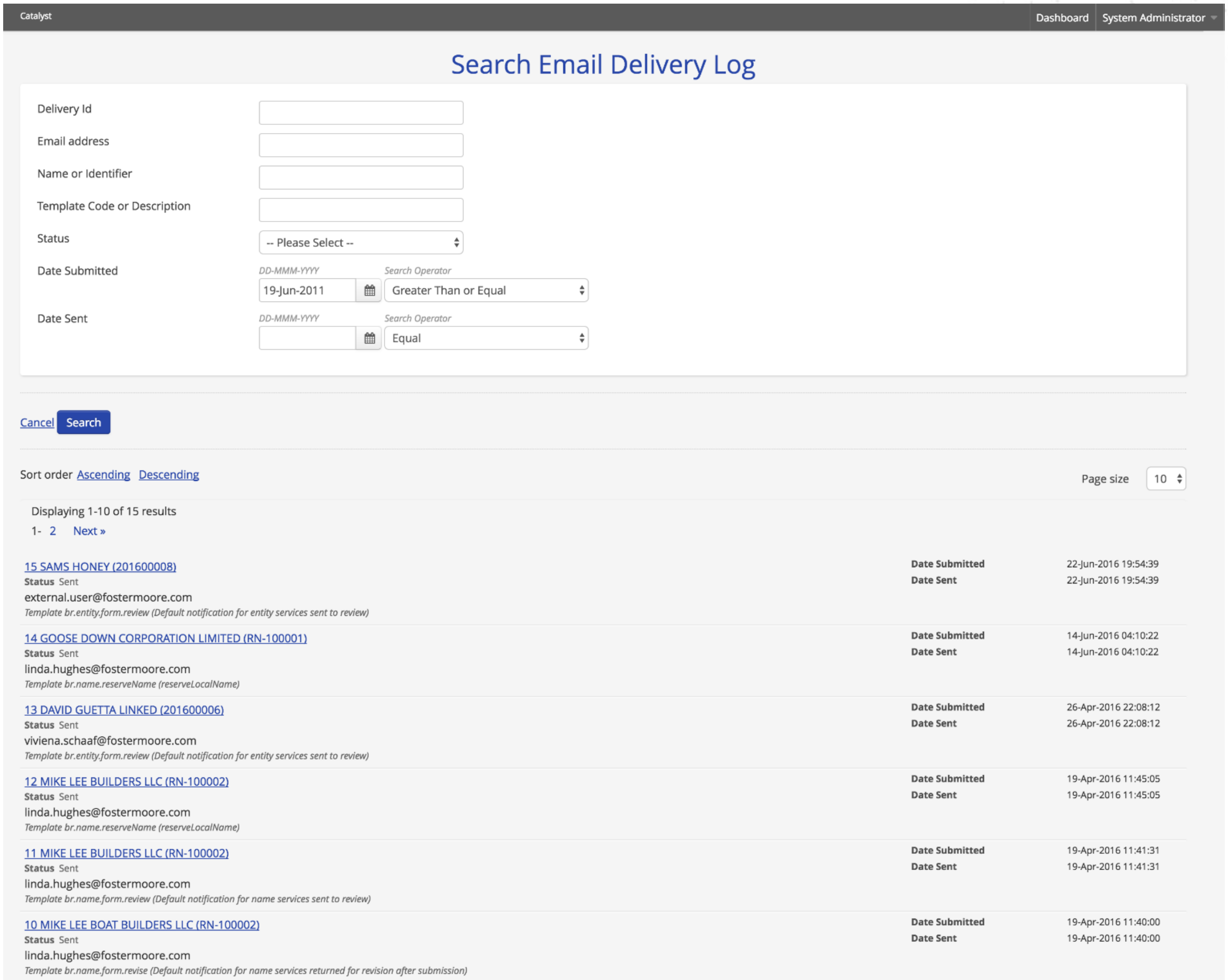

Figure 32. Correspondence Delivery Log

Spell checking is provided by the browser and can be in any language available and configured within the browser and/or computer's operating system.

As previously referenced, Catalyst provides for multiple methods of inbound and outbound correspondence. The method by which a correspondence is initiated does not limit the subsequent responses to that specific method. Workflows can dictate that various criteria, including the method by which a filing was submitted, result in acknowledgment by the correspondence method the registry office desires. Similarly, workflows can be created that require receipt of submissions by a specific methods (e.g. via mail) be automatically routed to a registry staff member to confirm desired acknowledgment method.

Certificates

Catalyst can be configured to create certificates at key points in an entity, notary, or agent's lifecycle, such as at time of registration. Such certificates are created based on a configurable template and are distributed based on configurable communication rules (e.g. email), as well as being available for download at any time.

Certificates can be configured to include watermarks, stamp/crests, signatures, verification codes, QR codes and other security features. QR codes will allow for verification on the validity of the certificate by any persons who are viewing the certificate. The embedded URL can take the user to the view entity details screen.

A business service called 'Request for Business Certificates' will be available online or via document receipting for paper requests. This business service will be available within the context of a business entity and will list certificates that may be requested, for example:

- Certificate of Good Standing
- Certificate of Existence
- Certificate of Authorization
- Certificate of Fact
- Certificate of Registration

On submission of the service and payment of any requisite fees, Catalyst will generate the requested certificate as a PDF document. It will then email it directly to an external user for an online submission or paper submission with return method by email. For other types of returns, the output documents may be printed by the processing officer.

Electronic Signatures

Once a user is authenticated and provided with access to the functions to which they have privilege to perform, they can record their consent using a range of mechanisms. The system can flag their authorization using their log-in credentials and, optionally, the user can apply an electronic signature to documents and other transactions.

Catalyst is developed specifically to support the legislative requirements of registers. Immutability of data, including electronic signatures, is at the very core of the product. Catalyst's core functionality includes unique capabilities such as versioning to store all historic data changes and business registration filings.

The solution will provide each type of user (role) with a dashboard tailored to their activities within the system and all transactions will be lodged against the entity itself. Catalyst's versioning and snapshotting features will be used to ensure all transactions are recorded, viewable and auditable. Catalyst provides "correct the register" functionality out of the box, ensuring the Department has the ability (in a controlled and auditable way) to correct errors within the register.

6. Reporting

Requirement	Fit Code
The system will log and retrieve all reports generated by the system	E
The system will create and run specific reports for pertinent staff and functional areas (e.g. fiscal reports, administrative reports etc.)	EC
The system will provide a user dashboard to enable staff to access reports based on user access and permissions	E
The system will provide the ability for authorized Division users to write and run ad hoc reports	EC
The system will provide scripts for ad hoc reports that will be maintained within the system for future use	EC

Catalyst delivers operational and management reports covering activities with the registries. This includes the ability for users to review caseloads and financial information related to the operation of the registries. Reports include those related to the data within the register, as well as the performance of staff in meeting work service levels (such as processing volumes and task wait times etc.). Reports are available online as interactive web pages and as printed reports. The online interactive reports allow a user to search, filter and drill down on the data to suit their purpose.

Catalyst allows users to view, print and save the reports they create. Generated reports can then be printed or exported in a range of formats including PDF, text and Excel (CSV). Reports can be archived and retrieved within the embedded document management system. Real-time reporting screens allow for the creation, review and manipulation of standard and ad-hoc reports by authorized users. A standard query and reporting interface is provided and can be used by most users with little or no training.

Not all reports may be available to all users. The list of reports displayed for execution by each user will depend on the user group(s) to which they belong. If they belong to more than one user group with different reporting availability, the user will have a combined list of all the reports available to the groups.

Catalyst provides a suite of operational and statistical reporting features out of the box. These reports provide standard statistical and management reports that registry administrators typically require to ensure the registry office is performing optimally and the registry is delivering a highly responsive service to their clients.

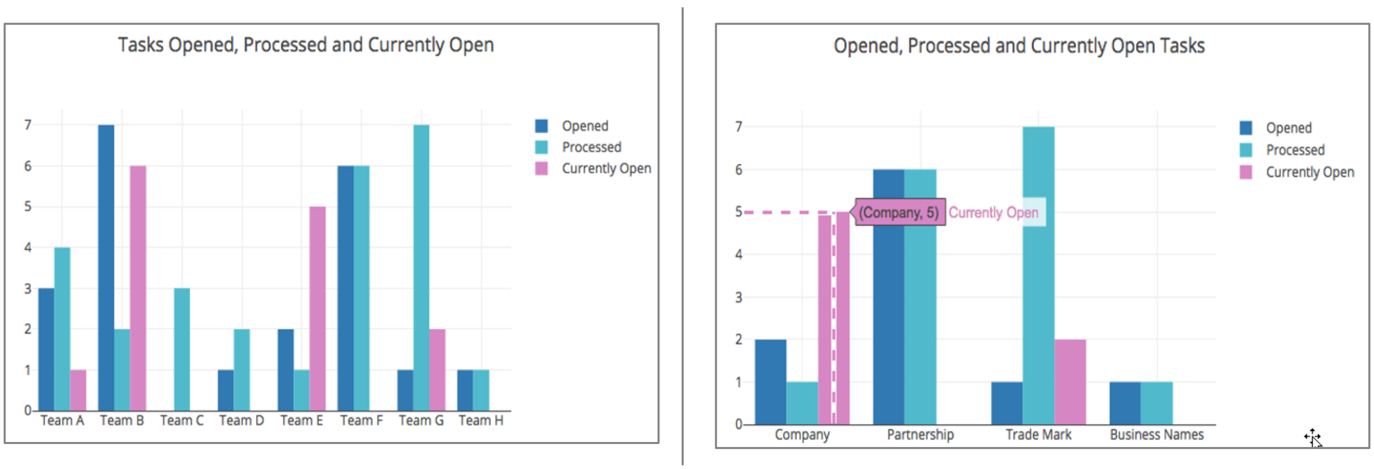

Figure 33. Catalyst - Sample Report for Tasks Opened, Processed and Currently Open by Internal Teams and Register

Reporting on the performance of the internal work queue is standard with all Catalyst implementations. All tasks (documents) that are in the queue(s) are monitored and reported on. Administrators also have the ability to define escalation rules on tasks that can send alerts to teams and people when SLA's are not met and the escalation history can be reported on.

Figure 34. Catalyst - Sample Report for Tasks in Work Queue

Catalyst's workflow engine stores all relevant events in the database. This history log can be used to monitor and analyze the execution of processes and the key performance indicators. Custom reports can also be defined, using the predefined data sets containing all process history information and any custom data sources.

Catalyst records the date and time when a task was assigned to a specific member of a registry team as well as the date and time when the task was completed. A productivity report may be generated to show workflow statistics per business service within a given date range.

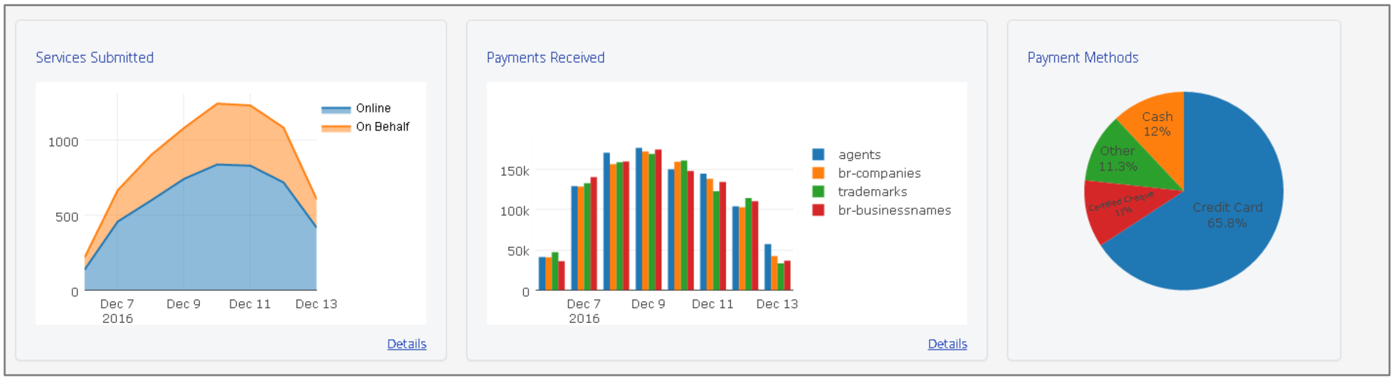

Figure 35. Catalyst - Sample Report for Service Submission Methods, Payments Received by Register and Payment Methods

Catalyst provides a unified dashboard across all registers delivered from the platform, so that as additional registers are added (e.g. Marriage Celebrants, Private Investigators and Security Guards, Real Estate Appraisers etc.), users have a launching point for services available to users across all registers to which they have access. Online dashboards and query facilities provide real-time access to information for internal and external users.

Not all reports may be available to all users, their respective dashboards are handled in the same manner. Dashboards are available to each user dependent upon the user group(s) to which they belong. If they belong to more than one user group with different information access, the user will have access to the dashboards available to the groups.

Catalyst delivers operational and management reports covering registry activities for any time frame for which data exists within the registry. This includes the ability for users to review caseloads and financial information related to the operation of the registries. Reports include those related to the data within the register as well as the performance of staff in meeting work service levels (such as processing volumes and task wait times etc.).

Reports are available online as interactive web pages and as printed reports. The online interactive reports allow a user to search, filter and drill down on the data to suit their purpose. Real-time reporting screens allow for the creation, review and manipulation of standard and ad-hoc reports by authorized users. A standard query and reporting interface is provided and can be used by most users with little or no training.

Pre-Defined Reports

Catalyst provides several pre-defined reports to certain authorized users. The following reports are available within each register:

1. User Activity Calendar (By Services) – This report shows a count of each business service that was instantiated for a given period. Options are available to see activity for the current day or a given week, month or year. The report data is provided in a calendar format. The internal user is able to drill down to view more detailed information about the services that were instantiated.
2. User Activity (By Services) – This report, like the above report, shows a count of each business service that was instantiated between two dates. A start and end date must be entered and a period selected. The periods available for selection are Day, Month and Year. The report data can be exported to HTML or CSV.
3. User Activity Calendar (By Service Group) – Like the User Activity Calendar (By Services), however the services are grouped together. For example, all Register or Incorporation type services can be grouped into a Register Corporation service group.
4. User Activity (By Service Group) – Like the User Activity (By Services), however the services are grouped together.
5. User Activity Summary (By Service Group) - This report lists each service group, showing a count of the services instantiated for the given periods:
    - Current Day
    - Previous Day
    - Current Week
    - Previous Week
    - Current Month
    - Previous Month
    - Current Year
    - Previous Year

Clicking on the Service Group will provide the user with details of each Business Service within the service group.

6. Service Transition Calendar - This report shows a count of the number of services that was transition from one state to another. For example, the number of services that transition into completed or into review for a given day, week, month or year.
7. Payment Calendar (By Services) – This report shows the sum of fees received per business service for a given period. The report data is provided in a calendar format. The internal user can drill down to view more detailed information about the services.
8. Payment Calendar (By Service Group) – This report, like the above report, shows the sum of fees received per business service between two dates. A start and end date must be entered and a period selected. The periods available for selection are Day, Month and Year. The report data can be exported to HTML or CSV.
9. Payment Summary (By Service Group) – This report lists each service group showing a summary of the fees created for different terms as follows:
    - Current Day
    - Previous Day
    - Current Week
    - Previous Week
    - Current Month
    - Previous Month
    - Current Year
    - Previous Year

Clicking on the Service Group will provide the user with details of each Business Service within the selected service group and the associated fees.

The Catalyst Document Receipting Module provides standard reports to assist in day end reconciliation and provide information on payments received during a given time period. The following reports are available:

- Daily Reconciliation Report by User - this report provides the receipting staff member with details of payments receipted for a particular period. The report can be run for a single day and can be filtered by a particular registry staff member.
- Receipts by Payment Type - this report provides the receipting staff member with a summary of payments receipted for a particular period. Payments are grouped by payment method and then grouped into those that will be deposited and those that will not.
- Payments Received Report - This report provides the receipting staff member with a list of payments receipted for a particular period, by default this is set to the beginning of the current day and the current date and time. Payments are grouped by payment method and details of each payment are shown

All reports provided by Catalyst will be pre-defined in terms of the input parameters, data displayed and presentation layout. Reports can be run by a user on demand and the user will be able to select the destination of reports – to screen, printer or to a file system location (saved as a PDF).

Not all reports will be available to all users. The list of reports displayed for execution by each user will depend on the user group to which they belong. If they belong to more than one user group with different reporting availability, the user will have a combined list of all the reports available to the groups.

Beyond pre-defined reports, users can be provided with the ability to create custom reports through the use of a reporting tool. Foster Moore recommends the use of a third party reporting tool which can be used to design and generate reports, for ad-hoc reporting requirements. The provision of an externally accessible reporting view of the Catalyst data is currently on the Catalyst product roadmap.

7. Administration

Requirement	Fit Code
The system will provide a workflow queue with work assignments based on current functional areas	EC
The system will provide ability to assign work assignments to specific staff	EC
The system will provide the ability for staff to manage, sort and route tasks	E
The system will provide the ability for staff and administrators to modify work assignments during any phase of the workflow lifecycle	E
The system must maintain audit log for all changes to records containing information on edit date, last edit user and previously stored content	E
The system must ensure that all system transactions are logged in the database and auditable	E
The system will ensure that user access levels shall be tiered for internal user access levels, with varying view and edit permissions based on role	E
The system software will not contain any features permitting access to the system in violation of its security features or the change management process	E
The system software will not contain any features rendering the system inoperable, or degrade its performance	E
The system software provided will be certified by the vendor as virus and malware free	E
The system must have the capability to monitor transactions through the system for the purposes of auditing, error diagnosis, and performance management	E
The system must support encryption of data, including the ability to transmit and receive encrypted files and messages	E

Each registry or licensing service within Catalyst is subject to a workflow process. The workflow controls the manner by which the service is invoked, the subsequent 'flow' involved in completing it and the common services that are invoked as part of the process. The workflow rules within Catalyst allow control over the business process that is followed when the services are used. This includes processes such as the registration of new licensees, administration of licenses and completion of regular compliance functions online, such as annual renewal notices.

Catalyst allows for the definition of workflows to control the flow of tasks and data within the system. Workflow processes can be built that involve actions on both internal and external users and provide a seamless flow of information between them. This enables Catalyst to deliver fully managed end-to-end business processes.

For example, a new license request by an external user can initiate a follow-up task with an internal user. Based on the result of this internal action, responsibility can be diverted back to the external user to obtain additional information or to notify them of a filing issue.

A workflow system will be configured to define business processes, tasks and escalation rules. A work queue will be provided to enable internal users to view and execute on outstanding tasks assigned to them. The following functions will be provided:

1) View Tasks - Allows an internal user to view the work queue of open tasks.
2) View Task Details - Allows an internal user to:
    a. View task details

b. Approve a form associated with a task
c. Reject a form associated with a task
d. Assign a task to another user

3) Maintain the Calendar - Allows an internal user to maintain statutory holidays.
4) User Registration and Account Maintenance

On submission of the application, a defined workflow will trigger tasks to notify internal staff of the application, prompting them to review the application and to approve or reject it. The following screenshot illustrates the administration screen presented to an internal user to allow them to approve a consent form supplied by an external user as part of the process:

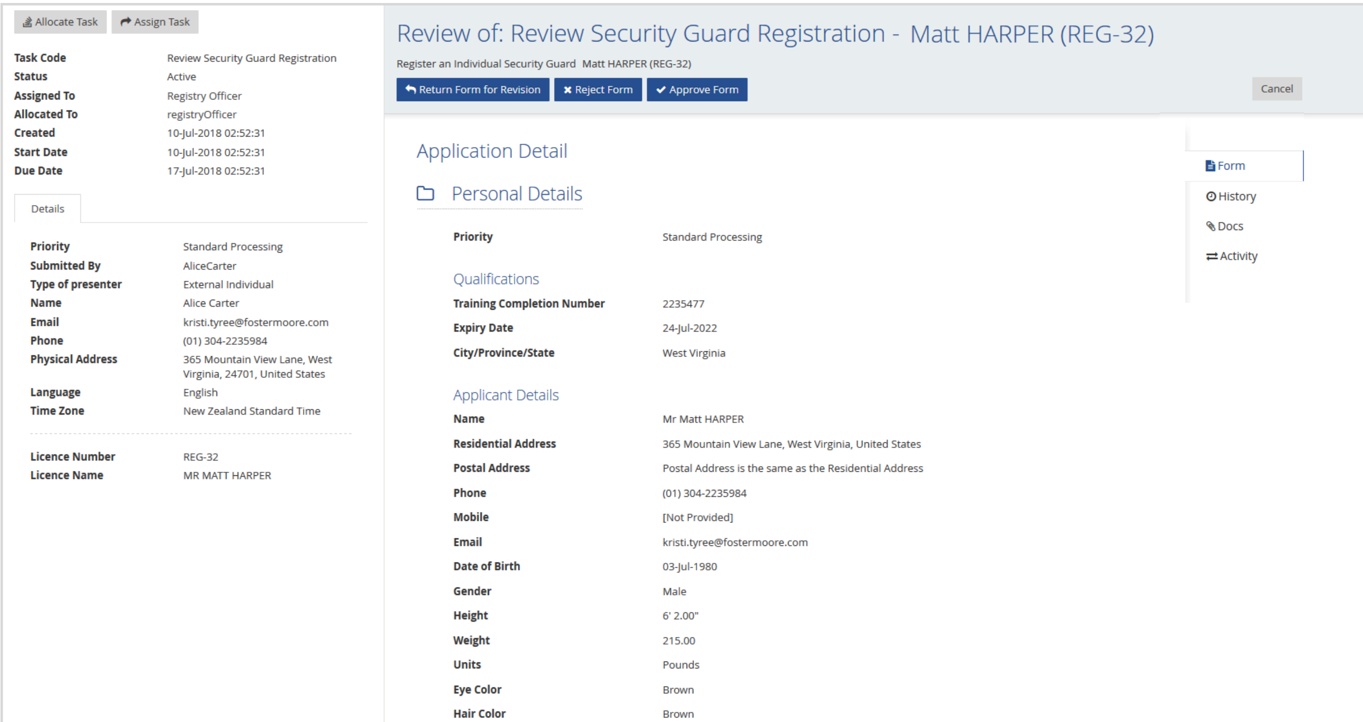

Figure 36. Catalyst - Internal Registry User's Approval of a Security Guard Registration

As tasks are created they are assigned to users, or teams of users, based on the configured rules and the users' permissions and team memberships. Catalyst supports the monitoring of tasks by management and the automatic alerting and escalation of overdue tasks through a configured hierarchy of users. Services to manually assign, allocate, or approve tasks are available to internal users with the appropriate permission.

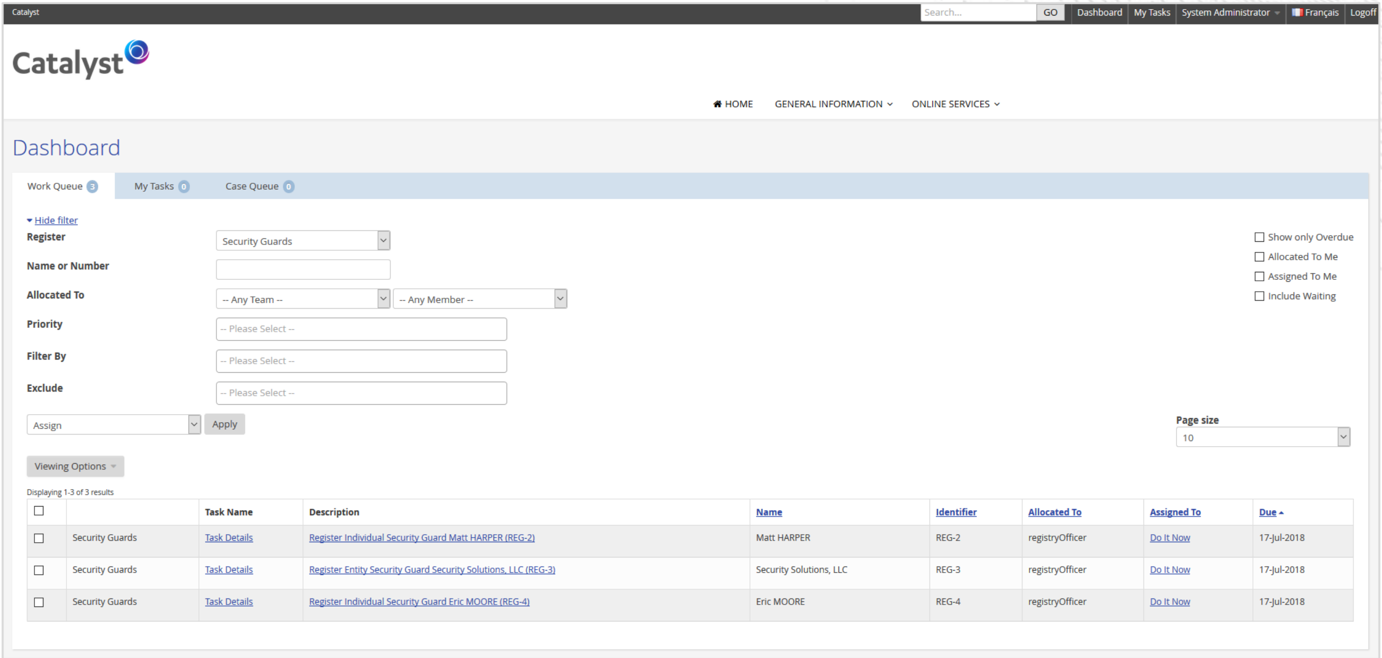

Figure 37. Catalyst - Internal Dashboard with Assignment Permissions, Showing Task Allocations

As tasks are created they are assigned to users, or teams of users, based on the configured rules and the users' permissions and team memberships. Catalyst supports the monitoring and management of tasks by registry administration and management of and automatic alerting and escalation of overdue tasks through a configured hierarchy of users. Services to assign, allocate or approve tasks are available to internal users with the appropriate permission.

Case Management

The Catalyst Case Management module provides for the capture and management of a ***case***. Within the context of Catalyst, a case represents a logically associated set of activities that are carried out in a controlled, yet ad-hoc manner, to address a business objective and arrive at an appropriate resolution.

The Case Management service supports the activities by providing a set of tools that enable the capture of information relating to the establishment of the case, on-going activity on the case, progress of the case, resolution of the case and closure of the case.

Case Management provides the ability to create a Case Type with a preconfigured structure. When creating a new instance of a case the case type must be selected providing the user with the default structure for the particular type of case. Examples of such case types that may be created include:

- Investigation
- Inspection
- Enforcement
- Audit
- Complaint

In addition to case-specific information, a series of generic tools that capture information on typical office operations, such as correspondence, document upload and storage, file notes and checklists are provided.

Case Management is designed within Catalyst to support the association of cases to entities within the register, to support the establishment of standalone case entries and to support the integration of cases to business specific services that are part of the specific operation of the register.

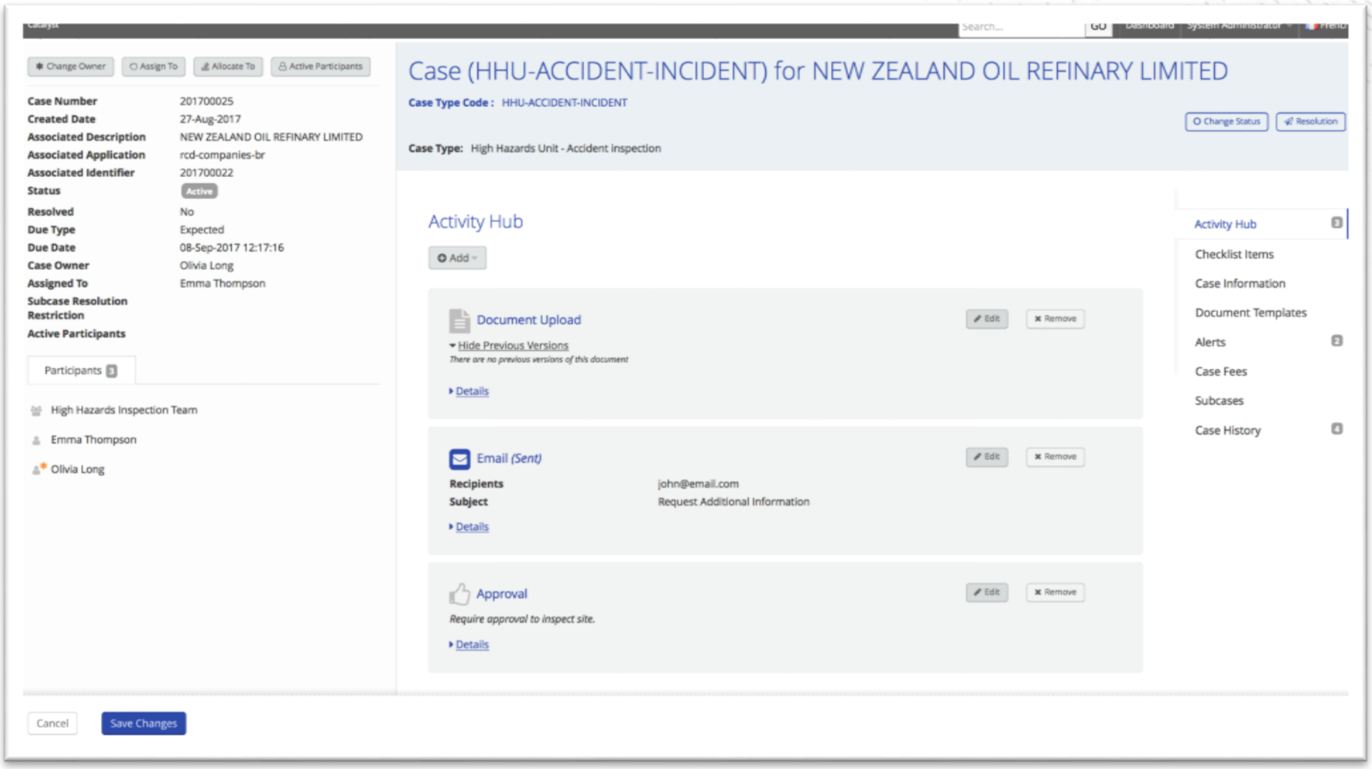

Figure 38. Catalyst - Case Review Screen

A case will consist of a number of elements, these typically being:

- Generic, or standard information that applies to all cases;
- Case type specific information that is determined through the template associated with the case type;
- Case type specific progress information that summarizes where in the type-specific 'life-cycle' the case has got to;
- A list of participants and participant access levels for the case;
- A case owner who can change the structure of the case;
- A set of general information that is stored as a result of typical office processes being carried out, such as research, correspondence and collaboration, document uploads etc.;
- Subcases related to the case.

Catalyst provides an integrated task management system that supports the assignment of tasks and activities to teams and team members. A fully interactive task list provides each user with a view of outstanding tasks, allowing them to select, update and complete tasks online.

All business services within Catalyst follow a standard process that handles the entry, validation, charging of fees and review of the data entered or contained within the service. Within a Catalyst workflow there are a number of configurable attributes that control the flow of a business service and the way it is processed by the system.

At a high level, Catalyst applies the following process to a business service:

- Allow the user to supply the data required for the service and to submit the data, either by submitting an online form or invoking a web service.
- Validate the data against the configured business rules
- Optionally charge a fee for the service (configured as part of the Catalyst workflow configuration)
- Optionally pass the submission to an internal user for manual review (configured as part of the Catalyst workflow configuration)
- Apply the changes to the register once it is submitted and, if necessary, approved by the internal user performing the review
- For those submissions that fail the internal review, reject the change or, when allowable, return the submission to the user to allow them to correct and resubmit.

Catalyst maintains the status of filings through the lifecycle defined within the system's workflow management system. When each entity is created and configured, the lifecycle of the entity is defined within the workflow system, including the definition of the various entity states, regular "renewal" procedures and triggers for status transitions. Catalyst's workflow system manages entities' governance and compliance activities, assigning back office tasks (such as reviews, approvals and authorizations) to registry staff and identifying and managing overdue tasks. These tasks can also be manually assigned, reassigned and modified at any time during the workflow by users with appropriate permissions.

Workflow Reporting

Catalyst provides a suite of operational and statistical reporting features out of the box. These reports provide standard statistical and management reports that registry administrators typically require to ensure the registry office is performing optimally and the registry is delivering a highly responsive service to their clients.

Reporting on the performance of the internal work queue is standard with all Catalyst implementations. All tasks (documents) that are in the queue(s) are monitored and reported on. Administrators also have the ability to define escalation rules on tasks that can send alerts to teams and people when SLA's are not met and the escalation history can be reported on.

Catalyst's workflow engine stores all relevant events in the database. This history log can be used to monitor and analyze the execution of processes and the key performance indicators. Custom reports can also be defined, using the predefined data sets containing all process history information and any custom data sources.

The work queue lists every task and the status of the task. This information can also be rolled up to the service level (i.e. Scrap Metal Dealers Registration) and to the queue level also where multiple queues are operating.

Catalyst records the date and time when a task was assigned to a specific member of a registry team as well as the date and time when the task was completed. A productivity report may be generated to show workflow statistics per service within a given date range.

Catalyst supports the scheduling of batch and back office functions including batch updates, issue identification and report generation. This happens without the need to integrate a third-party scheduler.

Catalyst supports international standards in the area of:

1) Integration – Standard accepted integration protocols are used, such as XML, BXRL and AS2 etc.
2) Communications – Standard's based communication protocols are used, including TCP/IP, HTTP and HTTPS.
3) Accessibility – In each jurisdiction, Foster Moore delivers a Catalyst solution which complies with the local accessibility and usability requirements in place. Systems have been delivered in Canada, New Zealand and across the Pacific.

4) Implementation – The Catalyst Adoption Methodology used to deliver each project is based on the ITIL standard.

Catalyst maintains audit logs of all activities that take place within the system. Catalyst creates audit trails covering business activities as well as system and security events. Catalyst's audit log is a standard facility that requires no customization or configuration to enable.

The Catalyst audit log captures all activities undertaken within the systems including data updates, task, job and process completion, system generated activity (such as correspondence generation) and user activity (both internal and external). Four essential properties are captured for every auditable event; what was done, when it was done, what it was done to and who did it.

The system also records evidential acknowledgment for all prompts or warnings confirmed by a user during their activities. This becomes increasingly important as more and more functionality is assigned to external users. The system records a user's response to a message informing them that the action they are about to take is subject to law and identifying the ramifications if they continue with the process in an illegal or inappropriate way.

Catalyst employs communication protocols such as HTTPS to encrypt all data passing over public networks. In addition, internal registry staff can access Catalyst using a Virtual Private Network (VPN) to provide an added level of security.

8. Authentication and Authorization

Requirement	Fit Code
The system will have the ability to create, update and manage user roles and permissions for both internal and external users	E
The system will have the ability to control access to sections of the system according to defined permissions and roles	E
The system will have the ability to differentiate between internal and external users	E
The system will have the ability to display access to specific pages and information about business entities and structures to public without a user login	E
The system will provide one-to-one credentials only. There is not to be any shared access.	E
The system must provide access in the areas of fiscal, imaging, correspondence and service areas in addition to areas already defined	EC
The system will ensure that different levels of permission will be defined by the project team and implemented according to approved design requirements	EC

Catalyst employs a role-based security model that controls access to the system by registered users. This allows access to data and functionality to be restricted based on user accounts and users' membership to defined roles. Catalyst caters for internal users (staff who work in the registry office) and external users (members of the public with a declared interest in one or more entities) and controls their access accordingly. This security is managed at the register level within a multi-tenanted environment, allowing fine-grained control of access to users across multiple registers.

Authorized users of the system (e.g. system administrators) can add and maintain user accounts, including the assignment of users to one or more roles. Role maintenance is also provided, allowing authorized users to create and edit roles, including setting the available permission levels for a role. Permissions allow control over the functions users have access to as well as the data they have access to. Data access configuration allows independent control over the entities (rows) and data items (columns) accessible by users. Data access control can also be configured to take into account defined relationships between the user and the entity (e.g. a officer of a company).

Authority Management

A key concept within Catalyst is that of authority management. Authority management controls a user's access to entities within the system, the data they can view for those entities and the functions they can perform against them. This access can cover the functions that are required to be performed by external parties such as agents, lawyers and accountants.

Authority management is based around providing services to three distinct types of users:

- Anonymous Users - Users of the system who have not logged in to the system.
- Authorized External Users - Logged in members of the public who already have authority over an entity.
- Unauthorized Users - Logged in members of the public who do not have authority over an entity

External users of the register often need access to data for entities with which their user account has no pre-existing direct association. Catalyst provides control over this through its authority management functions, including delegated authority. Catalyst allows an external user to request authority over an entity. It also allows a user who already has authority over an entity to grant authority to a user who does not. The registrar (an internal user) may also grant and revoke authority to external users based on requests from authorized and unauthorized users.

In some cases, Catalyst will automatically grant an authority against an entity as part a business function (for example when an entity is successfully registered). In other circumstances, authority over an entity can be granted explicitly to a user by an internal user, or by another external user with existing authority over the entity (an "authorized user"). In the same manner, an authorized user or an internal user may revoke a user's authority on a business entity.

The registrar has the option to suspend external authority management in the event of disputes over an entity. Where an entity has been suspended from authority management, authorized external users will no longer be able to maintain entity details. Suspending authority management does not revoke existing authority, ensuring that once the suspension is lifted all authorized users will once again be able to maintain the entity.

In many cases a register generates an industry in the associated register community, allowing a range of different parties to offer services associated with the maintenance of the register. A typical example of such is the establishment of agencies that perform administrative duties, such as filing, on behalf of business entities.

Catalyst supports agencies through the establishment of organizations within the authority model. Each organization has one or more individuals associated with it and, through a business role, will be linked with one or more entities within the register. This model allows those individuals linked to an organization (known as organization users) to access and maintain the entities over which the organization has authority. As with access for an individual with authority over an entity, the data and functions available to organizational users is determined by the business role granted to the organization.

Access control within Catalyst restricts the entities and sections users have access to and the degree of control and change they can effect over those entities, based on the permissions granted for the users' specific role(s). While some functions, such as searches, can be performed anonymously, all functions which involve management of an entity (creation and modification etc.) require a user to have a user account.

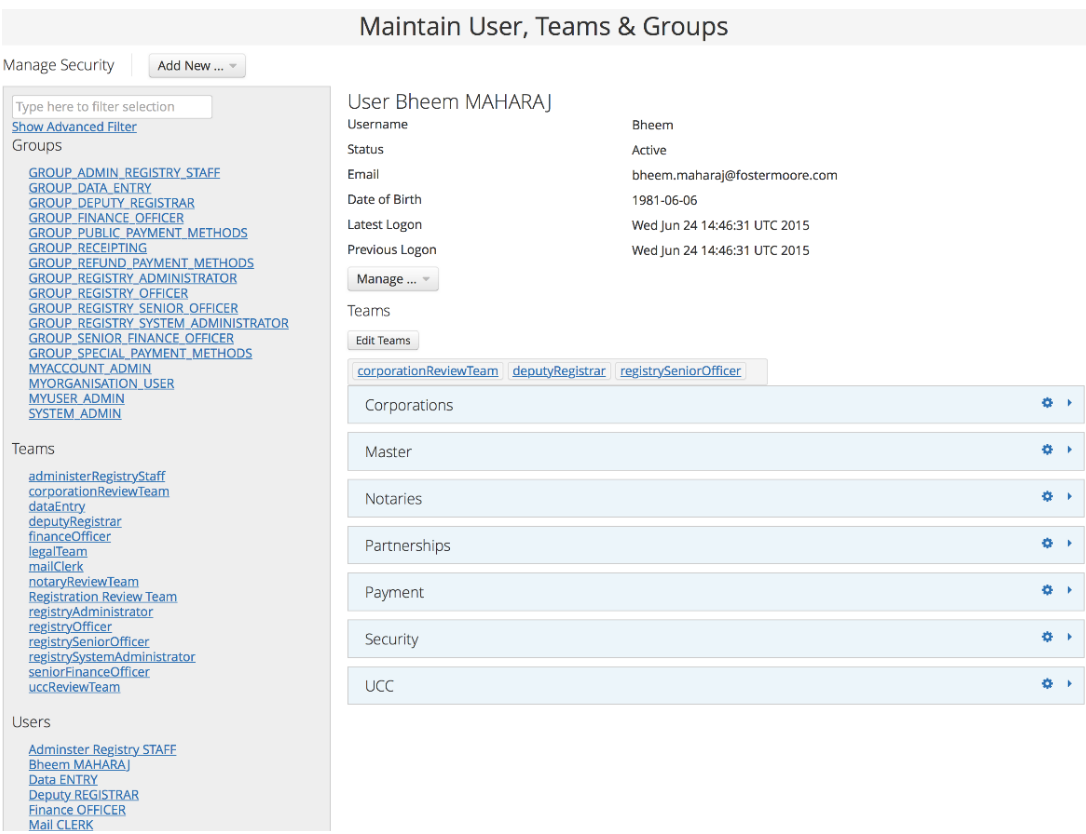

Figure 39. Catalyst - User Account Maintenance Illustrating the Assignment of an Internal User to Groups and Teams

Catalyst ensures all access to functionality and data takes place through the application itself, with access controlled by the Catalyst security model. Foster Moore works with clients through all Catalyst installations to ensure that all servers, including application, web and database servers, are adequately secured from unauthorized access.

Catalyst provides entry points for both internal users and external users. The system provides different functionality to users based on whether they are an internal or external user, their relationship with an entity and the business or administrative role they play. In addition, internal users can be assigned different access privileges based on their membership to user security groups and to teams within the registry office.

Catalyst provides external users with integrated entity search, creation, maintenance and compliance functions, as well as access to online payment facilities.

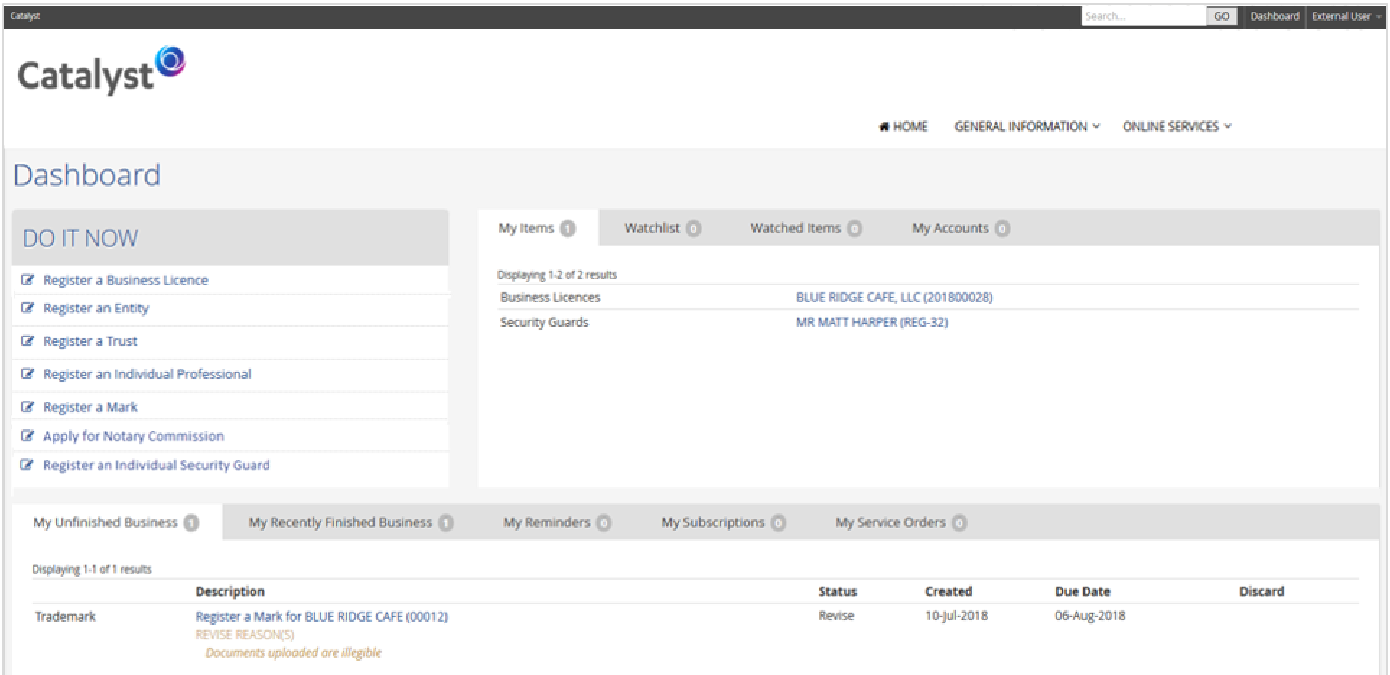

Figure 40. Catalyst - Example External User Homepage

Internal users use Catalyst to carry out the daily functions required to maintain the register. Working from a web-based interactive task list, they complete the tasks allocated to them based on their defined responsibilities and security level. Catalyst provides an advanced browser-based application for use by staff within the registry office. This application is focused on efficiently supporting the day-to-day administrative and management functions they perform against the registry (e.g. approval of incorporations and management of overdue activities).

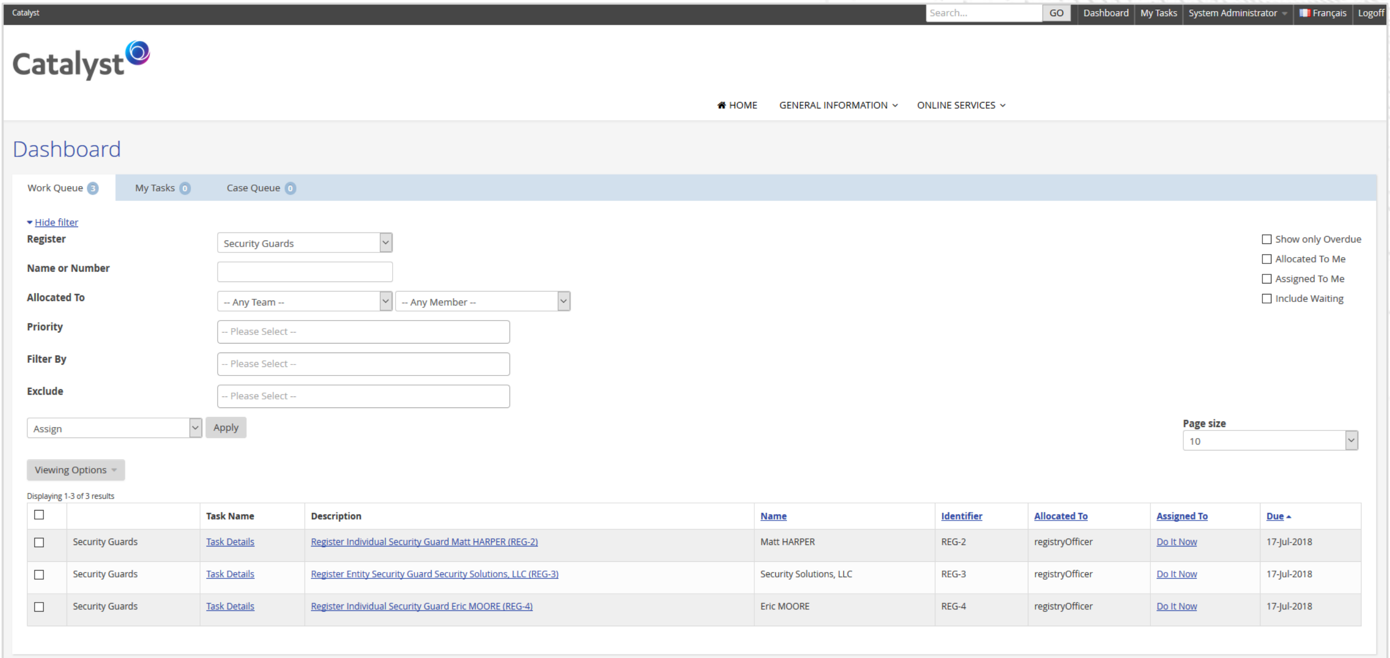

Figure 41. Catalyst - Internal User Dashboard Including Work Queue

Access control within Catalyst restricts the entities and sections users have access to and the degree of control and change they can effect over those entities, based on the permissions granted for the users' specific role(s). In most Catalyst implementations, some functions, such as searches, can be performed anonymously while functions which involve management of an entity (creation and modification etc.) require a user to have a user account. Access to pages and information that require users to log in versus those that do not are configured based on our clients' requirements for each specific registry.

Within Catalyst, a user's access to data and functionality is managed by the Access Control system. This system relies on every individual accessing the register having an individual account that uniquely identifies them. These accounts are used for all activity within the register, aside from those such as simple register searches which may be performed anonymously.

This approach ensures that all actions undertaken within the register are attributable to an individual user and delivers significant benefits in terms of security, auditability and accountability within the register.

9. Migration

Requirement	Fit Code
The system must have the ability to integrate and migrate data from existing systems	EC
The system must have the ability to import data from other data sources (e.g. FTP; code tables etc.)	EC
The vendor will provide mapping of the .tif and .pdf images in the Legacy system	EC
The vendor will provide a migration plan which successfully moves all the data to a single database and database type	EC
The vendor must provide a migration plan that will include multiple migrations to include historical data, data through development, and "Go Live" data	EC
The vendor will ensure that the migration of "Go Live" data will have a limited impact on the duration existing public facing interface is offline	EC
The system must provide the ability for images to be indexed in the database with all images of documents stored on a file server	E
The system must ensure that migration will keep a 1:1 relationship between filings and an entity	E
The system must ensure that migration will keep a 1:1 relationship between a filing and associated images	E
The vendor must develop a 5 year growth plan for the database based on a 10% annual increase of filings	EC
The system must maintain the historical records and associations to the appropriate filings during the migration process	EC
The vendor must ensure the data be analyzed for integrity, gaps identified where necessary, and recommend where differences will need to be reconciled	EC
The vendor must ensure that the data be transformed from current to future state and routines created for converting	EC
The vendor must plan for the addition and modification of data throughout the migration process	EC

Catalyst provides integration points that enable it to support existing external systems. For example, Catalyst can be integrated with an external document management system or with external components for services such as user identification, authentication and authorization.

Within a client’s environment Catalyst can leverage existing database infrastructure, including different relational database management systems and hardware such as SANs, and can be deployed into the customer’s existing web delivery environments. Catalyst is delivered with a built-in search engine for entity searching and can also can be configured to integrate with a client’s existing search engine technology if required.

Catalyst can be integrated with external systems for the purposes of coordinating governmental activities, such as applications for tax numbers, background checks and other registration actions associated with registration and maintenance of entities within the register.

Catalyst also supports state and national level services such as those providing user authentication and login services. This integration is in place with the State of Montana’s ePass, a State-wide access management system for government online services, and the State’s government finance system. In Ontario, Canada, Catalyst is integrated with ONe-Key for external user authentication and authorization. Integration with the New Zealand Government's RealMe login service is another example of Catalyst's large scale integration capabilities.

When configured, Catalyst automatically constructs a series of business services based on the configured entities and business rules. These business services are then available to be consumed by external systems and validate the data using the same rules as employed in the online application. These web services are delivered thorough product configuration, based on the configuration of the entities managed within the register. The following diagram shows a high level view of a Catalyst based solution including key integration points in the bottom right corner:

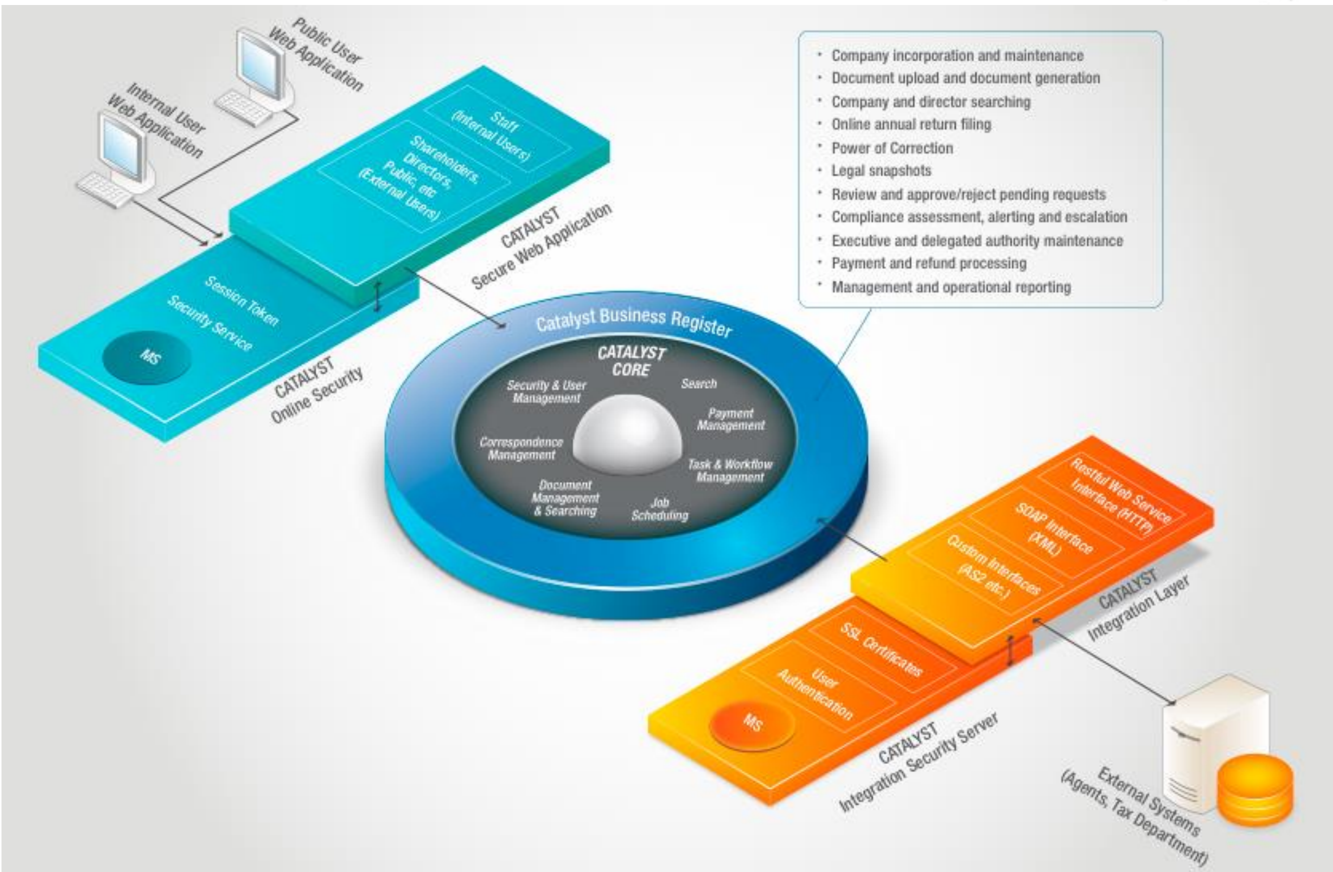

Figure 42. Catalyst - High Level Solution, Including Integration Points

Typical integrations that are implemented as part of a Catalyst project include:

- Payment gateways for processing of payments
- Address and post code validation services
- Financial Management System
- Active Directory / LDAP for authentication of internal users
- State, national or regional identity service for authentication of external users
- Jurisdiction's taxation service for exchange of new entity details and tax numbers
- External registers for exchange of new and modified entity details
- Scanning and OCR systems for receipt of scanned paper documents for processing
- Document management systems for external storage and retrieval of documents
- Systems of professional organizations such as lawyers and accountants to enable them to administer the register on behalf of their clients

Integration within Catalyst can happen through electronic messaging, whereby Catalyst captures the required information, sends a request to the external system and awaits a response before informing the user accordingly (for example, requesting and receiving a background check for a new Security Quard application). Such an implementation requires that the external system provide an electronic interface, such as EDI messaging or web services.

Data migration and conversion is a key element of any Catalyst implementation and forms a major part of any project we deliver. Foster Moore has extensive experience in the conversion of data from legacy systems and disparate data sources to new online registry solutions. These migrations have involved significant volumes of data and documents, in a range of formats, with complex data transformation and cleansing activities.

Data elements required by Catalyst are centered on the data captured by the existing paper forms or electronic system and the data requirements of the legislation and regulations in place within the State. Foster Moore works closely with clients during the project to identify the data requirements of the solution.

Our Standard Migration Library (SML) is a set of libraries which align with the standard Catalyst application configuration for a given register type. The library consists of a set of functions, each of which handles the population of a Catalyst domain. A Catalyst domain is a logical representation of physical data, where the logical representation usually represents a business construct such as a 'Licensee' or 'Postal Address' domain.

The Standard Migration Library is the starting point for every data migration for a Catalyst implementation project and can be extended by client specific package(s) to meet each client's individual requirements. Where data is being imported, each import requires careful analysis and implementation to ensure the data available from the existing system can support the new, often more stringent, business rules configured within the new online filing system.

Catalyst supports the migration of existing user accounts to the new online register. For migrated accounts, Catalyst generates a unique entity key that it emails to the entity's official email address. The recipient then uses this key to request authority for such entities, from either an individual or organization account. This process uses the standard Request Entity Authority service outlined below.

The following screenshot illustrates a sample entry field for a unique key, as part of requesting authority within a business register:

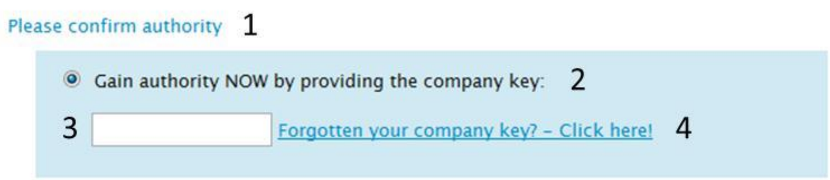

Figure 43: Catalyst - Gaining Authority Using the Unique Entity Key

Foster Moore has established five principles of operation that each Catalyst data migration abides by. These principles are aligned closely to the activities and outputs of the Catalyst Data Migration Methodology. The Catalyst Data Migration Methodology will:

1. Ensure that the scope and the expectations of the client are fully understood and agreed upon with respect to data migration prior to any concrete or binding commercial arrangements.
2. Subject to the scope and expectations, ensure that the client understands the nature of the data that must be provided to support the functionality that the client's configured Catalyst will provide.

3. Subject to the scope and expectations, ensure that the client understands what constitutes compliant and non-compliant data and how non-compliance is addressed. This enables the client to review and agree on any areas of the solution that might be subject to a compromise with respect to functionality. Conversely, Foster Moore can understand any mandatory client requirements that requires non-compliant data to be addressed as part of the migration exercise.
4. Provide a clearly defined set of processes, tools and outputs that allow for the successful migration of compliant data and the management on non-compliant data. This establishes a closely controlled framework for subsequent activities and interactions that mitigates risks associated with data migration.
5. Establish a clear understanding of the sign off protocol and responsibilities from both parties. This enables all parties to plan future steps with greater confidence.

The approach generally taken to data conversions is as follows:

1. The customer is required to have a detailed understanding of the current data and the low-level structure of this data within the current system's database management system.
2. The customer needs to provide a source data repository of legacy data that matches the structures of the legacy production system (or some other mutually agreed structure). Depending on the location of this repository (e.g. within a legacy database management system), Foster Moore may require the customer provide the source data in flat files.
3. Foster Moore works with the customer to map the existing data to the Catalyst data repository using this detailed understanding held by the customer.
4. Foster Moore uses the Catalyst data migration assistant to develop the Extract Transform Load (ETL) definition.
5. The ETL process is run, tested, refined and re-run iteratively until finalized and accepted by the client.
6. Manual effort around the scanning and/or manual data entry of historical data is generally excluded from the Foster Moore scope and undertaken by the customer's staff.

Methodology

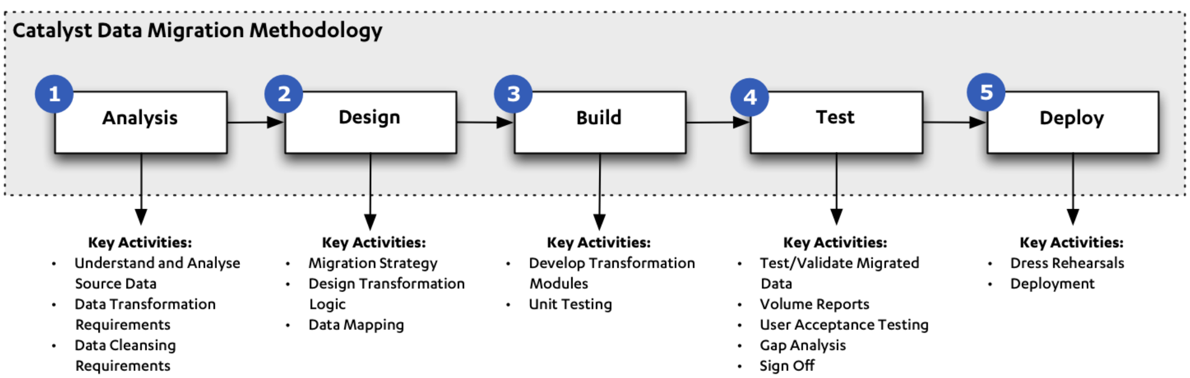

Figure 44. Foster Moore Data Migration Methodology

Data Analysis Phase

The purpose of this phase is to establish an in-depth, business level, understanding of the data that is proposed to be migrated.

- **Activities**

- Understand and Analyze Source Data: Understand the legacy data structures, their integrity, relationships and the quality of data
  - Data Transformation Requirements: Understand the transformation requirements to get legacy data into the staging area and subsequently into the target Catalyst system. For example, One-to-One mappings, Data Enrichment requirements.
  - Data Cleansing Requirements: Identify data issues such as: data that is not "fit for purpose", or data, that is a mandatory requirement, yet does not exist.
- **Output**
  - Data Profiling Document**:** A joint responsibility between Foster Moore and the client. An informal document answering many standard questions about client data based on the registry type.

Design Phase

The purpose of this phase is to establish the data transformation rules and the migration strategy.

- **Activities**
  - Define the Migration Strategy: Establish whether the migration is to be a big bang approach or a split/phased migration? Define out-of-scope data.
  - Design Transformation Logic: Define the transformations required to "fit" the client legacy data into the staging area and subsequently into the target Catalyst system.
  - Data Mapping Specification: Start the Mapping Specification Document by documenting the above transformations
- **Output**
  - Draft Data Migration Specification Document: Written by Foster Moore but with significant input from the Client Data and Business SMEs

Build Phase

The purpose of this phase is to write the data migration modules to perform the transformations defined in the design phase.

- **Activities**
  - Develop Transformation Modules: Software Development of the transformation rules
  - Unit Testing: Define unit tests for each module
  - Migration Code Release(s)
- **Output**
  - Data migration code
  - Migration Configuration and execution guide

Test/User Acceptance Testing Phase

The purpose of this phase is to perform and pass business testing of the application with Migrated Data.

- **Activities**
  - Test/Validate Migrated Data: Business testing of the application integrated with migrated data
  - Signoff Data Migration Mapping specification: Sign off the final Data Migration Mapping specification
  - Signoff Gap Analysis Report: Produce and sign off Gap Analysis report showing unmapped data elements.
  - Signoff Volume Report: Produce and sign off Volume reports - containing Source vs Target counts.
  - UAT (User Acceptance Testing). Requires Sign-off: Business signoff of data migration specification and UAT testing.

- **Output**
    - Final Data Migration Mapping requiring sign-off: Contains logical business rules and physical element mappings
    - Gap Analysis: Detailed report showing all elements that have not been mapped (and therefore not migrated).
    - Volume Reports: Reports detailing Source vs Target counts by area (i.e. Role counts, Address type counts)

Deployment Phase

The purpose of this phase is to plan and execute dress rehearsals. Once these are deemed satisfactory, to then plan and execute data migration to support the Production Go-Live.

- **Activities**
    - Dress Rehearsals: Plan and execute several dress rehearsals (simulated migrations).
    - Production Deployment: Plan production go-live.
- **Output**
    - Migration Go-Live Project Plan: A plan detailing all dependencies and clearing defining roles and responsibilities for the migration activity.

Catalyst can accept incoming data, in the form of batch data files, for a range of functions. For example, in Ontario, the solution receives data files containing tax numbers for existing corporations and for defaulting corporations. Such updated files are typically based on a unique identifier for the entity.

Catalyst can also prepare outgoing batch files of agreed data items, with creation of files and records based on configured triggers within the system. Triggers can be coordinated to support the various exports of similar information in different formats. As the identified triggers are initiated, the required data will be flagged for inclusion in the next appropriate export file. Examples of export files that can be configured include the following:

1. Entity master list
2. Entity list based on some pre-defined criteria (e.g. Trademarks with Vehicle related Class codes)
3. Applications for vendor permits and employer health tax numbers
4. New and updated Licensees
5. Business number updates
6. Correspondence and document data for printing and distribution by third parties

For inbound interfaces Foster Moore assumes that some form of data mover will place incoming batch files in a pre-agreed location on a file server from which Catalyst will be able to read the files.

For outbound interfaces Foster Moore assumes that some form of data mover will pick up a flat file created by Catalyst and placed in a pre-agreed location on a file server, moving it to the correct destination location.

10. General

Requirement	Fit Code
The selected COTS solution must have modules successfully deployed for the Secretary of State for at least two (2) of the 50 United States or its territories	E
The selected COTS solution must be secure, sustainable, efficient, high performing, and economical	E
The selected COTS solution must include differential authentication and authorization levels	E
The system must maintain an audit log of all filings, edits to filings, and other transactions to include date and time, by whom, and the original and modified transaction	E
The selected vendor must submit scheduled status reports for each activity group and a summary report of the project	E
The vendor must develop and execute a detailed testing plan at the unit, integration, system (Beta), and User acceptance	E
The selected vendor must engage Business Analysts to document all aspects of the project	E
The selected vendor will maintain a repository of the documents for all project team members	E
The selected vendor will ensure that all subcontractors must be properly vetted and approved by the Department	E

Over just the past eight years Foster Moore has implemented Catalyst in over twenty jurisdictions, including the State of Montana and Puerto Rico. Several of these implementation are similar in size and scope to WVSOS' needs, many even larger. Our partnership with the Ministry of Business Innovation and Enterprise (MBIE), formerly New Zealand Companies Office under the Ministry of Economic Development, dates to the late 1990's. Foster Moore has designed and developed over 30 different registers to support their ongoing modernization agenda. Currently, we are migrating seventeen existing business registers, comprising twenty-three entity types, to the new Catalyst platform. Due in part to the collaborative and innovative partnership between our two organizations, MBIE has become the benchmark for the World Bank's "Ease of Doing Business" global indicator and has been ranked #1 for "Starting a Business" for the past nine consecutive years.

Our business partnership with the Government of Ontario dates to 2012. We are currently upgrading to a new version of Catalyst under the continuous modernization initiative of the Ontario Security Guard License and Ontario Business Information System (ONBIS) registries. Both programs demonstrate the connectivity and extensibility of Catalyst. In these deployments, Catalyst integrates with the Province of Ontario's authentication service (ONeKey), the Canadian national postal address file, NUANS (a national computerized search system that compares a proposed corporate/business name or trade-mark with databases of existing corporate names and trademarks), numerous other external service providers and multiple payment engines.

Montana's Secretary of State, Cory Stapleton, is an ardent supporter of innovation and business enablement. His focus on technology stability, usability and continuous improvement led to a directive to Foster Moore to implement a fully electronic business registry with Catalyst and an online Notary registry is currently in the works. Montana is now one of only a select group of state business registries to go completely "paperless." Additionally, Montana's statutory requirements are among some of the most complex in the US. Foster Moore delivered over 40 different business entity types, plus trademarks and occupational registers, in a 17-month timeframe. This rapid register deployment demonstrates the efficiencies, implementation speed and quality achievable with a truly COTS solution.

In Puerto Rico, the Department of State wanted to mandate online annual report filings within sixty days of contract kick-off and then follow a phased approach for additional online services. Foster Moore then took Business, Trademarks and Commercial Transaction registries entirely online as requested by Puerto Rico. In the US Virgin Islands, the Lieutenant

Governor's Office oversees Business, Trademarks and Commercial Transactions registries. In our partnership, we will manage and migrate data in multiple data stores, digitize the physical records, lead a training program and implement modern, cost-effective, reliable and innovative registers for years to come.

As shown in the following graphic, we are fortunate to have several other government clients beyond those mentioned above, many with goals and challenges similar to WVSOS.

Figure 45. Foster Moore Client Map

Authentication

Catalyst is a fully-integrated solution that provides all the components necessary to deliver an online self-service register. It is a standalone platform that leverages built-in components for services such as authentication, authorization and searching as well as document management and database management.

However, it also provides integration points for existing client and third-party systems, including external document management systems and services for user identification, authentication and authorization, including state and national-level services. This is in place in Ontario, Canada, where the Province's ONe-Key is integrated with Catalyst for external user authentication and authorization and in New Zealand, where Catalyst leverages the Government's RealMe login service. In the State of Montana Catalyst integrates with ePass, a State-wide access management system for government online services and the states government finance system.

User Access Control

Catalyst employs a role-based security model that controls registered users' access to the system, meaning that access to data and functionality is based on the user account and membership in defined roles. This applies to both internal and external users, each of whom will have different degrees of access. Security is managed at the register level within a multi-tenanted environment, allowing fine-grained access control across multiple registers.

Authorized users (e.g. system administrators) can add and maintain user accounts, including role creation and editing; assignment of users to one or more roles and teams; and setting permissions by role. Permissions determine the functions and data that users have access to, as well as task assignments. Further, data access configuration allows independent control over the entities (rows) and data items (columns) that are accessible to users. This can also be configured to consider defined relationships between the user and the entity (e.g. a director of a company).

Catalyst ensures that all access to functionality and data is through the application itself, with access controlled by the Catalyst security model. During the implementation stage, Foster Moore works with clients to ensure that all servers, including application, web and database servers, are appropriately secured.

Roles and Security Groups

In order to restrict access to services within a register, Catalyst employs a role-based security model with roles determining the level of access to services and functionality within a register. Individual roles are then combined into security groups, with users being granted membership to one or more of these security groups. Security groups within a Catalyst register can only be created or maintained by a user who has been assigned the appropriate role via a security group.

Teams

A team is a collection of users and the number and types of teams are based on client requirements. Each team can also have a designated team manager. For example, teams can be defined based on processing responsibilities (e.g., initial review team versus final review team) or based on areas of responsibility (e.g., registrations, reinstatements, complaints etc.).

Catalyst allows task options (e.g., Approve or Reject) to be restricted to specific teams or to the team manager. This means, for instance, that a task can be assigned to one team for initial review and another team or team manager for final review and approval.

Teams can also be defined to support escalation of tasks. For example, when a task is not completed by the due date it can be allocated to another team or assigned to the team manager. Only a user with the appropriate role and in the authorized security group can create and manage teams within Catalyst.

Auditing

Catalyst maintains audit logs of all activities in the system, along with audit trails for both business activities and system and security events. The audit log is a standard facility that can be enabled without the need for any customization or configuration. Because the system stores details of all new, altered, or deleted data and "before images" (i.e., a snapshot of data before it is updated or deleted), authorized users have access to the complete change history of a given data element.

Three distinct product features facilitate activity monitoring and auditing, namely, Audit Logging, Versioning and Snapshots and Business Service Activity Counters. These are described below.

The Catalyst audit log captures all activities within the system, including data updates, task, job and process completion, system-generated activity (such as correspondence generation) and user activity (both internal and external). Four essential properties are captured for every auditable event: what was done, when it was done, what was done to and who did it.

At a minimum, the following attributes are captured in the audit log:

- The user that triggered the event (whenever an activity is manually initiated);
- The date and time that the activity commenced;
- The IP address that was used to access Catalyst and perform the action;
- The activity that was carried out – such activities must be defined according to a controlled structure, so that it is easy to understand what the activity represents;
- The success or otherwise of the activity, if such a concept is applicable;
- The entity that the activity was based on (if applicable);
- The entity component that the activity was based on, e.g., an entity address; and
- Any specific business data that was directly associated with the activity, e.g., a specific document that was uploaded, or a specific record that was changed.

Test Plan

As part of the Catalyst Adoption Methodology (CAM), test plans are included at various stages within a project implementation:

Phase	Activity	Description
Preparation	Issue draft test plan	Issue the draft version of the plan for system testing undertaken by Foster Moore.
Build	Present Final Test Plan	Present the finalized Test Plan, based on the agreed scope of the project.
Build	Catalyst Testing	Based on the finalized Test Plan, comprehensive integration and system testing as defined in the Test Plan.
Build	Unit and Integration Tests	Define unit tests for each module.
Build	Client Produces UAT Test Plan	Produce the User Acceptance Testing plan that the client is going to implement.
Deployment	Perform Client UAT Training	Undertake training in use of the Foster Moore tools and associated processes to be used when performing User Acceptance Testing.
Deployment	Perform User Acceptance Testing	Undertake user acceptance testing according to the User Acceptance Testing Plan.

It is not anticipated that subcontractors will be used for this project. Should that change, we will ensure the Department has ample opportunity to vet and approve any subcontractors.

Project Methodology

Foster Moore proposes using its proven Catalyst Adoption Methodology (CAM) to deliver West Virginia's registry solution. CAM details the end-to-end implementation process, including roles and responsibilities for all team members, and provides templates for a standard set of deliverables.

Foster Moore will demonstrate Catalyst's capabilities at key points from the start of the project. This approach reduces the need for costly customization, increases reliability and simplifies support by helping the client to understand what can be achieved through configuration of Catalyst.

CAM Projects are divided into seven major phases:

- The **Understanding & Engagement** phase establishes project teams, scope and governance.
- The **Preparation** phase focusses on discovery of West Virginia's processes and how Catalyst's inbuilt capabilities can support them.
- During the **Adoption** workshop Foster Moore will use a partially-configured Catalyst instance to complete the design process.
- During the **Build** phase, the Foster Moore team focusses on configuring and testing Catalyst to support client requirements.
- The West Virginia team executes UAT during the **Deployment** phase. Go live planning begins.
- Once UAT has been signed off, the Foster Moore and West Virginia teams will execute the **Go Live** plan.
- During the **Warranty** period, the Foster Moore project team resolves any issues identified after Go Live, before handing over to the long-term support team.

The following diagram illustrates the flow of activities throughout the project as it moves from one CAM phase to the next

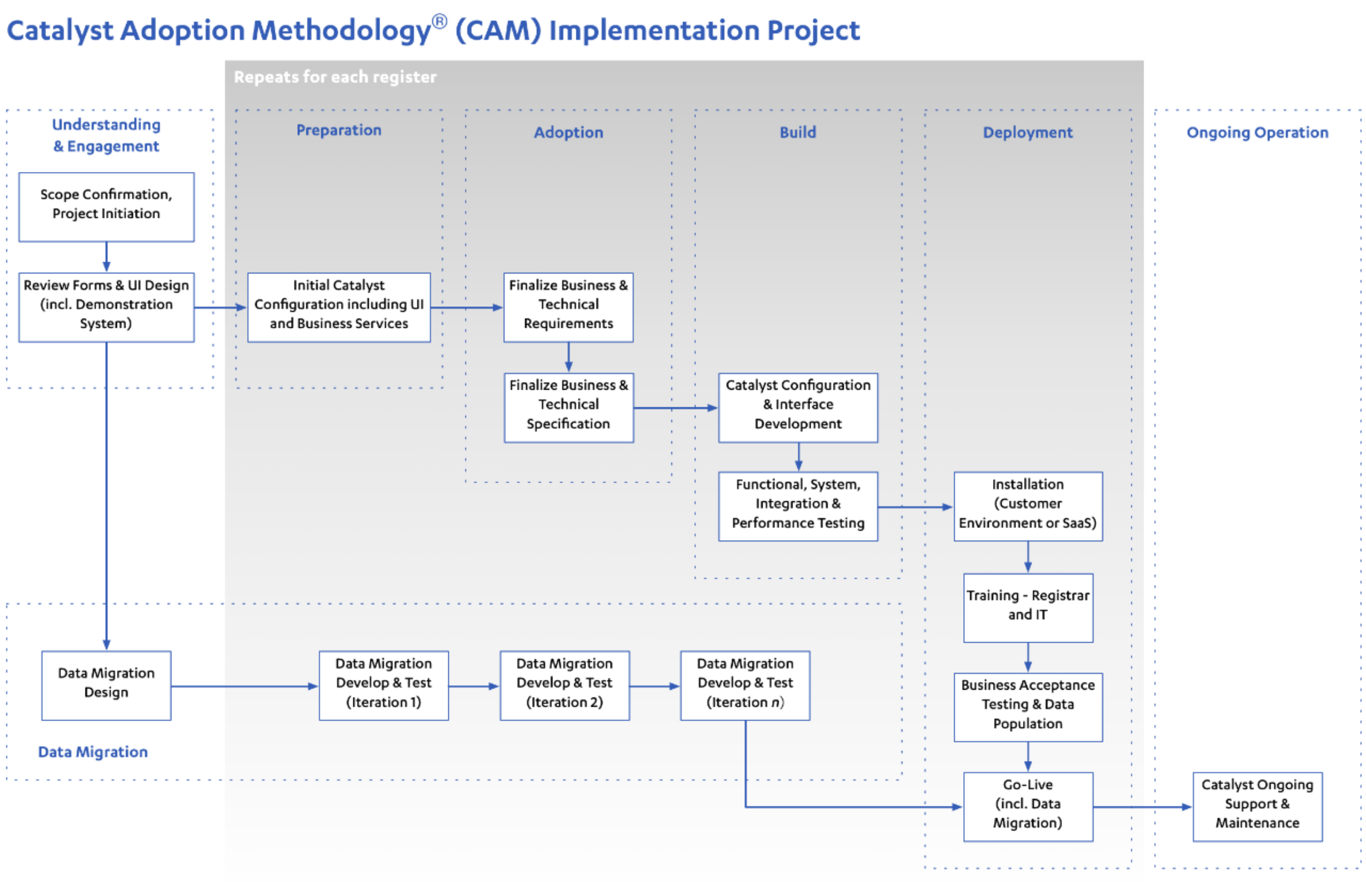

Figure 46. CAM (Catalyst Adoption Methodology)

Project Governance

The project will be governed through two key forums: The Executive Management Team and the Project Management Team.

The Executive Management Team has ultimate oversight of the project and will meet on a monthly basis. The Team's core role is to provide strategic direction for the project and support the project management team; however, they also act as a point of escalation for issues and risks, review deliverables and deliverable quality and review and sign off change requests.

Project Management Team has operational control over the project on a day-to-day basis and will meet on a weekly basis. The Project Management Team's core role is to coordinate the actions of the project teams to produce the agreed deliverables; however, they will also be responsible for managing project scope, resources, quality and budget. The Project Team will provide status reporting for the Executive Management Team.

Key Roles and Descriptions

Each role within the governance structure has a specific role to play within the project.

Organization	Role	Role Description
WVSOS	Project Sponsor	The project is initiated on the sponsor's authority. The sponsor establishes the projects vision and directs strategy. Acts as the ultimate point of escalation for the WVSOS
Foster Moore	FM Executive Sponsor	The Executive Project Sponsor if Foster Moore's senior representative in the governance structure and acts as a trusted advisor to the sponsor, assisting with strategic decision making and acting as the ultimate point of escalation within Foster Moore.
WVSOS	Project Manager	The SOS's Senior Project Manager has overall operational ownership for the project and acts as the lead for all Department team members.
Foster Moore	Project Manager	Foster Moore's Senior Project Manager has operational ownership of the Foster Moore team's activities and works with the Secretary of State's Project Manager to lead the project team.
WVSOS	Service Area Leads	The project leads for each of the Department's service areas which are engaged in the project will act as subject matter experts (SMEs) for their services area, providing critical insight into the SOS's processes, business rules and operations.
Foster Moore	Lead Catalyst Consultant	The Lead Catalyst Consultant owns the functional design process and is responsible for all activities which result in the production of the Common Catalogs, Business Service Catalogs and the Interface Specifications.
Foster Moore	Lead Catalyst Configurator	The Lead Catalyst Configurator is the owner of the configuration and release processes and is responsible for all activities which result in the creation of a configured Catalyst instance.
Foster Moore	Lead Catalyst Tester	The Lead Catalyst Tester has ownership of all software QA / testing processes and the activities which confirm that a configured Catalyst instance meets the documented requirements.
Foster Moore	Catalyst Infrastructure Architect	The Catalyst Infrastructure Architect is the owner of the design process for the technical infrastructure on which the Catalyst instance resides and is responsible for all design activities. Where cloud hosting is used, the Catalyst Infrastructure Architect also builds the environments.
Foster Moore	Catalyst Solution Architect	The Catalyst Solution Architect is the Foster Moore project team's liaison with the Product Group, which develops and maintains the core Catalyst engine. The Catalyst Solution Architect brings critical development and configuration experience, as well as product knowledge.
Foster Moore	Data Migration Lead	The Data Migration Lead is the owner of the Data Migration process, by which legacy data is extracted, transformed and loaded into the configured Catalyst Register.

Change Management

Changes in scope will be handled through the change control process. Changes may be identified at any point in the life of the project by any project stakeholder, often because of issues, risks, legislation, or business change. Every change will be documented in a Change Request (CR) which describes the change and its impact on the project. CRs will undergo extensive review by the Foster Moore and Department project teams before being submitted for approval through the governance process.

No CR will be accepted for implementation until it has been reviewed and signed off by the Foster Moore and WV Executive Sponsors through the governance process. CRs may be returned for further review by the Department and Foster Moore Project Managers, or for development of an options analysis to identify suitable alternatives, but may also be rejected entirely. If signed off, a CR is then communicated and implemented within the framework of the project.

Flexibility of the Project Plan

The Project Plan will be further detailed during the Engagement phase and then baselined to establish a realistic and clear path to Go Live. Foster Moore recognizes that there may be a need to make minor adjustments to the plan in the light of activity to mitigate risks and address issues; however, there is also the possibility of needing to make significant revisions to the plan in light of changing circumstances.

Minor changes to the Work Plan often result from the need to mitigate a risk, or address a risk which has crystallized into an issue. A common example might be a key individual leaving the organization, resulting in the need to hire a replacement and address the potential impacts on quality and timeline. Addressing such issues through the Risk Management, Issue Resolution and Change Management processes is a core discipline in project management. Foster Moore's recent work demonstrates many examples of such change requests, ranging from newly identified scope to minor timeline changes in response to

More significant and far reaching changes to registry implementation projects may be triggered by major external events such as changes in leadership or strategic direction within a registrar organization. Such events may be triggered by unexpected election results and the formation of a new administration, for example. While the same core processes of Risk Management, Issue Resolution and Change Management are required, it is likely that we will have developed a contingency plan for such a major risk and the practical actions required are more significant and further reaching.

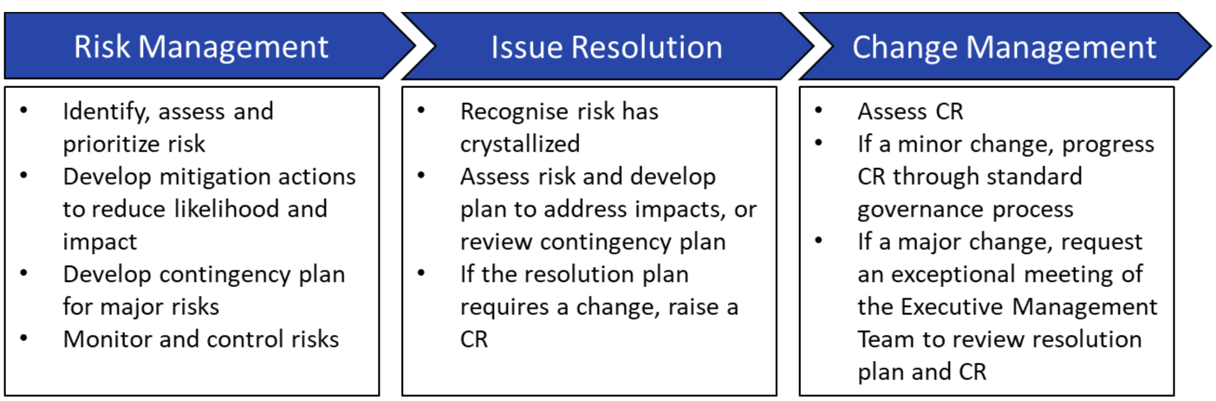

Figure 47. Potential path from Risk -> Issue -> Change

In the case of a potential major disruption to the project as the result of legislation, elections or another risk a variety of options are option to the project team, it may be acceptable to accept the likelihood that the risk may crystallize and develop a contingency plan. An alternative option could be for the Executive Management Team to introduce a planned pause in the project to allow the potentially disruptive event to pass before resuming at an agreed date.

11. Security

Requirement	Fit Code
The system must provide ability to create external user accounts and user credentials for authentication and authorization	E
The system must provide ability to send an authentication email when an external user creates a user account	E
The system must provide the ability for external users to create, manage and change their usernames and passwords without Agency intervention	E
The system's website must utilize a Secure Socket Layer (SSL) with at least 128-bit encryption	E
The solution must meet the Laws, Rules, Regulations, and Codes of the State of West Virginia and its agencies	EC

Register New User

External users can easily register an online account within Catalyst to access all of their associated businesses and services within one centralized location. To create an account, basic information is captured, allowing for Username, Password, Name, Navigation Option, Addresses and Phone Numbers.

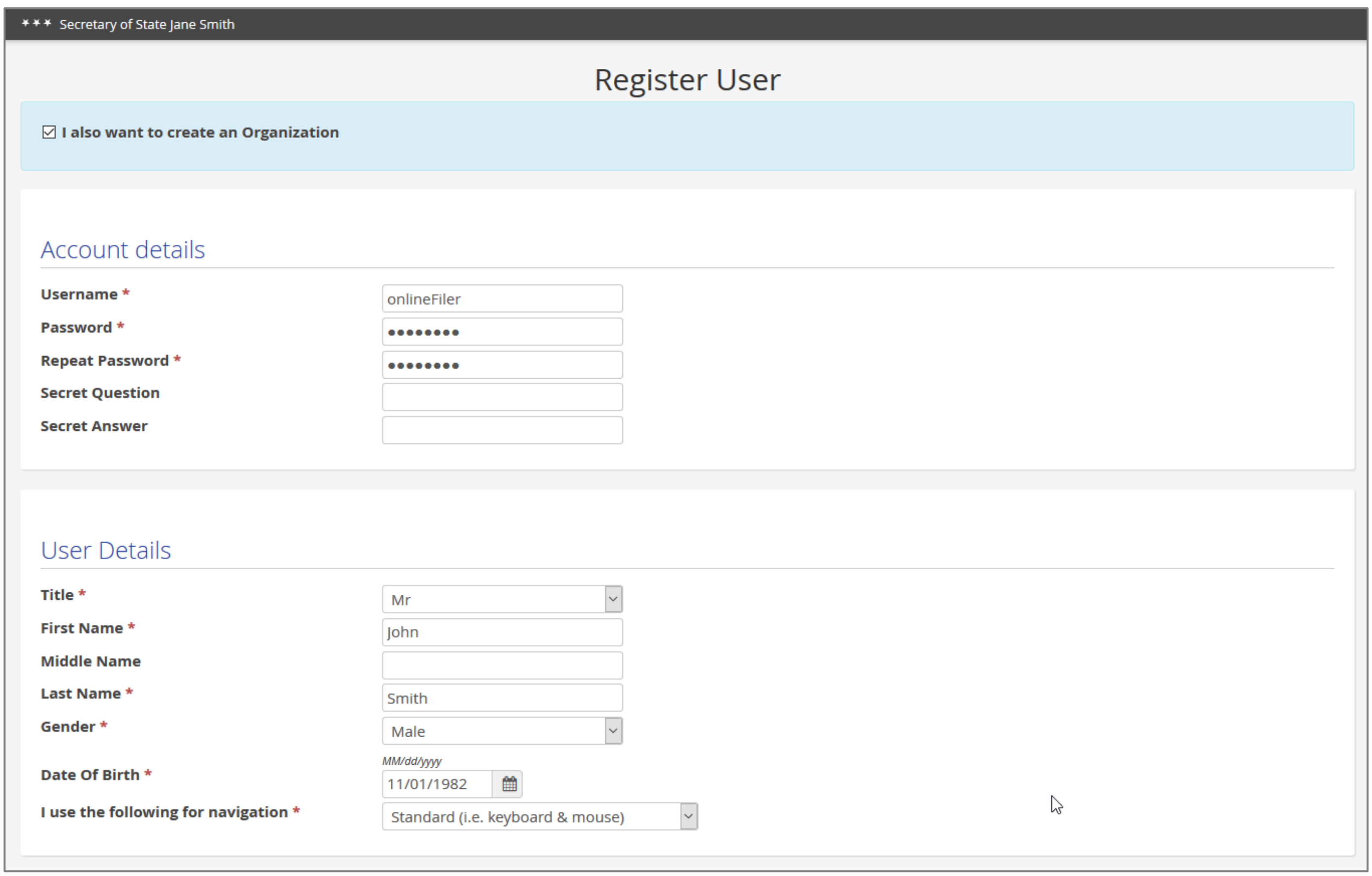

Figure 48. Catalyst - External User Registration. *Note; Image Does Not Show All Captured Data Which Also Includes Contact Details*

After the successful completion of the registration form, the user is sent a verification email to the specified address and the account is active. The following describes features within a user account to support online filers:

- **Organization Accounts** – Allows organization level account creation for multiple users to access the same profiles across all modules for business entities, licenses, trademarks, liens, etc. Organization accounts are typically for registered agents, attorneys, etc. with staff to assist support the client base. User accounts not originally created within the organization account can be added later and the creator of the organization account has various administrative tools to manage the group.
- **Email Opt Outs** – Allows users to opt out of emails for various notifications including compliance and reminder emails, Authority Management emails, filing notification emails and all emails regardless of purpose.
    - Internal users can also search for user accounts to manage email opt outs.
- **Password Management** – Allows user to change their password or reset a forgotten password.
- **Navigation Method** – Allows users to select their navigation option in accordance with the Americans with Disabilities Act.

Data Encryption

Where necessary, Foster Moore can employ Encryption to protect select pieces of information that the database hosts. Encryption is a wall of complex code which requires a security key in order to gain access. We use encryption to protect sensitive data like user passwords of PINs. In cases like these we recommend encryption so that potential hackers can't decipher your data.

Security Policy

Foster Moore's core business is registry software. The various regulatory and government bodies that use this software need do so in the knowledge that it is secure. To maintain our status and reputation as the leading experts in this field, Foster Moore gives serious consideration to the security of our product. We make it clear to our clients on Catalyst security policies, how we identify vulnerabilities in the product and how often and when do we check the product. Additionally, we define how we communicate these vulnerabilities to our clients and what do we do about vulnerabilities when discovered.

This policy is not intended to supersede or negate the need for a client to obtain a third-party independent security and vulnerability penetration test. It is our opinion that given the environmental variables that are unique to each client, this should always be done. Our policy is about establishing a first line of defense – ensuring that we are developing and configuring in a secure manner before we ship Catalyst to our clients.

Foster Moore currently use the following organizations and their products to test the security of Catalyst.

Qualys

Qualys, Inc. is a provider of cloud security, compliance and related services for small and medium-sized businesses and large corporations based in Redwood Shores, California. Founded in 1999, Qualys was the first company to deliver vulnerability management solutions as applications through the web using a "software as a service" (SaaS) model. It has added cloud-based compliance and web application security offerings.

Qualys has over 7,700 customers in more than 100 countries, including most the Forbes Global 100. The company has strategic partnerships with major managed services providers and consulting organizations including BT, Dell SecureWorks, Fujitsu, IBM, NTT, Symantec, Verizon and Wipro. The company is also a founding member of the Cloud Security Alliance (CSA).

Tools that Qualys offers to test and ensure security include:

- **FreeScan** - provides the ability to scan your network, servers, desktops or web apps for security vulnerabilities;
- **BroswerCheck** - performs an audit of Browser, Plugin, OS & Security Updates to ensure that your system is up to date.
- **Top 4 Security Controls** - enables an organization to verify if their Windows PCs are implementing the 4 controls that typically prevent 85% of the cyber-attack techniques: -
    - Application Whitelisting;
    - Application Patching;
    - OS Patching;
- Management and minimizing Administrative Access.
- SSL Secure Web Test - checks whether your SSL website is properly configured for strong security and if it is vulnerable to Heartbleed.
- OWASP - Tests a web apps' defenses against top OWASP-rated risks.
- SCAP - Tests computers against security configuration benchmarks required by US federal government agencies.

Tenable Network Security

Tenable Network Security is a developer of vulnerability detection systems. Tenable Network Security is an American network security company, headquartered in Maryland, with additional offices in United Kingdom and Singapore. The company's products provide network vulnerability scanning for over 75,000+ organizations worldwide. Tenable Network Security products have been granted vulnerability detection certifications by multiple entities including Payment Card Industry Data Security Standard, Common Criteria Evaluation and Validation Scheme Center for Internet Security and National Institute of Standards and Technology. The United States Department of Defense have standardized their networks security by using products made by Tenable Network Security.

Tools that it offers to test and ensure security include:

Nessus - a proprietary comprehensive vulnerability scanner, which scans a computer and raises an alert if it discovers any vulnerabilities that malicious hackers could use to gain access to any computer connected to a network. It does this by running over 1200 checks on a given computer, testing to see if any of these attacks could be used to break into the computer or otherwise harm it.

Open Web Application Security Project (OWASP)

The Open Web Application Security Project is an online community which creates freely-available articles, methodologies, documentation, tools and technologies in the field of web application security.

Tools that it provides to test and ensure security include:

OWASP ZapProxy - is an open-source web application security scanner. It is comprehensively by professional penetration testers. It is one of the most active OWASP projects and has been given Flagship status. It is also fully internationalized and is being translated into over 25 languages. Some of the built-in features include: Intercepting proxy server, Traditional and AJAX Web crawlers, Automated scanner, Passive scanner, Forced browsing, Fuzzer, WebSocket support, Scripting languages and Plug-n-Hack support.

12. Calendaring

Requirement	Fit Code
The system will allow filings to occur at any time of the year	EC
The system must recognize weekends and not include them in the business day count	EC
The system must recognize state holidays and not include them in the business day count	EC
The system must allow for ad hoc closing of the business office (e.g., hurricanes) and not count the closed days in the count of business days	EC
The system must allow for later effective dates on business entity filings and restrict the effective dates for associated entities to that later date or after	EC
The system must allow for later effective dates for amendments and make change on selected date	EC

Standard implementations of Catalyst registries inherently adopt the ability to create and submit filings 24 hours a day, 365 days a year. Additionally, Catalyst's Calendaring Module supports setting and maintaining business office hours to accommodate calculations relating to task timers, due dates etc. The Calendaring Module allows system administrators to define and maintain national holidays and other jurisdictional holidays where the office is closed. Working days and non-working days can also be factored into compliance. System administrators also have the ability to add, on an ad hoc basis, any unforeseen office closures which will also be factored into the overall calculation of working days.

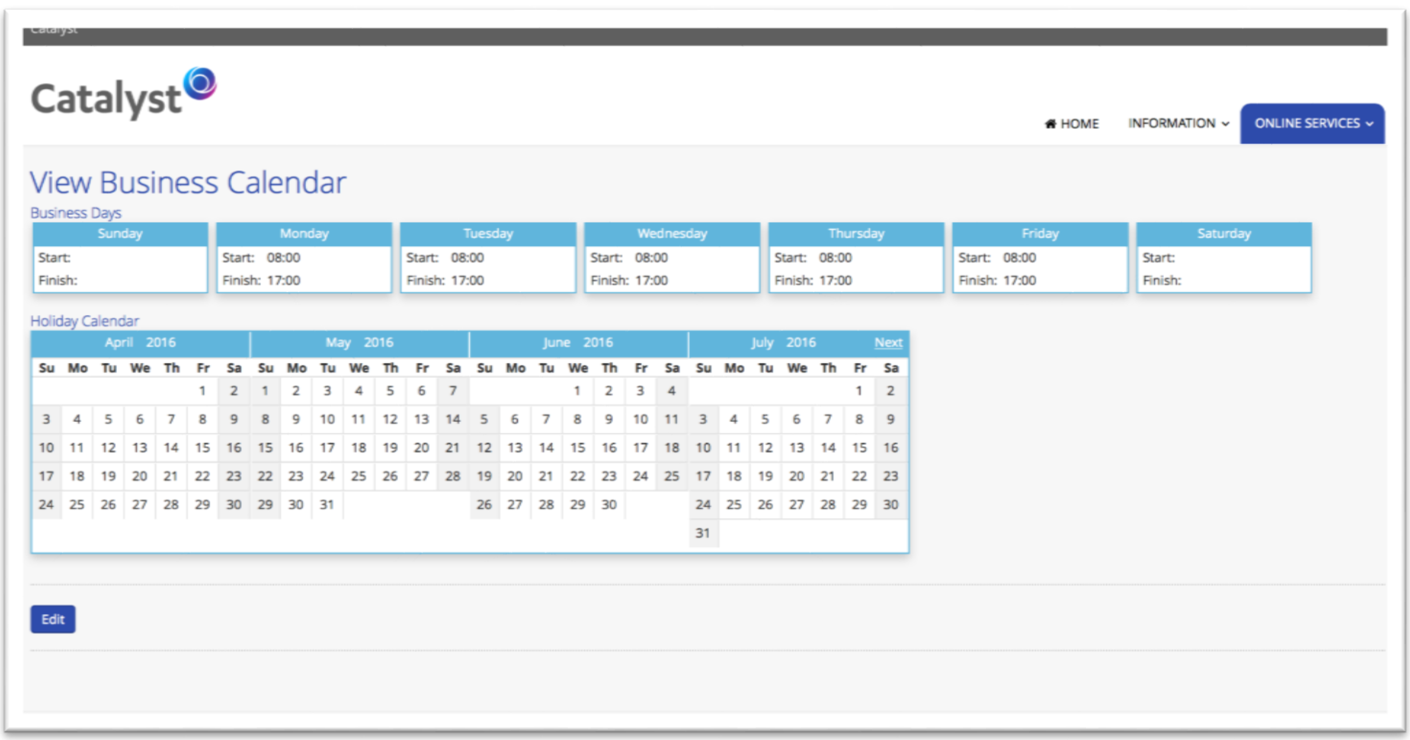

Figure 49. Catalyst - Business Calendar

It is common for Secretaries of State to use fees to drive behaviors within the business community. The fee change may be a reduction to reduce regulatory burden or an increase to fund activity within the office. Either way the fee change is usually signaled in advance and has an effective date.

Where applicable in any given business service, Catalyst accounts for the concept of delayed effective dates and applies additional jurisdictional rules to those dates to restrict how far into the future those dates may be set. System routines monitor on a daily basis all services where a delayed effective has been entered and upon occurrence of that date, makes the required data changes and makes the filing visible to the public. Prior to the delayed date, only the authorized users of the record, including internal users, will have access to the content entered for that filing.

13. Training

Requirement	Fit Code
The vendor must develop and provide training using a “train the trainer” method	E
The vendor must provide training onsite at the WV Secretary of State’s Office	E
The vendor must ensure that at the deployment of the solution, staff members are competent in the navigation and use of the modernized business registry and can provide high level assistance to all level of users	E
The vendor will provide a "sandbox" for the exploration, demonstration, and training of the system	EC

External (Public) Users

Catalyst is designed to be easy and intuitive for members of the general public to use without training, so no end-user training is required for members of the public. Any training that is may be requested can be delivered by online training material, including training videos etc.

Part of the training plan for a Catalyst implementation includes training for key customers of the registry office (including brokers, agents and external organizations responsible for processing transaction on behalf of clients). This training is designed to ensure they are set up with the necessary entity authorities and access at go-live and includes the provision of training materials, including videos, focused on the specific high volume functions performed by these users.

Internal (Registry) Users

Foster Moore delivers “train the trainer” training to client representatives using standard Catalyst training materials. Once the client’s trainers are trained, they can train the remainder of the registry office’s staff in turn.

Foster Moore’s approach for internal user training is based on key guiding principles we have found to be critical in effectively training users and successfully deploying large-scale technology solutions in the public sector. Our “Training for Trainers” (T4T) methodology develops trainers and builds a capacity for them to take over training responsibilities. The trainers will be prepared to deliver training to their respective end-users based on information received at the trainer-led T4T sessions.

As part of T4T, the trainers will:

1. Learn project goals and timelines.
2. Discover their roles and responsibilities.
3. Learn effective training delivery methods.
4. Review the training course content and training tools, including how to access and use them.
5. Receive training on the instructor-led courses they will be teaching to their end-users.

T4T is an interactive, team-building experience. It is designed to foster enthusiasm and confidence among the client’s trainers, which will carry over to end-user training classes.

Training Plan

As part of the Foster Moore implementation project plan, a training plan will be developed to ensure that internal and external users are knowledgeable on the use of the new registers.

This plan typically includes the following tasks associated with staff training:

- Training requirements and planning workshop
- Production of training materials (i.e. anything additional to user guide e.g. case studies for trainees to work through, feedback forms) – liaise with business on production of relevant case studies.
- Identification of attendees for the two-phase training program (number to be confirmed preferably five or less per session)
- Organization of venues
- Training execution
- Process feedback from the 'Train the Trainer' course and make amendments to materials as required prior to the end user training.

Foster Moore typically conducts a two-week intensive training course at the client offices to educate the super users (including the registrar representative) on the major functions of the system, which are relevant to their area of expertise. Subsequently, the super users will handle the end user training, using the available training material, at the designated offices.

This training would be delivered as close as possible to the commencement of the client's User Acceptance Testing. This ensures the training is fresh in the users' minds as they start UAT.

Training is performed on the client's own equipment and can consist of the workstations subsequently utilized for production use of the system. A training server environment is provided within the deployed infrastructure, so training requires access to workstations in a dedicated training room. The workstations need to meet the minimum hardware specification of client machines accessing the Catalyst register. Additional equipment is the provision of a data projector/screen and whiteboard for use by the Foster Moore trainer.

Registry Operation Training

Foster Moore will conduct a two-week intensive training course at the client's offices to educate the T4T trainers on the major functions of the system that are relevant to their area of expertise. Subsequently, the super users will handle the end user training, using the available training material, at the designated offices.

The course will include the following skills:

- Electronic register concepts and processes
- Roles and responsibilities for register maintenance
- Logging in to the register
- Usage of the workflow and task management system, including locating tasks, completing tasks, reassigning tasks and escalating tasks
- Reporting creation
- Financial management
- Handling of exceptions
- Finding help within the system
- Correcting the Register
- Registry-specific functional training

System Administration Training

Foster Moore provides training in the administration of the Catalyst product including user maintenance, system management, troubleshooting and maintenance activities.

Foster Moore provides training in the administration of Catalyst product including:

- User maintenance (adding and removing users and modifying users' privileges)
- Maintenance of user groups to determine assignment of tasks to work queues
- Maintenance, monitoring and operational management of the workflow and task management system
- System log review
- Troubleshooting and response to logged events
- Report writing and running
- Regular preventative maintenance activities
- Handling system exceptions and escalating issues to the platform provider (e.g. Foster Moore)

System Operation Training

As we are proposing a hosted solution, Foster Moore would perform these activities and this training is unnecessary.

Ongoing Training Programs

Ongoing training of new users is typically performed by the client's trainers as part of the standard employee onboarding process. Foster Moore can deliver ongoing training in Catalyst's new features and capabilities if required. There would likely be a cost associated with the delivery of such training.

Ensuring users can make best use of the system requires a combination of online training material (user guidance, FAQs and videos etc.), intuitive and easy-to-use screens, common and best practice design principles and user interface components and integrated online help.

Since these users are members of the public and no formal training courses are run, training material focuses on that which can be delivered over the Internet. The client is responsible for preparing all end-sure training material using the standard documentation supplied by Foster Moore. For example, the client may prepare tutorial videos of key online functions to get their customers started, e.g. user registration, searching, company incorporation etc. Links to these tutorials will be defined by Foster Moore on the client's home page.

Based on Foster Moore's experience on previous implementations, a page of frequently asked questions may be provided as a link on the home page to further assist customers.

14. Testing

Requirement	Fit Code
The vendor must develop and execute a detailed testing plan at the unit, integration, system (Beta), and User acceptance	EC
The vendor is responsible for designing, implementing, and validating a test plan for each function of the application and the overall unit in which the function is deployed	EC
The vendor must ensure that testing is to include unit and integration testing and integration testing is to take place every time there is a modification to the code and/or functionality	E
The system must ensure that all promotions are to be Beta and successfully complete User Acceptance Testing (UAT) before a deployment	E
The vendor is to provide an issue tracking system (ITS) for the reporting and tracking of "bugs"	E
The vendor must ensure that the ITS is to record such things as a name for the issue, a tracking ID, a description of the issue, the reporter, the date reported, the priority, and the severity of the issue, as well as who is assigned to fix the issue, the status of the issue, and by whom the issue was tested and approved for promotion	E
The vendor must ensure that safeguards are to be in place for promoting data both on a schedule and as needed in an emergency only after being unit, integration, Beta, and User Accepted	E
The vendor must ensure that safeguards are to be in place to back out promoted code and return the system to a defined point and time through a source control program.	E

Foster Moore proposes using its proven Catalyst Adoption Methodology (CAM) to deliver West Virginia's registry solution. CAM details the end-to-end implementation process, including roles and responsibilities for all team members, and provides templates for a standard set of deliverables.

CAM provides a clearly defined set of processes, tools and outputs that allow for the capture of business, technical, functional and non-functional requirements to be implemented. This results in a closely controlled environment for subsequent workshop sessions and other interactions, that aids both scope and project management.

CAM Projects are divided into seven major phases:

- The **Understanding & Engagement** phase establishes project teams, scope and governance.
- The **Preparation** phase focusses on discovery of West Virginia's processes and how Catalyst's inbuilt capabilities can support them.
- During the **Adoption** workshop Foster Moore will use a partially-configured Catalyst instance to complete the design process.
- During the **Build** phase, the Foster Moore team focusses on configuring and testing Catalyst to support client requirements.
- The West Virginia team executes UAT during the **Deployment** phase. Go live planning begins.
- Once UAT has been signed off, the Foster Moore and West Virginia teams will execute the **Go Live** plan.
- During the **Warranty** period, the Foster Moore project team resolves any issues identified after Go Live, before handing over to the long-term support team.

In addition to the above high-level activities, the following testing activities are a standard part of CAM:

Phase	Activity	Description
Preparation	Issue draft test plan	Issue the draft version of the plan for system testing undertaken by Foster Moore.
Build	Present Final Test Plan	Present the finalized Test Plan, based on the agreed scope of the project.
Build	Catalyst Testing	Based on the finalized Test Plan, comprehensive integration and system testing as defined in the Test Plan.
Build	Unit and Integration Tests	Define unit tests for each module.
Build	Client Produces UAT Test Plan	Produce the User Acceptance Testing plan that the client is going to implement.
Deployment	Perform Client UAT Training	Undertake training in use of the Foster Moore tools and associated processes to be used when performing User Acceptance Testing.
Deployment	Perform User Acceptance Testing	Undertake user acceptance testing according to the User Acceptance Testing Plan.

Pricing

This section sets out Foster Moore's pricing in response to the State's request for a hosted transactional model^^.

Exhibit A - Pricing Page - Revised per Addendum No. 3 issued 7/3/18 - CRFQ SOS1800000007
WV Secretary of State - Enterprise Registration and Licensing System (ERLS)

Item No.	Item	Vendor Description	Unit of Measure	Quantity	Unit Price	Extended Cost
1	Commercial Off-the-Shelf (COTS) Enterprise Registration and Licensing System (ERLS) including License, Software, Set-up, Configuration, Installation, Historical Data Migration and System Training, including Five Years of Maintenance and Support/Warranty * *Vendors should include an itemized breakdown of the charges below.*	• **ERLS System - Common Components, Payment Interface and Methods, Language, UI Design, Core Training, AWS Design** *(Invoiced at Commencement of Project)* • **Annual Transaction Fees^ Years 1-5** (*Invoiced Monthly post Go Live)* *Cost of items below recouped via Annual Transaction Fees* • **License and Software** • **Set-up, Configuration and Installation** • **Historical Data Migration** • **Registry Specific Training** • **Maintenance and Support/Warranty Years 1 through 5** • **Hosting Infrastructure & Support**	Lump Sum	1	$ 1,881,000.00	$ 1,881,000.00
2	Sixth Year (6th) Maintenance and Support/Warranty **	• **Annual Transaction Fees^ (Invoiced Monthly)** *Cost of items below recouped via Annual Transaction Fees* • **Catalyst Software Maintenance & Support** • **Hosting Infrastructure & Support**	Year	1	$ 340,200.00	$ 340,200.00
3	Seventh (7th) Year Maintenance and Support/Warranty **	• **Annual Transaction Fees^ (Invoiced Monthly)** *Cost of items below recouped via Annual Transaction Fees* • **Catalyst Software Maintenance & Support** • **Hosting Infrastructure & Support**	Year	1	$ 340,200.00	$ 340,200.00
4	Eighth (8th) Year Maintenance and Support/Warranty **	• **Annual Transaction Fees^ (Invoiced Monthly)** *Cost of items below recouped via Annual Transaction Fees* • **Catalyst Software Maintenance & Support** • **Hosting Infrastructure & Support**	Year	1	$ 340,200.00	$ 340,200.00
			Total for Item Nos. 1 through 4			$ 2,901,600.00

UNIT PRICES						
Vendor should provide a unit price for custom programming. This unit price will only be used to execute formal Change Orders during the life of the contract, if required. Estimated Quantities are included for bid evaluation only; there is no guarantee that any quantity of the Item(s) will be purchased.						
Item No.	Item	Vendor Description	Unit of Measure	Estimated Quantity	Unit Price	Extended Cost
5	Customization Programming	Hourly rate for custom programming/development	Hour	80	$ 135.00	$ 10,800.00
6	Transactional Fee	• This fee is for example purposes only as transaction fees are accounted for in the above listed cost model. • The Transactional Fee amount listed here is the average fee collected for all transactions on all registers within the scope of this RFQ. Actual fee amounts vary for each specific transaction, based on percentage of the fee the State charges end users for each specific transaction.	Each	30,000	$ 11.34	$ 340,200.00
Total for Item Nos. 5 and 6						$ 351,000.00

Lowest Overall Total Cost (Item Nos. 1+2+3+4+5+6) =	$ 3,252,600.00

The Contract is intended to provide Agency with a purchase price for the Contract Services. The Contract shall be awarded to the Vendor that provides the Contract Services (Item Nos. 1 through 6 above) meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages. Renewal options for years 6, 7, and 8 will be initiated by the Agency, agreed to by the Vendor and processed by the West Virginia Purchasing Division as Change Orders for subsequent years. Customization Programming will only be used to execute change orders during the life of the contract, if required.

* Breakdown of Costs for Item No. 1		
ERLS System: Common Components, Payment Interface and Methods, Language, UI Design, Core Training, AWS Design.	$ 180,000.00	Invoiced at Commencement of Project
License and Software: • Trademarks & Service Marks: $170,000 • Notary: $170,000 • Private Investigators/Security Guards: $10,000 • Athletic Agents: $10,000 • Marriage Celebrants: $10,000 • Apostilles and Authentications: $10,000 • Scrap Metal Dealers: $10,000 • Charitable Organizations: $10,000	$ 400,000.00	^These costs recouped via vendor fee on revenue collected by State for all paid transactions within scope of this RFQ ^Vendor Transaction Fees Invoiced Monthly Post New System Go-Live **ANTICIPATED TOTAL TRANSACTIONS FEES Years 1-5^** **$1,701,000 (*$340,200/yr*)**
Set-up, Configuration and Installation	$ 231,051.00	
Historical Data Migration	$ 184,031.00	
System Training: Training specific to the various individual registers.	$ 9,430.00	
Maintenance and Support/Warranty Years 1 through 5 *Includes Hosting Infrastructure & Support*	$ 876,388.00	
Unit Price for Customization Programming	$ 135.00	
Unit Price for Transactional Fee	$ 11.34	• This fee is for example purposes only as transaction fees are accounted for in the above listed cost model. • The Transactional Fee amount listed here is the average fee collected for all transactions on all registers within the scope of this RFQ. Actual fee amounts vary for each specific transaction, based on percentage of the fee the State charges end users for each specific transaction.
** Years 6, 7 and 8 of annual maintenance and support/warranty will be added by subsequent change order upon mutual agreement between the vendor and the agency.		

^^ The pricing model requested by the State is not currently reflected in the General Terms and Conditions.

Vendor Name: Foster Moore US, LLC

Authorized Signature: Kelly Kopyt, VP US Operations

Assumptions

Number	Functional Area	Assumption
1	Scope	Pricing is prepared based on the scope identified in the RFQ.
2	Registry Language	American English only.
3	Currency	Single currency only – US Dollars. All payments will be entered into system in USD. Foreign currency payments must be converted to USD.
4	Time zone	There is a single time zone covering all users of the system.
5	Project	Foster Moore will have access to SMEs as required, delays to this access or to decision-making may impact project schedules and/or costs.
6	Data Migration	The client will handle data cleansing and analysis of their own data, to assist in the data migration process. All mandatory data required by the systems business rules (presumably the same as the Jurisdictions legislation) are available in the legacy data. Versioning of migrated data is not required. Foster Moore will be provided with read-only access to the legacy database or a full extract as required. Data migration excludes payment data and in-flight transactions. It is assumed that there are common business rules and data formats shared across the various licensing databases. Large differences between the datasets may impact project schedules and/or costs.
7	Content Management System	The delivery of a Content Management System (CMS) is out of scope.
8	Payment Processer	A third-party payment service will be used, and sensitive financial info (such as credit card number) will not be captured by, or stored within, Catalyst.
9	Searching	Searching will be performed using Catalyst search engine. Searching within documents is out of scope.
10	Workflow	It is assumed that the standard Catalyst filing workflow will be used, with custom configuration for the client. The core Catalyst workflow will be configured to ensure that all of West Virginia's business rules are met.
11	Correct the Register	The Catalyst services available to correct the register (this includes data and filings) are available to internal users only. External users can notify the registry of corrections that are required, via an online service. However, the actual correction will need to be done be an internal user with the appropriate permissions.
12	Feedback & Sign off	Feedback should be received within an "acceptable timeframe". For signoff of documentation/specifications produced by Foster Moore, this has to be done within two weeks following receipt of the final version.

Number	Functional Area	Assumption
13	Training	Training includes the Licensing system training only. Server administration training, database administration training, and external (Public) end user training is not currently carried out by Foster Moore and has not been factored into estimates.
14	Application Support and Maintenance	Price includes 20 hours per month. P1 & P2 break fix only.
15	Project Management	The project will be managed using Foster Moore’s Catalyst Adoption Methodology (CAM).
16	Infrastructure – Shared Platform	The different registers will all share the same technical infrastructure.
17	Infrastructure - Environments	Any external interfaces will be provided by West Virginia and not the vendor. The third-party payment gateway can be contacted directly from the Catalyst application layer without the need for further equipment.
18	Infrastructure - Support	The infrastructure costs provided are based on Foster Moore's out of the box reference architecture.

Exceptions and Clarifications

Section 11 of the *Instructions to Vendors Submitting Bids* states that *Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications to its bid . . .*

Reference	Exception/ clarification/ modification
GTC section 26. Subsequent Forms	Foster Moore seeks to clarify that its standard End User License Agreement for Catalyst (included as part of the bid) will form part of the Contract and will prevail in respect of the License Agreement's subject-matter.
GTC section 36. Indemnity	Foster Moore seeks to discuss reasonable limitations of its liability for its performance of the Contract and related risk.
General – rights and remedies (e.g. GTC section 19. Cancellation; GTC section 28 Warranty; and the Specifications section 10)	The Contract appears to be directed more at provision of tangible goods and anticipates that the State may exercise rights (e.g. cancellation and warranty) for any failure and in broad circumstances. Foster Moore seeks to discuss adding materiality thresholds and other limitations (including a warranty claim process) to align the Contract with standard information technology undertakings. These undertakings generally recognize that IT projects are complex, that issues are likely to arise and materiality thresholds should apply and that the vendor should be given the chance to remedy issues using standard and objective processes.
General - funding model and processes (e.g. GTC section 20. Time; the Specifications section 4; and Attachment A)	The Contract does not address several key aspects of the project, including the hosted transactional model proposed by Foster Moore, the detailed processes (e.g. Acceptance, change, delay and approval) for the operation of the project and the detailed requirements for the ERLS. Foster Moore seeks to discuss including those details and processes as part of the Contract and/or the parties agreeing a process document and detailed requirements at the start of the project.

End User License Agreement

Foster Moore International Limited a limited liability company registered in New Zealand **("Foster Moore")**
Software License Agreement

IMPORTANT NOTICE: By installing or using the Licensed Software in any way (or permitting any other person to do so on the Licensee's behalf), the Licensee agrees to the terms of this License Agreement. If the Licensee does not agree to the terms of this License Agreement, the Licensee should promptly contact Foster Moore, must not install or use (or permit any other person to do so on its behalf) the Licensed Software or Documentation, must immediately return all copies of the Licensed Software and Documentation to Foster Moore, and must provide written certification confirming the return of all copies on Foster Moore request. The Licensee is deemed to have accepted this License Agreement if the Licensed Software is installed or used in any way.

Foster Moore owns and supplies software applications for use in operating and managing various public registries. The Licensee wishes to use some or all of Foster Moore's software applications and related documentation. Foster Moore has agreed to grant to the Licensee a license to use those applications and documentation, on the terms and conditions of this License Agreement.

OPERATIVE PART

1 **Interpretation**

1.1 In this License Agreement:

"Approved Hosting Provider" means a hosting provider (other than the Licensee) approved in writing by Foster Moore to host the Licensed Software on the Licensee's behalf in accordance with the Special Conditions set out in the Order Form. To avoid doubt and without limitation, it will be a condition of approval that the physical location of the hosting site is advised to Foster Moore and approval is obtained in advance to move that location;
"Associated Material" includes (without limitation) product roadmaps and Foster Moore's proprietary Catalyst Application Methodology (CAM) software development methodology and templates, together with updates to any of those items;
"Commencement Date" means the date of installation of the Licensed Software on the Licensee's or Approved Hosting Provider's equipment;
"Confidential Information" means information which is confidential in nature or disclosed in confidence by Foster Moore to the Licensee including without limitation the Foster Moore Software, the Documentation, the Source Code, the Associated Material, or any information about Foster Moore's business or its development, marketing or other plans or strategies, but does not include any information which is:

(a) on receipt by the Licensee, in the public domain or which subsequently enters the public domain without any breach of the License Agreement or other obligation owed to Foster Moore by any person;
(b) on receipt by the Licensee, already known by the Licensee other than as a result of a breach of any obligation owed to Foster Moore by any person; or
(c) at any time after the date of receipt by the Licensee, received in good faith from a third party without any breach of an obligation of confidentiality by that third party.

"Documentation" means the current standard documentation for the Licensed Software, together with any standard updates to that documentation provided with the Maintenance Services;
"Force Majeure Event" means any event that is beyond the reasonable control of Foster Moore, including without limitation war, riot, strike, communication lines or internet failure, and natural or man-made disaster;
"Foster Moore Software" means any Foster Moore application, including any modification, enhancement or derivative work and all patches, standard updates and revisions of an application provided as part of Maintenance Services or otherwise. To avoid doubt, the Licensed Software is Foster Moore Software;
"Intellectual Property" includes copyright, patents, designs, trade marks, trade names, goodwill rights, trade secrets, confidential information, know-how and any other intellectual proprietary right or form of intellectual property existing anywhere in the world and whether registered or not;
"License Agreement" means this software license agreement together with the Order Form;
"Licensed Software" means the Foster Moore Software specified in the Order Form and includes all patches, standard upgrades and revisions of that software supplied as part of the Maintenance Services, but excludes the Source Code;
"Licensee" means the person named as Licensee in the Order Form;
"Maintenance Services" means services to maintain the Licensed Software in good operating condition as determined by Foster Moore at its discretion, including the provision of patches, updates and revisions and new releases of the Licensed Software, but excludes the support and maintenance of any Licensee specific customizations made to, or Licensee specific derivative works of, the Licensed Software (such support and maintenance to be supplied under a separate support agreement);
"Order Form" means Foster Moore's standard 'Software Order Form' which is completed and signed by Foster Moore and the Licensee;
"Service Provider" means Foster Moore, the Foster Moore related company, or the authorized service provider that enters into the Services Agreement with the Licensee;
"Services Agreement" means the master services or supply agreement including any relevant statement(s) of work, between a Service Provider and the Licensee under which the Licensed Software is implemented for the Licensee; and
"Source Code" means the source code for the Licensed Software.

2 License

2.1 Subject to the Licensee complying with the terms of this License Agreement, Foster Moore grants to the Licensee a non-exclusive, non-assignable license to use the Licensed Software and Documentation on the terms of this License Agreement for the purpose set out in and subject to any constraints on use specified in the Order Form or otherwise agreed upon in writing between the Licensee and Foster Moore. The license commences on the Commencement Date and will continue unless and until the License Agreement is terminated. Where there is an Approved Hosting Provider, that provider may host the Licensed Software on the Licensee's behalf (subject to any Special Condition in the Order Form), provided that the Licensee procures the Approved Hosting Provider's compliance with the terms of this License Agreement (including, without limit clauses 6 and 7). To avoid doubt, any breach of this License Agreement by the Approved Hosting Provider is deemed to be a breach of this License Agreement by the Licensee.

2.2 The Licensed Software must be installed only at the agreed site(s) specified in the Order Form. Implementation and related services are provided by the Service Provider under the Services Agreement.

2.3 Various third party software may be required for operation of the Licensed Software. Details are available on request from Foster Moore. The Licensee is responsible for procuring licenses to use the required third party software at its expense.

2.4 The Licensee must not, nor may it permit any other person to:

(a) sell, rent, lease, sub-license, lend, assign, transfer, make available, time share or act as a service bureau or application service provider that allows third party access to, in whole or in part, the Licensed Software or Documentation;

(b) resell or offer for resale, reproduce, modify, copy (except for backup purposes), reverse assemble, reverse compile or enhance the Licensed Software or Documentation or any of it, except to the extent expressly permitted by any law or treaty that is in force in the country where the Licensed Software is installed and which cannot be excluded, restricted or modified by the License Agreement;

(c) access the Licensed Software or Documentation other than as expressly set out in this License Agreement;

(d) alter, remove or tamper with any trade marks, any patent or copyright notices, or any confidentiality, proprietary or trade secret legend or notice, or any numbers, or other means of identification used on or in relation to the Licensed Software or Documentation; or

(e) do any act which would or might invalidate or be inconsistent with Foster Moore's (or its licensor's) Intellectual Property rights.

Without limiting the earlier part of this clause **Error! Reference source not found.**, the Licensee must not supply or otherwise use the Licensed Software or Documentation in competition with Foster Moore.

3 Maintenance Services

3.1 Foster Moore will provide Maintenance Services for the Licensed Software to the Licensee, commencing on the commencement date for Maintenance Services specified in the Order Form. Provision of Maintenance Services is subject to (a) the Licensee's continued compliance with the terms of this License Agreement; (b) payment by the Licensee of the annual fees for Maintenance Services; (c) the Licensee using a current or supported version of the Licensed Software; and (d) the Licensee maintaining an adequate and properly configured environment for the operation of the Licensed Software (in accordance with any recommendation of Foster Moore from time to time). Support services for Licensee specific customisations made to, or Licensee specific derivative works of, the Licensed Software are only available under a separate agreement (and for which separate fees apply) and are subject to Licensee having paid the annual Maintenance Services fees under this License Agreement.

3.2 The fees for Maintenance Services for the initial 12 month term are as specified in the Order Form or if not specified in the Order Form will be the Foster Moore list price, unless otherwise agreed in writing with Foster Moore. For each 12 month period following the initial 12 month term, the maintenance fees will be as specified in the Order Form or if not specified in the Order Form will be the Foster Moore List price. The fees for each renewal period may be increased at the start of each period by a maximum of 5% of the maintenance fees applicable in the current period (provided that Foster Moore may not exercise this right in the first renewal period). Subject to the following sentence, as long as the Licensee pays the annual fees for Maintenance Services, Foster Moore will continue to provide Maintenance Services. Foster Moore may terminate the Maintenance Services on no less than 3 months' written notice, provided that it may not exercise this right prior to the 5th anniversary of the Commencement Date.

3.3 Provision of Maintenance Services does not include supply of any services, whether for installation or implementation of patches, updates or revisions or otherwise. Such services are available from the Service Provider under the Services Agreement or separate support agreement (as applicable).

4 Charges and payment

4.1 The Licensee must pay Foster Moore the license fees for the Licensed Software and the fees for Maintenance Services as specified in the Order Form or clause **Error! Reference source not found.**, plus any applicable goods and services tax, sales tax, value added tax, or similar form of tax. The Licensee must pay all fees by the 20th of the month following the date of the invoice unless otherwise specified in the Order Form.

4.2 All fees payable by the Licensee under the License Agreement must be made in full without set-off or counterclaim and, except to the extent required by law, free and clear of any deduction on account of tax or otherwise.

4.3 If the Licensee fails to pay any amount due under a License Agreement by the due date, Foster Moore may without prejudice to its other rights and remedies:

(a) decline to supply any additional Foster Moore Software to the Licensee until payment of all outstanding amounts is paid; and/or

(b) require the Licensee to pay interest at 10% per annum on the amount due from the due date until the date of payment (in addition to the Licensee remaining liable for the full amount outstanding); and

(c) suspend the provision of the Maintenance Services or suspend the Licensee's access and use of the Licensed Software, including:

(i) by utilizing and changing passwords or remote access provided to Foster Moore by or on behalf of the Licensee (albeit for other purposes or provided under the Services Agreement or another separate agreement between the parties);

(ii) by instructing any third party hosting provider to cease hosting the Licensed Software and return all copies to Foster Moore and Foster Moore may disclose the License Agreement, and in particular this clause, together with such evidence of non-payment of relevant invoices as the hosting provider may require to any such hosting provider as Foster Moore's authority to instruct the hosting provider accordingly.

Without limiting any other remedies that Foster Moore may have, if Foster Moore invokes this clause **Error! Reference source not found.**, the Client's rights to use the Licensed Software (including without limitation any backup or other copy) cease immediately for the period of the suspension.

5 Escrow

5.1 Foster Moore will provide the Licensee with, and the Licensee accepts, rights of access to, and use of, the Source Code in accordance with the terms of this clause **Error! Reference source not found.**.

5.2 On request and subject to the Licensee paying all associated escrow account fees, Foster Moore will add the Licensee as a beneficiary to its standard escrow account (**Escrow Account**) that Foster Moore holds with Iron Mountain Intellectual Property Management, Inc. or any replacement escrow provider (**Iron Mountain**). Foster Moore's obligations under this clause **Error! Reference source not found.** are subject to the Licensee's continued compliance with the terms of this Agreement and the Licensee signing all documents required for it to be added as a beneficiary under the Escrow Account.

5.3 Under the Escrow Account, the Licensee may elect to have any assessment, verification or other additional services carried out by Iron Mountain in relation to the Source Code, such services will be at the Licensee's cost.

5.4 The Licensee's rights of access to the Source Code will be:

(a) in accordance with the release conditions for the Escrow Account, provided that Foster Moore must be given written notice of an occurrence of a claimed release condition at the same time as the Licensee gives notice to Iron Mountain; and

(b) conditional on the Licensee having a continued need for support and maintenance of the Licensed Software.

5.5 On release of the Source Code in accordance with this clause, Foster Moore's obligation to provide Maintenance Services ceases and Foster Moore grants the Licensee a non-transferable and non-sub-licensable licence to use the Source Code for the sole purpose of supporting and maintaining the Licensed Software in a manner consistent with the Licensee's rights to support and maintenance that it would otherwise have been entitled to under this License Agreement (**Escrow License**). The Escrow License:

(a) includes the right of the Licensee to adapt and modify the Source Code to the extent necessary to bug-fix and make like minor amendments; and

(b) excludes any further right to adapt, modify or make derivative works of the Source Code.

5.6 The restrictions and obligations on the Licensee set out in clauses **Error! Reference source not found.**, **Error! Reference source not found.**, **Error! Reference source not found.**, **Error! Reference source not found.**, and **Error! Reference source not found.** of the License Agreement apply equally to the Source Code and the Escrow License, with all necessary modifications.

5.7 The Escrow License terminates on the earlier of the following events:

(a) if the Licensee no longer has any need for support and maintenance of the Licensed Software (e.g. because it has implemented a replacement software or system for the Licensed Software or has discontinued its use of the Licensed Software);

(b) on termination of the License Agreement by Foster Moore in accordance with clause **Error! Reference source not found.**; or

(c) on notice from Foster Moore in the event of the Licensee committing a material breach of the terms of the Escrow License that is either incapable of remedy or that the Licensee has failed to remedy within 30 days of notice from Foster Moore of the default.

5.8 On termination of the Escrow License, clause **Error! Reference source not found.** applies with all necessary modification.

6 Protection of Intellectual Property

6.1 Foster Moore or its licensor owns all Intellectual Property rights in the Foster Moore Software, the Documentation, the Source Code, and the Associated Material.

6.2 The Licensee must, at Foster Moore's expense, take all such steps as Foster Moore may reasonably require to assist Foster Moore to maintain the validity and enforceability of Foster Moore's (or its licensor's) Intellectual Property rights.

6.3 The Licensee must notify Foster Moore of any actual, threatened or suspected infringement of any Intellectual Property right in the Licensed Software or Documentation and of any claim by any third party that any use of the Licensed Software or Documentation infringes any rights of any other person, as soon as that infringement or claim comes to the Licensee's notice. The Licensee will (at Foster Moore's expense) do all such things as may reasonably be required by Foster Moore to assist Foster Moore in pursuing or defending any proceedings in relation to any such infringement or claim.

7 Confidentiality and publicity

7.1 The Licensee must effect and maintain adequate security measures to safeguard the Confidential Information.

7.2 The Licensee must not use or disclose any Confidential Information other than: (a) to its directors, employees, or Approved Hosting Provider to the extent necessary in the performance of the License Agreement; or (b) with the express prior written consent of Foster Moore; (c) to its professional advisers; or (d) to the extent required by law. Disclosure of Confidential Information to the persons in (a) and (c) is subject to those persons being subject to confidentiality obligations no less onerous than those set out in this License Agreement.

7.3 Foster Moore may, with the Licensee's prior written consent, use the Licensee as a reference site or in a case study or other promotional material.

7.4 Licensee acknowledges and agrees that the Foster Moore Software, the Documentation, the Source Code, and the Associated Material are "trade secrets" of Foster Moore and their use and disclosure in breach of this License Agreement may result in loss to Foster Moore that may not be adequately compensated by payment of damages and, without limiting Foster Moore's other rights and remedies, Foster Moore is entitled to equitable relief, including enforcing its rights by specific performance or injunction proceedings.

8 Warranties

8.1 Foster Moore warrants that Foster Moore or its licensors are entitled to grant the license granted under the License Agreement.

8.2 Except as provided under clause **Error! Reference source not found.**, all warranties, terms and conditions (including without limitation, warranties and conditions as to fitness for purpose and merchantability), whether express or implied by statute, common law or otherwise are excluded to the extent permitted by law.

9 Limitation of liability

9.1 To the extent permitted by law, the maximum aggregate liability of Foster Moore under or in connection with the License Agreement or relating to the Licensed Software, the Documentation, the Source Code, or the Maintenance Services, whether in contract, tort (including negligence), breach of statutory duty or otherwise, must not in any 12 month period starting on the Commencement Date or anniversary of that date exceed the fees paid by the Licensee under the License Agreement in that 12 month period (which in the first 12 month period of this License Agreement is deemed to be the total fees paid by the Licensee from the Commencement Date to the date of the first event giving rise to liability).

9.2 To the extent permitted by law, Foster Moore will not be liable for:

(a) losses or damages which do not flow directly from a breach of the License Agreement nor for any loss of business, savings, revenue, profits, data, and/or goodwill; and/or

(b) any failure to perform its obligations under the Agreement to the extent caused by: (i) Force Majeure; or (ii) any use or modification of the Licensed Software, the Documentation, the Source Code, or the Maintenance Services by the Licensee under the Escrow License or in a manner not permitted under this License Agreement.

10 Termination

10.1 Either party may terminate the License Agreement immediately by notice in writing:

(a) upon the other party committing any material breach of the License Agreement that is incapable of remedy;

(b) upon the other party failing to remedy any breach of the License Agreement that is capable of remedy within 30 days of written notice of that breach having been given by the non-defaulting party to the other party (and, without limitation, a failure by the Licensee to pay any amount due under the License Agreement by the due date is a breach that is capable of remedy for the purposes of this clause **Error! Reference source not found.**); or

(c) upon the commencement of liquidation or the insolvency of the other party (except for the purposes of solvent amalgamation or reconstruction) or upon the appointment of a receiver, statutory manager or trustee of the other party's property or upon an assignment for the benefit of the other party's creditors or upon execution being levied against the other party or upon the other party compounding with its creditors or being unable to pay its debts in the ordinary course of business.

11 **Consequences of termination**

11.1 On termination of the License Agreement by either party:

(a) the licenses granted under the License Agreement will terminate immediately;

(b) the Licensee must cease to use Foster Moore's (and its licensor's) Intellectual Property (including all Licensed Software and Documentation) and remove the Licensed Software from its systems and instruct any Approved Hosting Provider to cease hosting the Licensed Software and remove it from all relevant systems;

(c) Foster Moore may require the Licensee to provide written certification to Foster Moore that it has complied with the requirements of clause **Error! Reference source not found.**; and

(d) the Licensee will promptly pay any amounts outstanding under the License Agreement.

12 **General**

12.1 Assignment: The Licensee must not assign, novate, transfer or sublicense any or all of its rights under the License Agreement without the prior written consent of Foster Moore. Foster Moore may assign its rights under the License Agreement at any time without the Licensee's consent.

12.2 Entire agreement: The License Agreement constitutes the complete and exclusive statement of the agreement between the parties, superseding all proposals or prior agreements, oral or written, and all other communications between the parties relating to the subject matter of the License Agreement.

12.3 Further assurances: The parties must each do all such further acts (and sign any documents), as may be necessary or desirable for effecting the transactions contemplated by the License Agreement.

12.4 Amendments: Except as specifically provided, no amendment to the License Agreement will be effective unless it is in writing and signed by both parties.

12.5 No waivers: No exercise or failure to exercise or delay in exercising any right or remedy by a party will constitute a waiver by that party of that or any other right or remedy available to it. No waiver will be effective unless it is in writing and signed by the party waiving the right or remedy.

12.6 Remedies cumulative: Except as is expressly stated in the License Agreement, the rights, powers and remedies provided in the License Agreement are cumulative and will be in addition to every other right, power or remedy given under the License Agreement or existing at law.

12.7 Severability: If any term of the License Agreement is subsequently found to be unenforceable, invalid or illegal for any reason whatsoever, the other terms will remain in full force and effect as if the License Agreement had been executed without such provisions.

12.8 Order of precedence: If there is any conflict or inconsistency between a) the terms and conditions of this License Agreement and b) the Order Form, the Order Form will take precedence.

13 **Notices**

13.1 Any notice or other communication under the License Agreement will be deemed to be validly given if in writing and delivered by hand, pre-paid post or email to the Licensee or Foster Moore at the addresses for that party specified in the Order Form. Receipt will be deemed: a) if delivered by hand, upon delivery, b) if delivered by post, ten days after posting from one state or country to another or c) if delivered by email, on sending provided the sender does not receive any indication of the failure of, or delay in, delivery within 24 hours after dispatch.

14 **Dispute resolution**

14.1 Where any dispute arises between the parties concerning the License Agreement or the circumstances, representations, or conduct giving rise to the License Agreement, no party may commence any court or arbitration proceedings relating to the dispute unless that party has complied with the procedures set out in this clause **Error! Reference source not found.**.

14.2 The party initiating the dispute ("the first party") must provide written notice of the dispute to the other party ("the other party") and nominate in that notice the first party's representative for the negotiations. The other party must within 7 days of receipt of the notice, give written notice to the first party naming its representative for the negotiations. Each representative nominated will have authority to settle or resolve the dispute.

14.3 If the parties are unable to resolve the dispute by discussion and negotiation within 14 days of receipt of the written notice from the first party, then the parties must immediately refer the dispute to mediation.

14.4 The mediation must be conducted under the terms of the International Chamber of Commerce Mediation Rules.

14.5 If the parties are unable to resolve the dispute by mediation, then the parties must immediately refer the dispute to arbitration, with this clause applying. The dispute must be finally settled under the Rules of Arbitration of the International Chamber of Commerce by a single arbitrator appointed in accordance with those Rules. All arbitration meetings and hearings shall be heard in Charleston and in English. Parties may attend the meeting and hearing by videoconference. Unless agreed by the parties, the arbitrator that is selected or appointed must have at least 10 years' experience as an arbitrator of similar disputes; and not have any interest that conflicts with, or may reasonably be seen to be in conflict with, the impartial performance of the duties of the arbitrator in respect of the dispute. Each party may be represented by a legal practitioner in proceedings before the arbitrator. The decision of the arbitrator will be confidential, and final and binding, between the parties. Any decision, judgment or award of the arbitrator may be entered in any court having jurisdiction to do so including the enforcement of any arbitration award in accordance with the UN Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958.

14.6 Nothing in this clause prevents a party from seeking urgent interlocutory and/or injunctive relief from any Court of competent jurisdiction.

15 **Governing law**

15.1 The License Agreement is governed by the laws of West Virginia, and, subject to the process in clause **Error! Reference source not found.**, the parties submit to the non-exclusive jurisdiction of the appropriate state court in West Virginia.

This section sets out Foster Moore's pricing in response to the State's request for a hosted transactional model^^.

Exhibit A - Pricing Page - Revised per Addendum No. 3 issued 7/3/18 - CRFQ SOS1800000007

WV Secretary of State - Enterprise Registration and Licensing System (ERLS)

Item No.	Item	Vendor Description	Unit of Measure	Quantity	Unit Price	Extended Cost
1	Commercial Off-the-Shelf (COTS) Enterprise Registration and Licensing System (ERLS) including License, Software, Set-up, Configuration, Installation, Historical Data Migration and System Training, including Five Years of Maintenance and Support/Warranty * *Vendors should include an itemized breakdown of the charges below.*	• **ERLS System - Common Components, Payment Interface and Methods, Language, UI Design, Core Training, AWS Design** *(Invoiced at Commencement of Project)* • **Annual Transaction Fees^ Years 1-5** **(***Invoiced Monthly post Go Live)* *Cost of items below recouped via Annual Transaction Fees* • **License and Software** • **Set-up, Configuration and Installation** • **Historical Data Migration** • **Registry Specific Training** • **Maintenance and Support/Warranty Years 1 through 5** • **Hosting Infrastructure & Support**	Lump Sum	1	$ 1,881,000.00	$ 1,881,000.00
2	Sixth Year (6th) Maintenance and Support/Warranty **	• **Annual Transaction Fees^ (Invoiced Monthly)** *Cost of items below recouped via Annual Transaction Fees* • **Catalyst Software Maintenance & Support** • **Hosting Infrastructure & Support**	Year	1	$ 340,200.00	$ 340,200.00
3	Seventh (7th) Year Maintenance and Support/Warranty **	• **Annual Transaction Fees^ (Invoiced Monthly)** *Cost of items below recouped via Annual Transaction Fees* • **Catalyst Software Maintenance & Support** • **Hosting Infrastructure & Support**	Year	1	$ 340,200.00	$ 340,200.00
4	Eighth (8th) Year Maintenance and Support/Warranty **	• **Annual Transaction Fees^ (Invoiced Monthly)** *Cost of items below recouped via Annual Transaction Fees* • **Catalyst Software Maintenance & Support** • **Hosting Infrastructure & Support**	Year	1	$ 340,200.00	$ 340,200.00
			Total for Item Nos. 1 through 4			$ 2,901,600.00

UNIT PRICES

Vendor should provide a unit price for custom programming. This unit price will only be used to execute formal Change Orders during the life of the contract, if required. Estimated Quantities are included for bid evaluation only; there is no guarantee that any quantity of the Item(s) will be purchased.

Item No.	Item	Vendor Description	Unit of Measure	Estimated Quantity	Unit Price	Extended Cost
5	Customization Programming	Hourly rate for custom programming/development	Hour	80	$ 135.00	$ 10,800.00

6	Transactional Fee	• This fee is for example purposes only as transaction fees are accounted for in the above listed cost model. • The Transactional Fee amount listed here is the average fee collected for all transactions on all registers within the scope of this RFQ. Actual fee amounts vary for each specific transaction, based on percentage of the fee the State charges end users for each specific transaction.	Each	30,000	$ 11.34	$ 340,200.00
					Total for Item Nos. 5 and 6	$ 351,000.00
					Lowest Overall Total Cost (Item Nos. 1+2+3+4+5+6) =	$ 3,252,600.00

The Contract is intended to provide Agency with a purchase price for the Contract Services. The Contract shall be awarded to the Vendor that provides the Contract Services (Item Nos. 1 through 6 above) meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages. Renewal options for years 6, 7, and 8 will be initiated by the Agency, agreed to by the Vendor and processed by the West Virginia Purchasing Division as Change Orders for subsequent years. Customization Programming will only be used to execute change orders during the life of the contract, if required.

*** Breakdown of Costs for Item No. 1**		
ERLS System: Common Components, Payment Interface and Methods, Language, UI Design, Core Training, AWS Design.	$ 180,000.00	Invoiced at Commencement of Project
License and Software: • Trademarks & Service Marks: $170,000 • Notary: $170,000 • Private Investigators/Security Guards: $10,000 • Athletic Agents: $10,000 • Marriage Celebrants: $10,000 • Apostilles and Authentications: $10,000 • Scrap Metal Dealers: $10,000 • Chariiable Organizations: $10,000	$ 400,000.00	^These costs recouped via vendor fee on revenue collected by State for all paid transactions within scope of this RFQ ^Vendor Transaction Fees Invoiced Monthly Post New System Go-Live
Set-up, Configuration and Installation	$ 231,051.00	
Historical Data Migration	$ 184,031.00	**ANTICIPATED TOTAL TRANSACTIONS FEES Years 1-5^** **$1,701,000 (***$340,200/yr)*
System Training: Training specific to the various individual registers.	$ 9,430.00	
Maintenance and Support/Warranty Years 1 through 5	$ 876,388.00	
Unit Price for Customization Programming	$ 135.00	

Unit Price for Transactional Fee	$ 11.34	• This fee is for example purposes only as transaction fees are accounted for in the above listed cost model. • The Transactional Fee amount listed here is the average fee collected for all transactions on all registers within the scope of this RFQ. Actual fee amounts vary for each specific transaction, based on percentage of the fee the State charges end users for each specific transaction.
** Years 6, 7 and 8 of annual maintenance and support/warranty will be added by subsequent change order upon mutual agreement between the vendor and the agency.		

^^ The pricing model requested by the State is not currently reflected in the General Terms and Conditions.

Vendor Name: Foster Moore US, LLC

Authorized Signature: Kelly Kopyt, VP US Operations

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. PREBID MEETING: The item identified below shall apply to this Solicitation.

☑ A pre-bid meeting will not be held prior to bid opening

☐ A **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

☐ A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: June 18, 2018 by 2:00 pm

Submit Questions to: Tara Lyle
2019 Washington Street, East
Charleston, WV 25305
Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)
Email: Tara.L.Lyle@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID:
BUYER: Tara Lyle, File 40
SOLICITATION NO.: CRFQ SOS18*7
BID OPENING DATE: June 25, 2018
BID OPENING TIME: 1:30 pm
FAX NUMBER: 304-558-3970

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression or Interest or Request for Proposal is not permitted in wvOASIS.

For Request For Proposal ("RFP") Responses Only: In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus N/A convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)
☐ Technical
☐ Cost

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: June 25, 2018 at 1:30 pm

Bid Opening Location: Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

10. ALTERNATE MODEL OR BRAND: Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

☐ This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

13. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the $125 fee, if applicable.

14. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

15. PREFERENCE: Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and should include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at:
http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15A. RECIPROCAL PREFERENCE: The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. A request form to help facilitate the request can be found at:
http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

17. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

18. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

19. NON-RESPONSIBLE: The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance."

20. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b."

21. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

22. INTERESTED PARTY DISCLOSURE: West Virginia Code § 6D-1-2 requires that the vendor submit to the Purchasing Division a disclosure of interested parties to the contract for all contracts with an actual or estimated value of at least $1 Million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

23. WITH THE BID REQUIREMENTS: In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or **"Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or **"Proposal"** means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or **"Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☑ **Term Contract**

Initial Contract Term: Initial Contract Term: This Contract becomes effective on upon award and extends for a period of five (5) year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to three (3) successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

> ☐ **Alternate Renewal Term** – This contract may be renewed for ____________ successive __________ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within ________________________ days.

☑ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within 30 days. Upon completion of the work covered by the preceding sentence, the vendor agrees that maintenance, monitoring, or warranty services will be provided for see above term contract year(s) thereafter.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached.

4. NOTICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☑ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under $100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

☐

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The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section.

Vendor must maintain:

☑ **Commercial General Liability Insurance** in at least an amount of: 1,000,000.00 per occurrence.

☐ **Automobile Liability Insurance** in at least an amount of: ________________ per occurrence.

☐ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: ________________ per occurrence.

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of: ________________ per occurrence.

☐ **Cyber Liability Insurance** in an amount of: $1,000,000.00 per occurrence.

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐ **Pollution Insurance** in an amount of: ________________ per occurrence.

☐ **Aircraft Liability** in an amount of: ________________ per occurrence.

☐

☐

☐

☐

Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

9. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. [Reserved]

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☐ ______________________________ for ____

☐ Liquidated Damages Contained in the Specifications

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

14. PAYMENT IN ARREARS: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

> **SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

> **SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. PURCHASING AFFIDAVIT: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"), provided that both the Other Government Entity and the Vendor agree. Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

39. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

40. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

41. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars ($2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars ($50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

44. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least $1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Kelly Kopyt, VP US Operations

(Name, Title)

Kelly Kopyt, VP US Operations

(Printed Name and Title)

5520 Dillard Dr. #280 Cary, NC 27518

(Address)

P 919.745.2141 | F 919.854.4115

(Phone Number) / (Fax Number)

kelly.kopyt@fostermoore.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Foster Moore US, LLC

(Company)

Kelly Kopyt, VP US Operations

(Authorized Signature) (Representative Name, Title)

Kelly Kopyt, VP US Operations

(Printed Name and Title of Authorized Representative)

July 12th, 2018

(Date)

P 919.745.2141 | F 919.854.4115

(Phone Number) (Fax Number)

REQUEST FOR QUOTATION
WEST VIRGINIA SECRETARY OF STATE'S OFFICE
Enterprise Registration and Licensing System
CRFQ SOS1800000007

SPECIFICATIONS

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Secretary of State (Agency) to establish a contract for the purchase of a configurable Commercial Off-the-Shelf (COTS) Enterprise Registration and Licensing System (ERLS) to modify, unify and integrate the West Virginia Secretary of State's (WVSOS) occupational and charitable licensing databases. The data is composed of an online system, an in-house legacy system, and an intermediary system with a front-end interface housed on www.sos.wv.gov

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them. Additional definitions can be found in section 2 of the General Terms and Conditions.

   2.1. **"Contract Item"** means as more fully described by these specifications.

   2.2. **"ERLS" or "Enterprise Registration and Licensing System"** means a commercial-off-the-shelf electronic registration and licensing solution to manage registration and licensing needs for specified service areas of the Agency.

   2.3. **"Pricing Page"** means the pages, contained in wvOASIS or attached as Exhibit A, upon which Vendor should list its proposed price for the Contract Items.

   2.4. **"Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

3. **QUALIFICATIONS:** Vendor, or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

   3.1 Has successfully deployed a business services registration system for at least one (1) of the 50 US states or its territories at the level of the Secretary of State or its equivalent and the system;

      3.1.1 is hosted by the vendor or a third party
      3.1.2 is funded entirely or primarily via a transactional model

   3.2 Currently maintains the business services registration system referenced in 3.1.1
   3.3 Has maintained the system referenced in 3.1.1 for a minimum of four (4) years
   3.4 Can configure their COTS system to meet the laws, rules, regulations, administrative codes, and processing requirements of the state of West Virginia.

4. GENERAL REQUIREMENTS:

4.1. Mandatory Contract Item Requirements: Contract Item must meet or exceed the mandatory requirements listed below.

4.1.1. Enterprise Registration and Licensing System

4.1.1.1. In accordance with Schedules A and B attached, the ERLS should be capable of handling registration and/or licensing or needs relating to the following service areas:

4.1.1.1.1. Marriage Celebrants (Minister registry)

4.1.1.1.1.1. The system will be used to maintain a registry of those authorized by law to perform or celebrate a marriage in West Virginia. Within the system, an online user will be able to submit and pay for the Marriage Celebrant application online. The system will connect the online payment to the filing. An internal specialist may review the online submitted document, if required. Final documents will be available online and in-house. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist. The system will provide the public and State with a data list of lawful marriage celebrants via the web.

4.1.1.1.2. Notaries Public

4.1.1.1.2.1. This system will be used for Notary Public Applications. The system will determine statutory compliance, with the assistance of a specialist only if needed. The system creates or alters the Notary Public Record on the NOTARY database based on the information contained therein. The system will connect the online payment to the filing. The system will notify the applicant of acceptance or rejection of the filing via electronic communication. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist. The system will make documents for notary applications available to the State. The system provides the public and State with access to Notary Public Records via the web.

4.1.1.1.3. Athletic Agents

4.1.1.1.3.1. This system will be used to maintain a registry of those licensed to represent student-athletes. Within this system, an online user will be able to submit and pay for the Athletic Agent license application online. The system will connect the online payment to the filing. Final documents will be available online. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist. The system will notify the applicant of acceptance or rejection of the filing via electronic communication. The online system will provide the public and State with a data list of licensed athletic agents via the web.

4.1.1.1.4. Private Investigators and Security Guards

4.1.1.1.4.1. This system will be used to maintain a registry of those licensed as private investigators and/or security guards in West Virginia. Within this system, an online user will be able to submit and pay for the Private Investigators and Security Guards license applications online. The system will connect the online payment to the filing. The system will determine statutory compliance, with the assistance of a specialist if needed. Final documents will be available online. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist.

The law requires a surety bond to be reviewed and approved by the Attorney General's Office. The bond is manually forwarded and returned to the Agency as accepted or rejected. The applicant also submits to fingerprinting during initial licensure by a 3rd party. The results of the background are reviewed through a secure portal by a specialist. The system will provide the ability to record that the external actions of the Attorney's General Office approval and fingerprinting have been met. The system will notify applicants of acceptance or rejection via electronic communication. The system will provide the public and State with a data list of licensed Private Investigators and Security Guards via the web.

4.1.1.1.5. Trademarks and Service Marks

4.1.1.1.5.1. This system will be used to maintain Trademarks and Service Marks. Within this system, an online user will be able to submit and pay for the filing. The system will determine statutory compliance, with the assistance of a specialist only if needed. The system will capture the name of the trademark/service/collective or certification mark as registered, assign an ID number, and other statutorily required information. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist. The system will notify applicants of acceptance or rejection via electronic communication. The system will provide the public and State with a data list of Trademarks and Service Marks via the web.

4.1.1.1.6. Scrap Metal Dealers

4.1.1.1.6.1. This system will be used for Scrap Metal Dealers. Within this system, an online user will be able to submit and pay for the filing. The system will determine statutory compliance, with the assistance of a specialist only if needed. The system adds or alters the Scrap Metal Dealers registry based on the updated information. There is currently no payment to file with this registry. The system will acknowledge or reject the filing via electronic communication. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist. The system will provide the public and State with access to the data list registry via the web.

4.1.1.1.7. Charitable Organizations

4.1.1.1.7.1. This system will be used for Charitable Organization registration. Within this system, an online user will be able to submit and pay for the filing. The system will determine statutory compliance, with the assistance of a specialist only if needed. The system will acknowledge, certify and/or reject the filing via electronic communication. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist. The system will provide the public and State with access to the data list registry via the web.

4.1.1.1.8. Apostilles

4.1.1.1.8.1. This system will be used for Apostille requests. Within this system, an online user will be able to submit and pay for the filing. The system will determine statutory compliance, with the assistance of a specialist only if needed. The system will certify and/or reject the request via electronic communication. If a paper filing is received, the system will provide the ability to upload an image to represent the paper document, with data entry performed by an internal specialist.

The system will provide the public and State with access to the data list registry via the web.

4.1.1.1.9. Public Records Request

4.1.1.1.9.1. This system will be used to comply with West Virginia FOIA law. It will provide the ability for online users to view and download publicly available records of the Agency. The system will provide the ability to issue a certificate to be attached to a filing, if any. The system will manage FOIA requests housed within the system. The system will manage the process for external web users to create a username and password with the assistance of a specialist only if needed.

4.1.1.1.9.2 Integrated into these service areas are to be the functions of certification, issuance, fiduciary, correspondence, authentication, authorization, security, inquiry and calendaring. The specific requirements for these integrations will be determined as part of the negotiation phase of this contract.

4.1.1.1.9.3 The priorities of the solution (which are not listed in order of importance) are:

4.1.1.1.9.4 An intuitive and quickly adopted solution that improves the lives of the citizens of the State.

4.1.1.1.9.5 Meeting pending legislative requirements for various registries and licensing to be available online.

4.1.1.1.9.6 A quick, verifiable implementation timeline.

4.1.1.1.9.7 Moving the administration of all registry and licensing areas under the jurisdiction of the Secretary of State's office to 100% online.

4.1.1.1.9.8 Increasing efficiency, compliance and audit readiness for all registry and licensing areas under the jurisdiction of the Secretary of State's office.

4.1.1.1.9.9 Ease of scalability to quickly accommodate additional registry and licensing areas in the future.

4.1.1.1.9.10 Decrease the workload on Secretary of State personnel and IT infrastructure.

4.1.1.1.10 The successful migration of valid and reliable data, which must be synchronized and reconciled from different databases. Most data is houses on a Microsoft SQL Server 2012. Most data is houses on the SQL server and a fileserver. The Agency will provide the successful Vendor reasonable access to a resource staff member to answer technical questions which will arise during development, as well as a schema in T-SQL for their use. The database type, storage format, count, and size for each of the above-mentioned services is as follows:

REQUEST FOR QUOTATION

WEST VIRGINIA SECRETARY OF STATE'S OFFICE

Enterprise Registration and Licensing System

CRFQ SOS1800000007

Registry/License	**Storage Format**	**Entities**	**Size**	**Age**	**Notes**
Notaries Public	SQL	1,234,551	3.0 GB 29.3 GB Images on internal server		Integrates with our Apostilles application
Athletic Agents	SQL	121,935[I]	545 MB[II] 22GB on internal file server	6 Years	Integrates with our document authentication system (Document ID)[III]
Private Investigators and Security Guards	SQL	**I**	**II**	6 Y.	**III**
Trademarks and Service Marks	SQL	19100	240 MB	6 Y.	
Scrap Metal Dealers	SQL	1987	500 MB	6 Y.	Integrates with Business 4 West Virginia (WVI hosted web application)
Charitable Organizations	SQL	396733	3.431 GB 291 GB on internal file server	8+ Y. Deskto p; 6Y. on web	
Marriage Celebrants	SQL	**I**	**II**	6 Y.	**III**
Public Records Request	N/A	N/A	N/A	N/A	
Other*	SQL				

* "Other" indicates_any data that is not represented elsewhere within table and the State requires be migrated.

[I] For all licensing areas.

[II] For all licensing areas.

[III] For all licensing areas.

4.1.1.1.11 Meeting the laws, rules, regulations, administrative codes, and processing and indexing requirements of the State of West Virginia and other agencies which rely on and utilize the Secretary of State's information.

4.1.1.1.12 Security, sustainability, enhanced and predictable service availability, high-performance efficiency, and cost-effective workload flexibility

4.1.1.1.13 Operational costs and continued reliability and validity

4.1.1.1.14 Ability to establish and differentiate various authentication, processing and authorization levels

4.1.1.1.15 Robust search and performance capabilities

4.1.1.1.16 Ability to generate and regenerate general and specific and/or customized communications (i.e., correspondence, notices and certificates) in both electronic and non-electronic formats with appropriate date(s), signature(s), text, content, status, link(s) and image(s). Regenerated correspondence, notices and certificates must maintain the original date(s), signature(s), text, content, status, link(s) and image(s) as that of the original

4.1.1.1.17 Ability to calendar and/or schedule events and compute correct fee(s) according to filing type, status, and applicable statutory filing, processing and/or certification fee(s)

4.1.1.1.18 Strong statistical reporting and ad hoc query capabilities (i.e. document type, status, date, time, processor, edits, etc.)

4.1.1.1.19 Documents stored in a single file, which can be indexed, accessed and associated with a specific record

4.1.1.1.20 Ability to accept, document and associate online payments utilizing credit cards through a third-party Vendor. Payment and filing association applications must also accept both single and/or multi-transactional filings and/or payment submissions.

4.1.1.1.21 The ability to maintain an audit log of all filings and/or processing activities, which includes any and all associated edits, corrections, adjustments, or redactions to filings and payments.

4.1.1.1.22 Ability to be successfully configured and deployed within an aggressive timeline:

4.1.2 The Agency requires that the solution be hosted in a commercial cloud environment proven and used by other Secretary of States or similar organizations. Images shall be indexed and stored as either editable, compressed Tagged Image Formatted (.tif) or Portable Document Format (.pdf) files, which can be distributed via E-mail.

4.1.3 The solution must allow the Agency to continue to operate and successfully perform the activities required by state and federal law, rules, regulation and/or policy.

4.1.4 Process Requirements

4.1.4.1 In accordance with Schedules A and B attached, the solution must be:

4.1.4.1.1 Intuitive and easy to use
4.1.4.1.2 Flexible and adaptive
4.1.4.1.3 Process driven
4.1.4.1.4 Flexible (both in reporting and open query)
4.1.4.1.5 Maintainable
4.1.4.1.6 Auditable
4.1.4.1.7 Well documented
4.1.4.1.8 Available to customers online 24/7/365
4.1.4.1.9 Designed for information to be easily shared with other agencies
4.1.4.1.10 Provide redundancy in all aspects of the system, with automatic failover and an offsite data backup within the continental United States
4.1.4.1.11 Provide a disaster recovery plan
4.1.4.1.12 Improve service deliverables by providing additional filing, acknowledgment, certification, and payment options online
4.1.4.1.13 Reduce the number of telephone inquiries received by the Agency
4.1.4.1.14 Generate timely, valid and reliable statistical data and reports as needed and upon request
4.1.4.1.15 Reduce fraudulent filing activity (i.e. user accounts, delegated filing authority, better tracking capabilities and investigative options, etc.)
4.1.4.1.16 Provide an improved and enhanced in-house and outside user experience
4.1.4.1.17 Facilitate mass email communications
4.1.4.1.18 Improve fiscal processing, adjustments and reporting
4.1.4.1.19 Provide enhanced search capabilities
4.1.4.1.20 Increase the overall depth and breadth of data collection
4.1.4.1.21 Improve workflow processes and efficiencies
4.1.4.1.22 Increase public confidence by providing improved data availability and reliability

4.1.4.2 In addition, the solution must effectively manage the volume of information currently processed by the Agency, as well as accommodate a 10% annual increase over the next five (5) fiscal years. The solution must be able to interface with the West Virginia OASIS accounting system.

4.1.4.3 Reporting is to include such items as entity status, daily work report histories, fiscal reports and various statistical information.

4.1.4.4 Vendor and Agency will agree upon encryption protocols for all data transfer methods.

4.1.5 Scope of Work

4.1.5.1 In accordance with Schedules A and B attached, the Vendor must:

4.1.5.1.1 Identify and set up the architecture for the new system, which must include Development, Testing, Staging, and Production environments

4.1.5.1.2 Install and test the operating and database systems

4.1.5.1.3 Migrate, unify, and identify data discrepancies and exceptions from multiple databases

4.1.5.1.4 Modify and launch the off-the-shelf solution

4.1.5.1.5 Provide a five (5) year growth plan

4.1.5.1.6 Provide status reports and participate in status meetings

4.1.5.1.7 Develop and execute a detailed testing plan at the unit, integration, system (Beta), and user acceptance phases

4.1.5.1.8 Provide "train the trainer" training, specialist will be identified for each major service to be delivered

4.1.5.2 Vendor solution must include:

4.1.5.2.1 Moving to a maintainable and sustainable architecture

4.1.5.2.2 Maintaining current historical data and document sequencing

4.1.5.2.3 Changing to a single image structure that is easily editable

4.1.5.2.4 Streamlining the licensing/registration processes in the ten (10) service areas of the Agency

4.1.5.2.5 Unifying how business is completed throughout the Division

4.1.5.2.6 Implementing improved search functions

4.1.5.2.7 Developing a secure system: WVSOS requires a vendor and solution that adhere to industry standards and best practices to ensure security. Vendor must provide their guidelines for the following security issues within their system:

4.1.5.2.7.1 Application and Data
4.1.5.2.7.2 Integration
4.1.5.2.7.3 Information
4.1.5.2.7.4 Incident Response Plan

4.1.5.2.8 Improving the overall speed and accuracy of communications.

4.1.5.2.9 Maintaining accountability, while simultaneously decreasing the Division's reliance on paper and non-electronic formats.

4.1.5.3 Vendor must provide system with redundant hosting and both Active and Passive fail-over capabilities that prevent availability interruption and performance degradation.

4.1.5.4 Vendor must have the ability to provide 24-hour solution support to Agency. Vendor and Agency will agree upon support requirements once contract is awarded.

4.1.5.5 Vendor and Agency will agree upon go-live, accessibility, availability, and system maintenance schedules once contract is awarded.

4.1.5.6 One of the top priorities of this project is to have a Single Configurable Registry/Licensing Platform to build on the required services with ease of add-ons going forward. The single platform should support data sharing across Occupational and Business Registers.

4.1.5.7 The Vendor is responsible for designing, implementing, and validating a test plan for each function of the application and overall unit for which the function is deployed. Testing must include integration testing and be updated and retested for each configuration made to the code and/or functionality. All promotions are to successfully complete Beta and User Acceptance Testing (UAT) before a deployment. The Vendor must provide an issue tracking system for the reporting and tracking of "bugs" and record the name given the issue, its tracking ID, the description of the issue, the reporter, the date reported, the priority, and the severity of the issue, as well as which individual or team has been assigned to resolve the issue, its status, current ownership/assignment, and which individual tested and approved the issue/resolution for promotion.

4.1.5.8 The selected Vendor is responsible for developing the training documents for the delivery of "train the trainer" training. It is also the Vendor's responsibility, before deployment of the solution, to ensure staff members are competent in the navigation and use of the modernized business registry, and to provide high level assistance to all level of users.

4.1.5.9 During the planning phase, Vendor will be responsible for the project management related tasks/information below:

4.1.5.9.1 the development of a detailed work breakdown structure to include:

4.1.5.9.1.1 a schedule including tasks, activities, activity duration, sequencing and dependencies

4.1.5.9.1.2 the completion date of each task

4.1.5.9.1.3 milestones, including entrance and exit criteria for specific milestones

4.1.5.9.2 the development of the Human Resources Plan to include:

4.1.5.9.2.1 staff assigned, their role, their location, and schedule

4.1.5.9.2.2 the project resources required

4.1.5.9.2.3 resource allocation percentage by role

4.1.5.9.2.4 Vendor's resources and Agency's resource requirements

4.1.5.9.3 Vendor must execute the project using a proven Software Development Cycle Methodology (SDLC), which has successfully been used in the past to deliver a configured COTS Business/Licensing Registry.

5. CONTRACT AWARD:

5.1. Contract Award: The Contract is intended to provide the Agency with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor the WVSOS determines will provide the best value based on the selection criteria.

5.2. Pricing Page: Vendor should complete the Pricing Page by itemizing the cost of the items as detailed in the specifications. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified. Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

PLEASE NOTE: The pricing page will be issued under separate addendum.

5.3 Vendor should provide with their bid a copy of any and all Software Terms and Conditions or licenses that the State of West Virginia or the Agency will have to agree to or accept as a part of this solicitation. This information will be required before Purchase Order is issued.

5.4 Vendor should include a copy of any Maintenance Terms and Conditions or Licenses that the State of West Virginia or the Agency will be required to agree to and accept as a part of this solicitation. This information will be required before Purchase Order is issued

6. PERFORMANCE: Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.

7. PAYMENT: Agency shall pay, as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

8. **TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the flat fee or hourly rate listed on Vendor's bid, but such costs will not be paid by the Agency separately.

9. **FACILITIES ACCESS:** Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. In the event that access cards and/or keys are required:

   a. Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

   b. Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

   c. Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

   d. Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

   e. Vendor shall inform all staff of Agency's security protocol and procedures.

10. VENDOR DEFAULT:

a. The following shall be considered a vendor default under this Contract.

i. Failure to perform Contract Services in accordance with the requirements contained herein.

ii. Failure to comply with other specifications and requirements contained herein.

iii. Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

iv. Failure to remedy deficient performance upon request.

b. The following remedies shall be available to Agency upon default.

i. Immediate cancellation of the Contract.

ii. Immediate cancellation of one or more release orders issued under this Contract.

iii. Any other remedies available in law or equity.

11. MISCELLANEOUS:

a. **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Kelly Kopyt, VP US Operations
Telephone Number: 919.745.2141
Fax Number: 919.854.4115
Email Address: kelly.kopyt@fostermoore.com

Attachment A

Process Requirements

Create licensing or registry:

- Provide external users with online filing options for various types of licensing/registry area and structure (e.g. Charities, Apostilles, Scrap Metal Dealers)
- Ability for internal staff to manually create license/registration in the system by uploading a filing image of a paper document, which was scanned outside of the system.
- Ability for internal staff to reject submitted applications/documents
- Provide external users with the ability to file/process authentications, licenses, registration and other services
- Provide external users the ability to file modifications online

Modify licensing or registry:

- Ability for external user to manage/change information
- Ability for external user to submit a request to renew, reinstate or withdraw an application
- Ability to request a certificate of status or additional copies of a certificate of status
- Ability to request and obtain a certified copy of a filed document
- Ability to upload attachments with online filings

Fiscal processing:

- Ability to accept credit card payments
- Ability to associate a payment to an entity for online and manual filings
- Provide audit tracking for all financial processing associated to an entity
- Ability to search, review and modify payment information associated to an entity
- Ability to process refunds and reconcile payments received

Scanning/imaging paper documents:

- Ability to upload documents which were scanned outside of the system, and associate them to an entity

Correspondence:

- Ability to generate and access specific correspondence templates
- Ability to generate correspondence utilizing approved templates
- Ability to generate and send a single correspondence and generate and send mass correspondence to specific users (both internal and external)
- Ability to log and retrieve all correspondence sent to users regarding their business entity
- Ability to provide filing acknowledgements by email regardless of submission method

Reporting:

- Ability to design and run ad hoc, batch, monthly and annual reports for all historical and current data held in the system
- Ability to log and retrieve all reports generated in the system
- Create and run specific reports for pertinent staff and functional areas (e.g. fiscal reports, administrative reports etc.)
- Provide a user dashboard to enable staff to access reports based on user access and permissions

Task management:

- Provide a dashboard for Administrators to organize and assign work assignments for staff
- Ability to create a workflow queue with work assignments based on current functional areas
- Ability to assign work assignments to specific staff
- Ability for staff to manage, sort and route tasks
- Ability for staff and administrators to modify work assignments during any phase of the workflow lifecycle

User accounts and permissions:

- Ability to create, update and manage user roles and permissions for both internal and external users
- Ability to control access to sections of the system according to defined permissions and roles
- Ability to differentiate between internal and external users
- Ability to display access to specific pages and information about business entities and structures to public without a user login

System processing:

- Ability to integrate and migrate data from existing systems
- Ability to import data from other data sources (e.g. FTP; code tables etc.)
- Ability to download data files from the system
- Ability to update system pages and functionality when federal or legislative changes are received (e.g. biennial report filing)

Attachment B

Functional Requirements

Inquiry/searches:

- The system is to have the ability to search Marriage Celebrant name, address and other details
- The system is to have the ability to search for Notaries Public by Name, Notary ID, and Commission Number
- The system is to have the ability to search for Athletic Agents by full business name, full business name, concatenated name, date of initial filing, Last Name of Officer, Last Name of Registered Agent, Zip code, Address, Document Number, Entity Type, effective date, and other details
- The system is to have the ability to search Private Investigator and/or Security Guard licensee by responsible agent, firm name, City or County of service, and other details
- The system is to have the ability to search trademark, service, collective or certification marks by name, registry, ID number and other statutorily required information
- The system is to have the ability to search for Scrap Metal Dealers by Name, Number, City or County of service
- The system is to have the ability to search Charitable Organization by name, concatenated name, Doing Business As (DBA) name, Last Name of Registered Agent, Registration, zip code, address, effective date, and other details
- The system will disallow the filing of two entities with the same name matched on any of the matching criteria in accordance with statutory laws/rules
- The system will provide ability to conduct name searches that are not case specific
- The system must provide ability to inquire by business name, Officers, Registered Agents, Document Number, and other details
- The system shall provide ability to perform special searches, such as, "Check Name Distinguishability" which allow consumer and Agency users to search for and test the uniqueness of a entity name against Agency records, and searches by names of individuals, for example, registered agent officer and director.
- The system must provide ability to restrict certain filings from public display as required by law
- Provide to be able to search by Notary ID, Commission Number or Name and display entire the record.
- The system will allow for the parsing and concatenating of names to include the removal of spaces, definite and indefinite articles, and special characters and searching on both the entered name and parsed/concatenated name.
- The search option within the system will allow for "is", "begins with", and "contains" searches

Licensing and registry:

- The system will provide the ability for users to submit new applications, subsequent filing requests, and updates using online forms, mail or counter intake.
- System workflow processing will be configured in the system to accommodate West Virginia-specific forms, fields, and rules to comply with West Virginia statutes.
- The system shall provide the ability for public users to review their screens before submission
- The system must provide external users with online filing options for various types of service areas (e.g. Notaries, Scrap Metal Dealers, Charities etc.)
- The system must provide ability for internal staff to manually receipt paper filings in the system, by uploading a scanned image
- The system must provide ability for internal staff to reject submitted filings
- The system must provide ability to display application status to external users via user login credentials
- The system shall provide ability to identify registration filings that should or must be marked for review by internal staff
- The system must provide external users with the ability to file modifications online, including initial application or renewals
- The system shall provide ability to verify that the entity type is correct for the entity filing requested.
- The system must provide a method to determine and identify duplicate filings and not allow the filing of a duplicate name
- The system must provide a way to verify data entered on a form to make sure it is accurate for the type selected
- The system must provide ability to require specific information for a registered agent is entered during the time of filing
- The system must track when a filing has been rejected
- The system must provide ability to file a renewal for all licenses and registrations online
- The system must provide ability to manage/change existing information (e.g. address updates etc.)
- The system must provide ability for external users to submit an online request to amend or reinstate a license/registration
- The system must provide ability to request and retrieve a certificate of status or additional copies of a certificate of status online
- The system must provide ability to request and obtain a certified copy of a filed document online
- The system must provide ability to upload attachments when submitting an online filing.
- The system must provide ability to modify a registered agent and/or registered office on multiple licenses/registrations simultaneously.
- The system must provide ability to update or alter any event or filings under a fictitious name without modifying the history
- If processing a business or firm license/registry, the system must provide ability to determine if the business is active or non-active in the state of West Virginia while processing
- The system must provide ability to generate an acknowledgement correspondence to send the user information about their application and any certified copy requests

Financial:

- The system will allow for the acceptance of payments by major credit cards and interface with current third party vendor
- The system will allow for online payments by credit card accounts
- The system will provide ability to create a fiscal record for every payment received and create an audit trail
- The system will provide ability to associate one payment to multiple documents received
- The system will provide ability to associate multiple payments to one or more documents received
- The system will provide ability to integrate with a third party software vendor for credit card processing
- The system will provide ability to associate a payment to a business entity and structure for online and paper filings
- The system will provide audit tracking for any and all financial processing associated to a business entity or structure
- The system will provide ability to search, review and modify payment information associated to a business entity or structure
- The system will provide ability to determine and modify the next business day for processing in the system
- The system will provide ability to assign a receipt date and validation date separately
- The system will provide ability to create and modify a fee schedule based on specific categories
- The system will provide ability to process refunds and reconcile payments received
- The system will provide the ability to create daily deposit and cash summary reports
- The system will provide ability to create and generate ad-hoc fiscal reports in the system
- The system will provide ability to create and add new fiscal categories & object codes to the system
- The system will provide ability to link to, validate, and reconcile on both current date (date funds received) and date of filing
- The system must maintain financial transaction data (e.g., document fee, tracking number, document type, payment amount, applicable record, and payer name for tracking and audit purposes
- The system will provide ability to search for payments by data captured (e.g., login ID, transaction date, payment number)
- The system must provide the capacity for printing all search returns

Imaging:

- The system will allow for the ability to upload scanned documents and associate them to a business entity or structure
- The system must store Images as compressed .tif or .pdf files
- The system must store all documents as a single file linked to the entity and filing
- The system must provide ability to store all documents in perpetuity for active and inactive entities
- The system will provide ability to upload scanned documents and associate them to a business entity, structure
- The system will provide ability to view or remove a scanned/imaged document
- The system will provide ability to create and recreate any and all certified documents
- The system will provide the ability allow external users to upload documents per service area

- The system must provide the ability for optical scanning capabilities to identify and automatically read barcodes printed on incoming documents for indexing purposes for both batch and individual scanning
- The system must adhere to the Agency requirements in compliance with West Virginia State Law and the Americans with Disabilities Act (ADA)
- The system shall be designed for American English speakers
- The system will support deletion of scanned images

Correspondence:

- The system will allow for the generation and access specific correspondence templates
- The system will allow for the generation of correspondence, by authorized Division users utilizing approved templates
- The system will allow for the communication with business owners and/or contacts via email
- The system will allow for the generation and sending of a single correspondence and generate and send mass correspondence to specific users (both internal and external)
- The system will allow for the logging and retrieval of all correspondence sent to users regarding their business entity
- The system will allow for the filing of acknowledgements by email regardless of submission method
- The system will provide the ability for certified certificates of status to be available for download as PDF files and include a watermark and the information for the Secretary of State at the time of initial certification.
- The system must store all correspondence generated and provide the ability for future retrieval
- The system must auto generate confirmation or tracking numbers and status information for online submissions via email to all users associated to an entity
- The system must generate renewal and expiration notices and change record status
- The system must provide functionality for internal staff to manage periodic forms and notices for mailings
- The system must provide ability to integrate signature fonts or signature images to be reflected on certificates and correspondence
- The system is to provide an option to reprint previously generated certificates, rejection letters and receipts.

Reporting:

- The system will log and retrieve all reports generated by the system
- The system will create and run specific reports for pertinent staff and functional areas (e.g. fiscal reports, administrative reports etc.)
- The system will provide a user dashboard to enable staff to access reports based on user access and permissions
- The system will provide the ability for authorized Division users to write and run ad hoc reports
- The system will provide scripts for ad hoc reports that will be maintained within the system for future use

Administration:

- The system will provide a workflow queue with work assignments based on current functional areas
- The system will provide ability to assign work assignments to specific staff
- The system will provide the ability for staff to manage, sort and route tasks
- The system will provide the ability for staff and administrators to modify work assignments during any phase of the workflow lifecycle
- The system must maintain audit log for all changes to records containing information on edit date, last edit user and previously stored content
- The system must ensure that all system transactions are logged in the database and auditable
- The system will ensure that user access levels shall be tiered for internal user access levels, with varying view and edit permissions based on role
- The system software will not contain any features permitting access to the system in violation of its security features or the change management process
- The system software will not contain any features rendering the system inoperable, or degrade its performance
- The system software provided will be certified by the vendor as virus and malware free
- The system must have the capability to monitor transactions through the system for the purposes of auditing, error diagnosis, and performance management
- The system must support encryption of data, including the ability to transmit and receive encrypted files and messages

Authentication and Authorization:

- The system will have the ability to create, update and manage user roles and permissions for both internal and external users
- The system will have the ability to control access to sections of the system according to defined permissions and roles
- The system will have the ability to differentiate between internal and external users
- The system will have the ability to display access to specific pages and information about business entities and structures to public without a user login
- The system will provide one-to-one credentials only. There is not to be any shared access.
- The system must provide access in the areas of fiscal, imaging, correspondence and service areas in addition to areas already defined
- The system will ensure that different levels of permission will be defined by the project team and implemented according to approved design requirements

Migration:

- The system must have the ability to integrate and migrate data from existing systems
- The system must have the ability to import data from other data sources (e.g. FTP; code tables etc.)
- The vendor will provide mapping of the .tif and .pdf images in the Legacy system
- The vendor will provide a migration plan which successfully moves all the data to a single database and database type

- The vendor must provide a migration plan that will include multiple migrations to include historical data, data through development, and "Go Live" data
- The vendor will ensure that the migration of "Go Live" data will have a limited impact on the duration existing public facing interface is offline
- The system must provide the ability for images to be indexed in the database with all images of documents stored on a file server
- The system must ensure that migration will keep a 1:1 relationship between filings and an entity
- The system must ensure that migration will keep a 1:1 relationship between a filing and associated images
- The vendor must develop a 5 year growth plan for the database based on a 10% annual increase of filings
- The system must maintain the historical records and associations to the appropriate filings during the migration process
- The vendor must ensure the data be analyzed for integrity, gaps identified where necessary, and recommend where differences will need to be reconciled
- The vendor must ensure that the data be transformed from current to future state and routines created for converting
- The vendor must plan for the addition and modification of data throughout the migration process

General:

- The selected COTS solution must have modules successfully deployed for the Secretary of State for at least two (2) of the 50 United States or its territories
- The selected COTS solution must be secure, sustainable, efficient, high performing, and economical
- The selected COTS solution must include differential authentication and authorization levels
- The system must maintain an audit log of all filings, edits to filings, and other transactions to include date and time, by whom, and the original and modified transaction
- The selected vendor must submit scheduled status reports for each activity group and a summary report of the project
- The vendor must develop and execute a detailed testing plan at the unit, integration, system (Beta), and User acceptance
- The selected vendor must engage Business Analysts to document all aspects of the project
- The selected vendor will maintain a repository of the documents for all project team members
- The selected vendor will ensure that all subcontractors must be properly vetted and approved by the Department

Security:

- The system must provide ability to create external user accounts and user credentials for authentication and authorization
- The system must provide ability to send an authentication email when an external user creates a user account
- The system must provide the ability for external users to create, manage and change their usernames and passwords without Agency intervention
- The system's website must utilize a Secure Socket Layer (SSL) with at least 128 bit encryption

- The solution must meet the Laws, Rules, Regulations, and Codes of the State of West Virginia and its agencies

Calendaring:

- The system will allow filings to occur at any time of the year
- The system must recognize weekends and not include them in the business day count
- The system must recognize state holidays and not include them in the business day count
- The system must allow for ad hoc closing of the business office (e.g., hurricanes) and not count the closed days in the count of business days
- The system must allow for later effective dates on business entity filings and restrict the effective dates for associated entities to that later date or after
- The system must allow for later effective dates for amendments and make change on selected date

Training:

- The vendor must develop and provide training using a "train the trainer" method
- The vendor must provide training onsite at the WV Secretary of State's Office
- The vendor must ensure that at the deployment of the solution, staff members are competent in the navigation and use of the modernized business registry and can provide high level assistance to all level of users
- The vendor will provide a "sandbox" for the exploration, demonstration, and training of the system

Testing:

- The vendor must develop and execute a detailed testing plan at the unit, integration, system (Beta), and User acceptance
- The vendor is responsible for designing, implementing, and validating a test plan for each function of the application and the overall unit in which the function is deployed
- The vendor must ensure that testing is to include unit and integration testing and integration testing is to take place every time there is a modification to the code and/or functionality
- The system must ensure that all promotions are to be Beta and successfully complete User Acceptance Testing (UAT) before a deployment
- The vendor is to provide an issue tracking system (ITS) for the reporting and tracking of "bugs"
- The vendor must ensure that the ITS is to record such things as a name for the issue, a tracking ID, a description of the issue, the reporter, the date reported, the priority, and the severity of the issue, as well as who is assigned to fix the issue, the status of the issue, and by whom the issue was tested and approved for promotion
- The vendor must ensure that safeguards are to be in place for promoting data both on a schedule and as needed in an emergency only after being unit, integration, Beta, and User Accepted
- The vendor must ensure that safeguards are to be in place to back out promoted code and return the system to a defined point and time through a source control program.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Foster Moore US, LLC

Authorized Signature: [signature] Kelly Lynn Caputo Date: 7/12/2018

State of NC

County of Wake, to-wit:

Taken, subscribed, and sworn to before me this 12th day of July, 2018.

My Commission expires March 21st, 2022.

AFFIX SEAL HERE

KAYLA BOSS
Notary Public
WAKE COUNTY, NORTH CAROLINA

NOTARY PUBLIC [signature]