VERTICALS

One-Stop-Shop Permitting Portal

State of West Virginia

West Virginia Office of Technology

November 20, 2025

Transmittal Letter

November 20, 2025

Tara Lyle
Buyer Supervisor
Department of Administration, Purchasing Division
2019 Washington Street, East Charleston, WV 25305

SOLICITATION NO.: **CRFP SEC2600000001**

Dear Ms. Lyle,

On behalf of i3 Verticals, LLC, we are pleased to provide a complete, concise response to the West Virginia Department of Administration, Office of the Cabinet Secretary (WVDOA) One-Stop-Shop Permitting Portal RFP.

The following are i3 Verticals acknowledgement statements:

- i3 Verticals acknowledges that it will comply with information outlined in this RFP and acknowledges and will comply with the terms and conditions set forth in this RFP.
- This offer is valid for one hundred and eighty (180) calendar days from the deadline for submission of Offers or until awarded.

i3 Verticals is ideally poised to "hit the ground running" as One-Stop-Shop Permitting

Portal's new partner, having successfully implemented and currently hosting licensing systems in several other statewide implementations. Our highly flexible solution has been proven to improve employee efficiency, data reporting, and sharing information along with one-stop capabilities to best serve stakeholders. We believe i3 Verticals highly configurable solution meets the WVDOA's One-Stop-Shop Permitting Portal needs through each phase of the Project. The i3 Verticals rules-driven platform coupled with our team members' collective expertise and direct experience configuring, deploying, and supporting licensing and regulation systems will greatly benefit WVDOA by addressing current challenges and modernizations while exceeding the project goals.

Please review our proposal in its entirety for additional insights and information about our company, technical solutions, experience - highlighting how our cost-effective software solution, approach, and experience will provide:

- An intuitive platform configured with the functions and capabilities needed to meet the new License Information System requirements.
- A flexible foundation that empowers the Agency to overcome future regulatory, business process and technological changes in the years to come.
- Personalized, responsive technical support and secure hosting services per our Software Licensing Agreement and Support Guide.

- A competent, trusting, and predicable partnership supporting the State's efforts to best serve and protect the departments and citizens of West Virginia.

We are eager to partner and support your agency. i3 Verticals is completely committed to ensuring the success of this program.

i3 Verticals delivers technology services and accelerates growth for public sector clients by solving complex business challenges with breakthrough technical innovations. Our firm is uniquely qualified to meet the project requirements having similarly implemented i3 Verticals Licensing and Regulatory Platform solution in a wide variety of State and Local License disciplines and relevant professional fields to many state licensing boards, commissions and government regulatory agencies including Licensing Boards & Agencies in Nevada, California, Oregon, Wyoming, Nebraska, Louisiana, Alaska, Kentucky, North Carolina, Delaware, Maryland, Alabama, North Carolina, New Mexico, South Dakota, & Arizona.

i3 Verticals Licensing and Regulatory Platform supports the entire lifecycle of licensing, application, and investigation processes. Relevant and demonstratable experience includes providing intuitive, user-friendly portals for applicants and licensees, to state Boards, staff, Business Partner Portal, or any other State License/registration programs as well as public views, while securely interfacing our highly flexible, role-based, and business rules- driven platform with other third-party systems for billing/payment, exchanging information and data.

Our collective experience implementing and supporting Saas (Software as a Service) licensure, application, and investigation case management systems, along with unique insights and functional understanding of the i3 Verticals Licensing and Regulatory Platform, increases your overall success and helps define realistic, achievable timelines for the project as we look forward to becoming WVDOA's long-term partner. i3 Verticals is committed to the success of this project and welcome the opportunity to discuss this proposal and its contents, demonstrate our solution, negotiate, and partner with the West Virginia Department of Administration, Office of the Cabinet Secretary.

The remainder of our proposal outlines our standard approach and plan to implement systems, providing detailed information on our approach, qualifications, and licensure solutions. We welcome the opportunity to discuss this proposal, demonstrate our solution, and partner with the West Virginia Department of Administration, Office of the Cabinet Secretary Team working towards achieving your strategic objectives once the proposal process has concluded.

As the individual authorized to obligate our organization contractually, I thank you for your time and consideration!

Sincerely,

Table of Contents

Required Forms
Purchasing Form
Designated Contact + Certification & Signature Page
Subcontractor List Form
Signature Page

4.2. Project Goals and Mandatory Requirements:

The intent of this program is to revolutionize and streamline West Virginia's permitting system by creating an online dashboard for processing and tracking permits for construction, economic development, infrastructure, and natural resource projects. The goal of this solicitation is to acquire a contract for the development, creation, and implementation of a permitting portal system, that will facilitate the intent of the program through effective workflows and user-friendly access to permitting information, applications, and tracking.

Comprehensive information, screenshots and examples of how our platform has been leveraged to meet and exceed projects similar in scope are provided within the following sub-sections:

- Applicant
- Licensee
- Back Office Application Processing
- Process and Document Enforcement Activity
- Software Solution Reporting
- Cashiering
- System Maintenance

Applicant

The new i3 Verticals Licensing Solution will be implemented for WVDOA and provides a highly secure and intuitive online portal for individuals and businesses to submit applications, renew existing licenses and permits, make payments, etc. Constituents can be enabled to update their contact information, manage their data, upload documents and files, receive correspondence, access / download / print receipts, certificates, report and submit label and tax information as well as perform other activities WVDOA desires to provide online in real-time. These regulatory functions can be performed from both an online portal (supporting all major web browsers and mobile devices) as well as from within the 'Back Office' (where staff with approved access can enter information in the unfortunate event a paper application was submitted).

i3 Verticals works with our clients to design the dashboard layout and workflows for Licensees and Applicants, empowering users to do as much of the work on their own in a paperless environment without having to call WVDOA for assistance. The illustration on this page is a sample of how the system has been designed to assist users with the initial Registration and Login process. We have developed the system to help 'guide' the Applicant

/ Licensee through the initial registration and login process and to the correct application forms based on their selections. Our clients receive fewer calls asking questions related to these topics and have saved significant time for all involved.

Functionalities

i3 Verticals incorporates secure, online portals including but not limited to the ability for first-time users to register for access to the system by creating a unique User ID and Password that is generated by the system. After completing the routine to create their unique password, applicants will then have access to their online profile within the system.

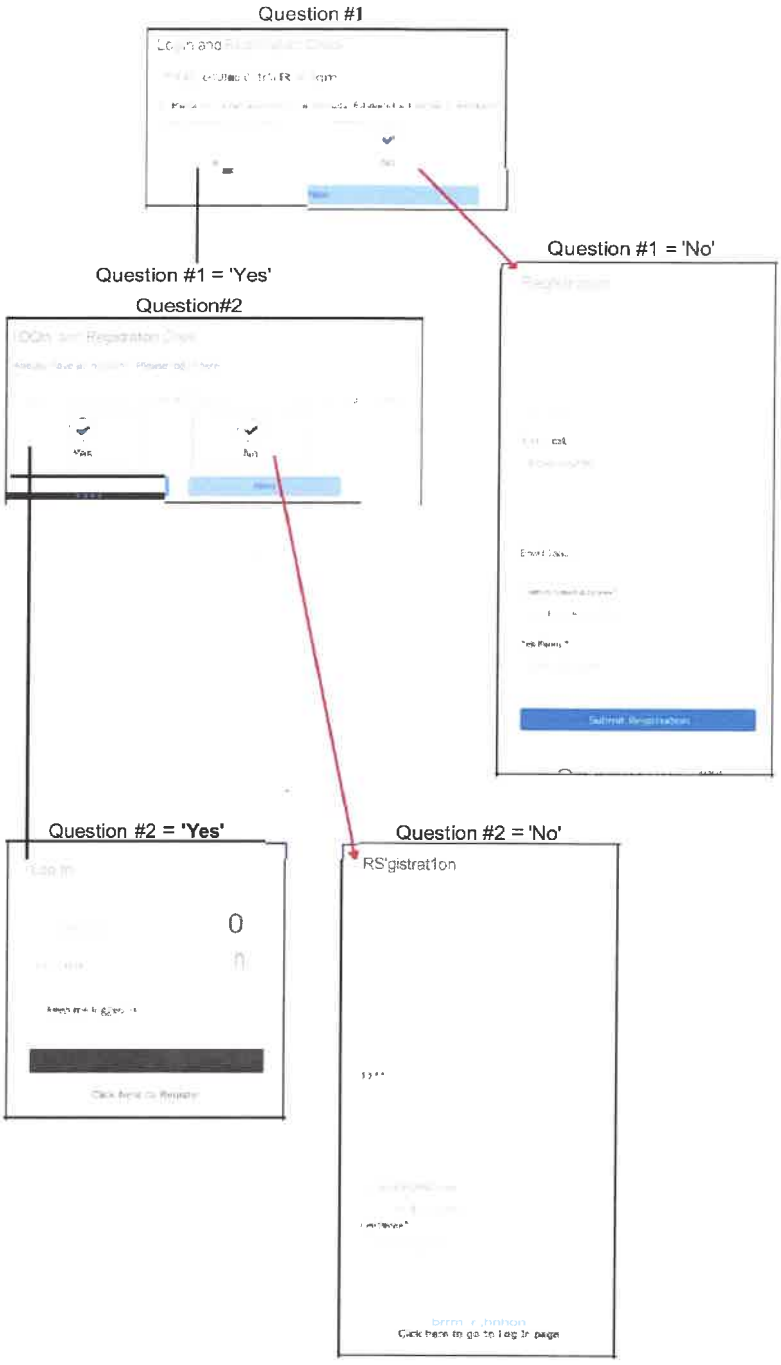


Figure 3: Registration Process

Online Portal features can also include as the WVDOA desires:

- External users (Applicants and Licensees) are limited to ONE login session and thus cannot be logged into the system more than once at any given time.
- Limits any user to a total of failed login attempts as per the configuration before the account is automatically 'locked'
- Adding, Removing and/or submitting extension request for an application license, name change. The figure to the right demonstrates how the system can allow an applicant to resume a previously stopped and saved application, as well as withdraw or delete the application.

Figure 4: Applicant Detail Action

- Verification of education, employment status, and information, etc.
- A notification if the system is down or unavailable

The new Software Solution will allow for the issuance of new and renewal of existing licenses from both an online portal for applicants to complete and submit online. The solution includes configuration and management of business rules, data validations, automated correspondence and workflows to enforce how WVDOA regulates each unique license, permit, certification and credentialing type and process.

An example of an applicant portal is shown in a partial screen in the following figure:

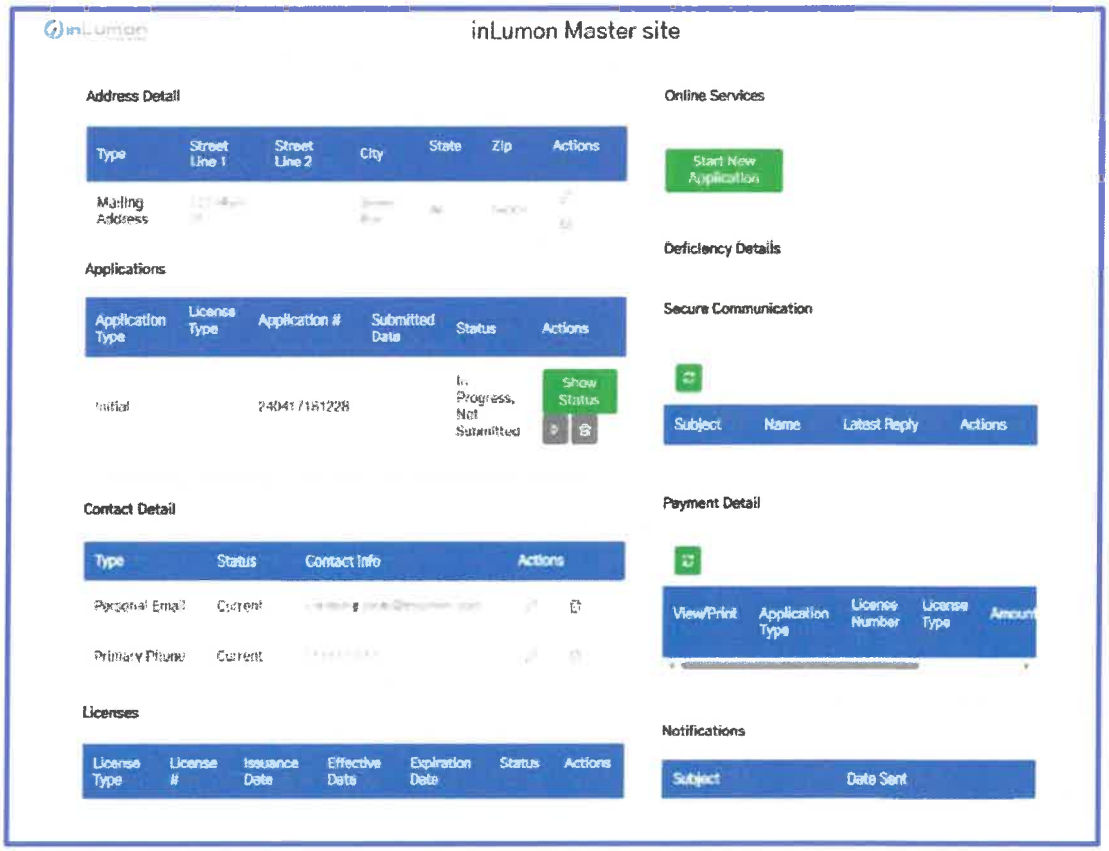


Figure S: Applicant Dashboard

To support, for instance, one of WVDOA's many application types, the system will be configured to prompt the Applicant to select the type(s) they wish to apply for. Business rules will fire to 'guide' the applicant to the unique application and upon selection, automatically create that specific form with associated requirements and sections segmented by tabs visible on the left side of the screen, as shown in the example below.

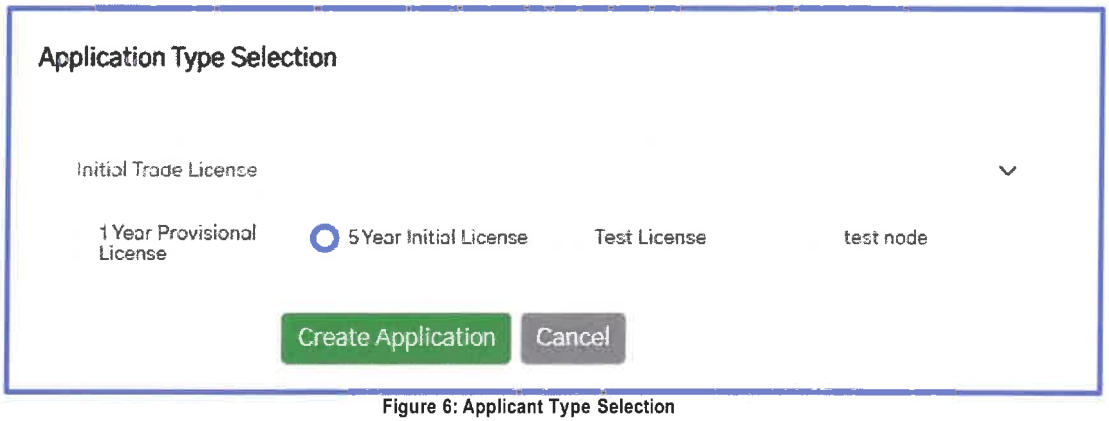


Figure 6: Applicant Type Selection

Each section, field, and data point are configurable based on WVDOA's forms to allow for the validation of data entered, including required information, data formats and items which must be submitted to ensure completeness and standardization of data collected. All application information collected is stored in the system in the applicant's record.

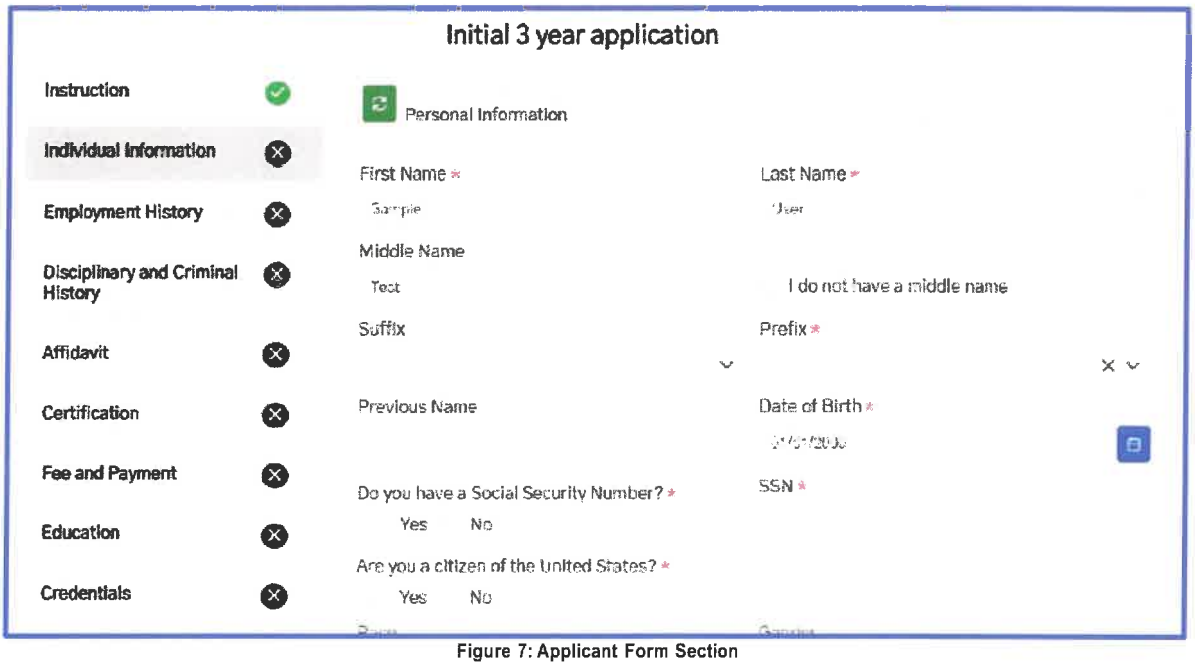


Figure 7: Applicant Form Section

Applicants are not required to complete an application in one session as many items and information (let alone interruptions and time limitations) may not be available at time of entry. Applicants can complete sections as able or, if WVDOA requires, can be forced to complete in a linear fashion. Either way, an Applicant can exit the system and log back into to continue the completing the application where they had left off.

As the Applicant moves through the sections of the application, visual indicators intuitively inform the user which items / sections have been completed to satisfy the required items for application submission. The preceding figures are examples of using visual indicators to create awareness of progress and remaining requirements in an application.

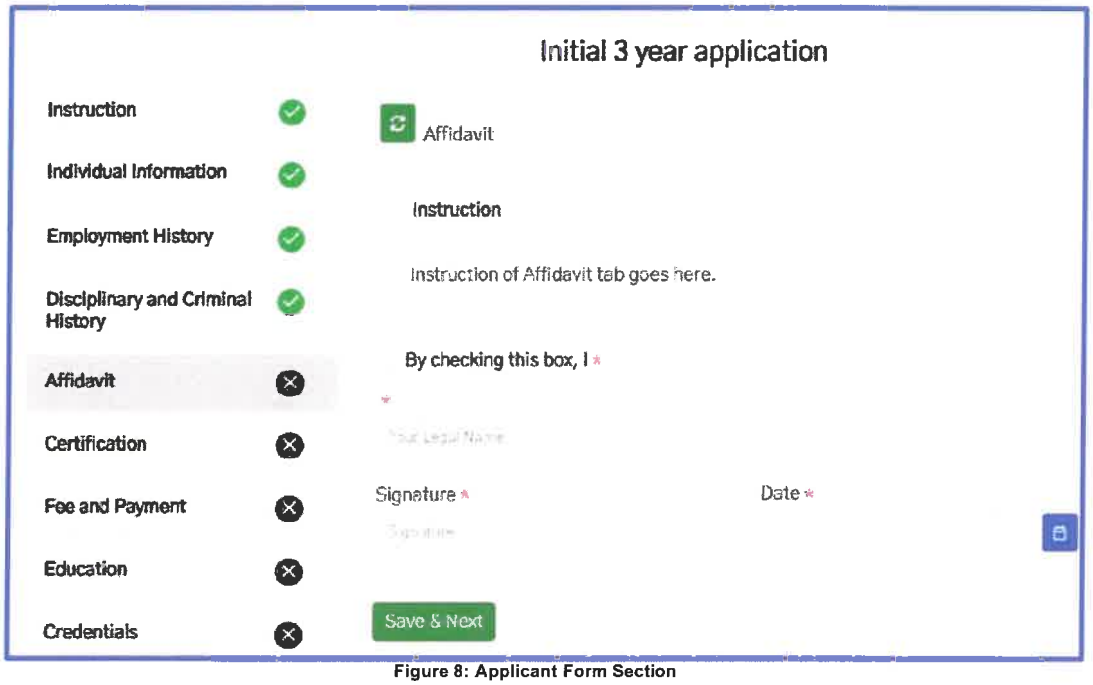


Figure 8: Applicant Form Section

Upon completion and submission of an application, the Applicant (as well as other stakeholders) can be notified of status via automatically generated email, SMS text, and via their online portal. The below figure reflects this process.

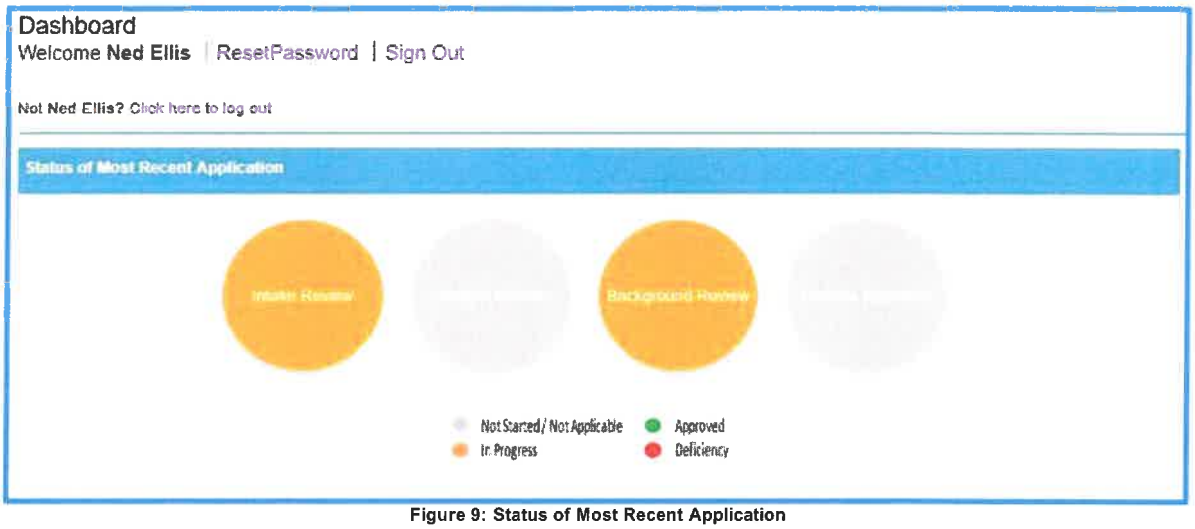


Figure 9: Status of Most Recent Application

Licensee

The licensee dashboard is similar to the Applicant dashboard. The Licensee has access to assess license/ permit application status, update information, submit all necessary documents, manage contact information, initiate their online renewal application, and utilize all online services in order to reduce paperwork, simplify and expedite processes, etc. per WVDOA requirements:

The Licensee (or Applicant) can monitor the real-time progress of the application, which is conveyed using visual indictors wherever possible. Our clients have found that providing this transparency in the application processing, with real-time status of their application, has significantly reduced the number of calls from Licensees/Applicants asking about the status of their application.

Typical dashboards include the ability for a Licensee/Applicant to maintain:

- Contact information-such as mailing address, phone number and/or email address
- Employment information-status and company / business / employer information
- Portal password - and recovery via typical 'Forgotten Password?' routine

The Licensee dashboard also has the capability to display the status of current license with regards to renewal eligibility. The figure to the right is an example of how this can be communicated.

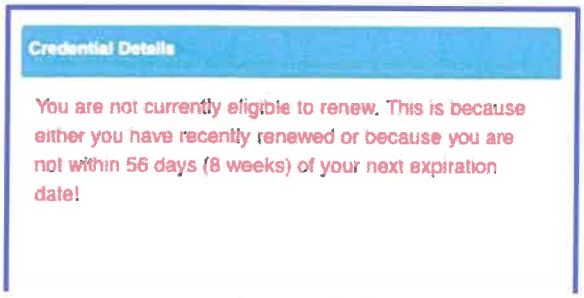


Figure 10: Renewal Eligibility Status

Example of additional Licensee online features can include:

- Requesting a Name Change-allowing for the upload of supporting document(s)
- Adding or deleting information on an authorized representative of the licensee/permittee
- Removing a license, endorsement or provision
- Extending an existing license or permit as allowed by law
- Requesting additional copies of their license
- Providing a 'forgotten password' link that users can use when they forget their password or if they wish to easily change their existing password (as this function will reset the user's account using a temporary password and email that temporary password to the email address noted when the link is clicked)-resetting the temporary password requires entering that password, along with a new password and then verification of that new password (this will be altered as necessary to support the State's security policy).

Licensees can also access their historical information on file with the licensing body. The Licensee can also manage secure messages from their portal (all secure messages are managed within the system and are associated with the Licensee/Applicant and are viewable by authorized state staff). Examples of this are shown in a partial screen, provided in the figure to the right.

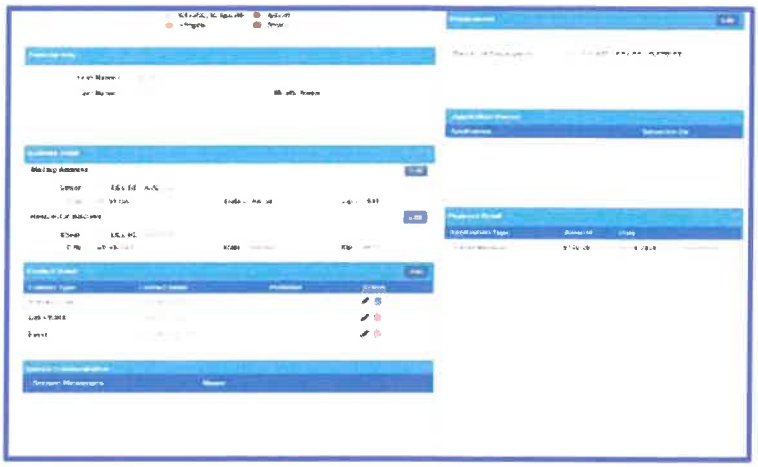


Figure 11: Licensee Historical Information

Electronic document management is an inherent capability of the i3 Verticals Licensing Framework, allowing for single and multiple documents, images and other files to be uploaded and associated with the applicable record(s) for ease of access, review and retention. This figure to the left illustrates how scanned documents and files can be uploaded, associated to an individual record and stored.

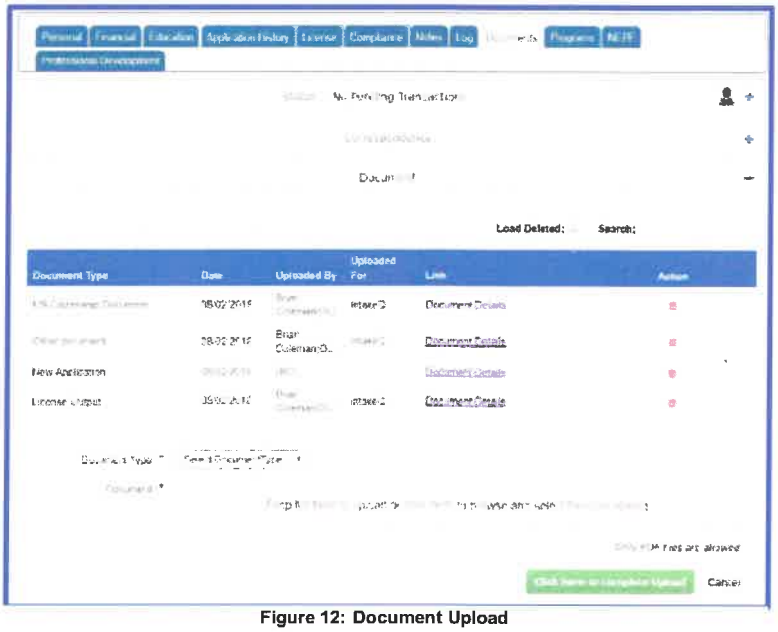


Figure 12: Document Upload

Back Office Overview

The new database system i3 Verticals will deploy will enable WVDOA staff to track and manage all application records and any other entities from the 'Back Office'. For licensing and renewal processes, the system captures all pre-requisites (e.g. mandatory information, payments, and documents to process an application, background and/or fingerprint checks) and manage these through the application life cycle based on WVDOA's specific requirements. For instance, staff with permissions can access and review an individual's entire career from initial application to credential issuance, audit and compliance, and more.

The software solution revolves around the customer providing a common link among applications, credentials, licenses, payments and other functions. A customer can be an individual (applicant, licensee or non-licensed), company, business, establishment, facility, location or other entity. The system allows maintaining customer demographics, contact information, customer profile for online portal access, identity information, account, and other related data and documentation.

The system maintains all current and historical information, such as credentials applied for and issued, insurance, affiliations, taxes, fees and billing information, documents (uploaded by individuals / businesses or WVDOA staff), correspondence along with status, credentials, approved certifications and/or labels they may hold, as shown in the following figure.

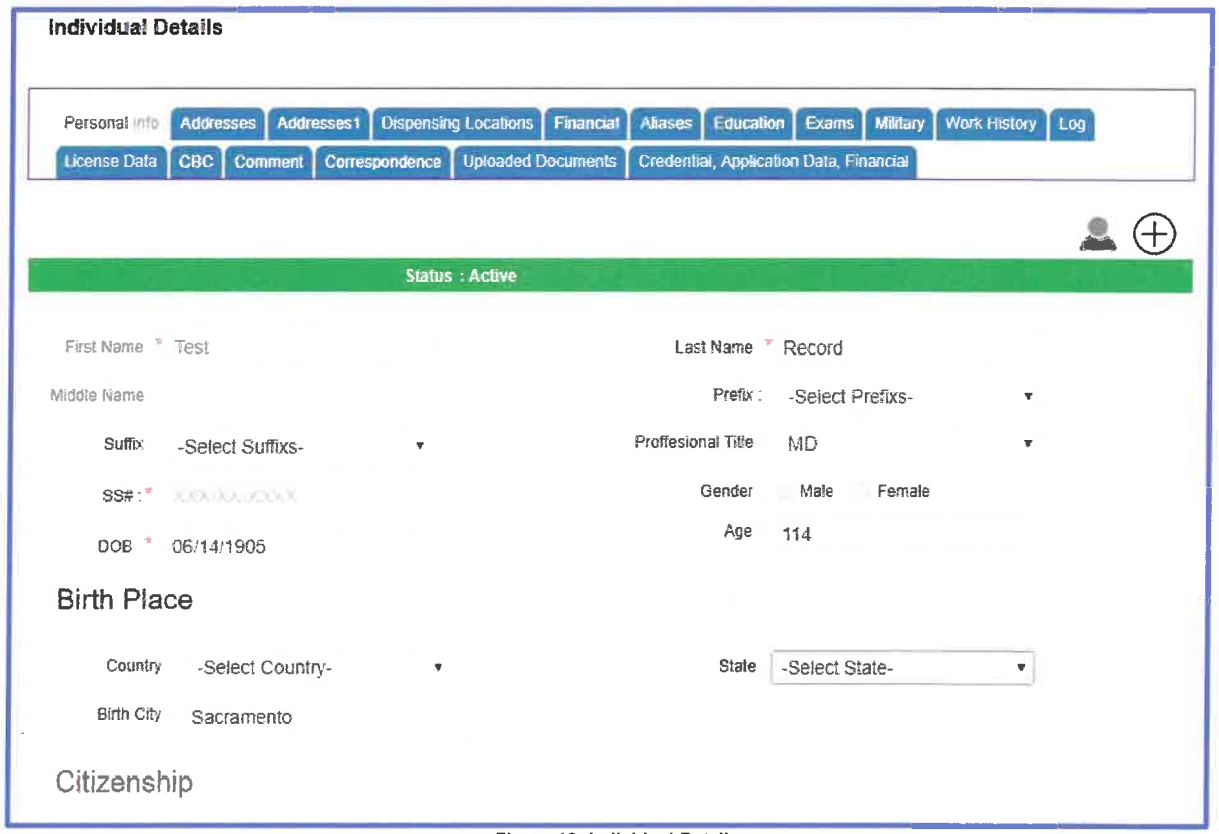


Figure 13: Individual Details

The figure to the right is a partial example (no sensitive information is shown) of an individual's record in which all historical data related to the customer is retained in the system, including address records, contact data and historical information (current or previous) displayed in the 'back-office' portal for DCA staff. This information is client configurable in terms of what is to be displayed and accessed based on users' role.

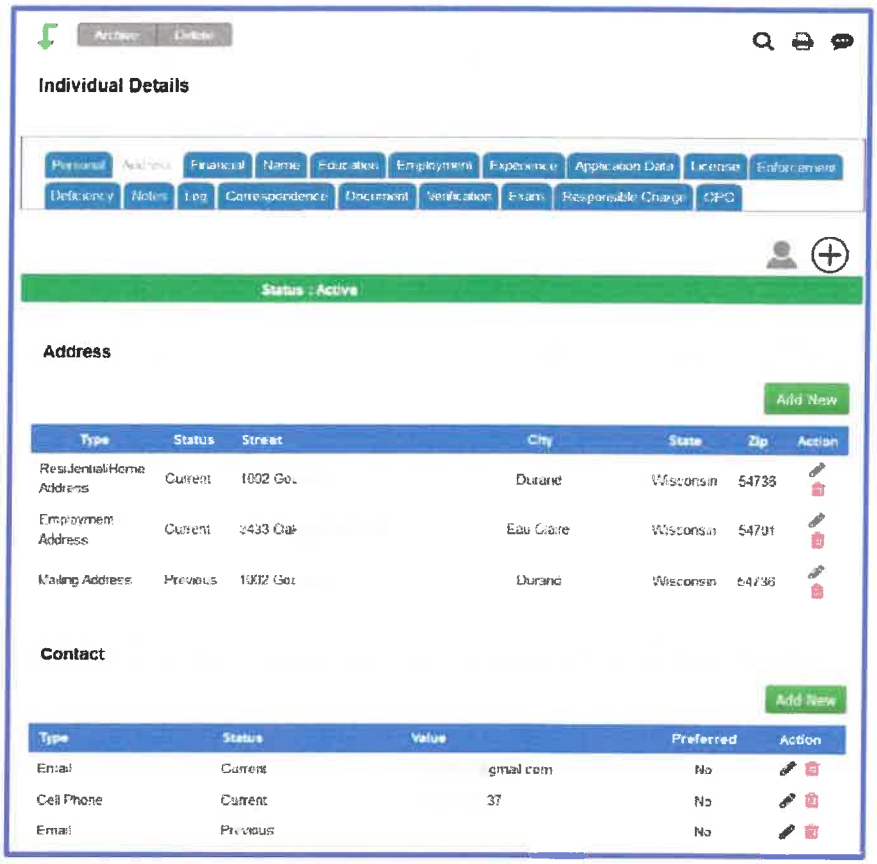


Figure 14: Historical Data

The system can also notify customers and staff of those requirements fulfilled and any application deficiencies via display along with automated notification(s). In addition, within each area of the application, as in the Applicant Information area shown in the figure the error is shown at the top of the section and the specific error is highlighted (see the Email Address field highlighted in light red).

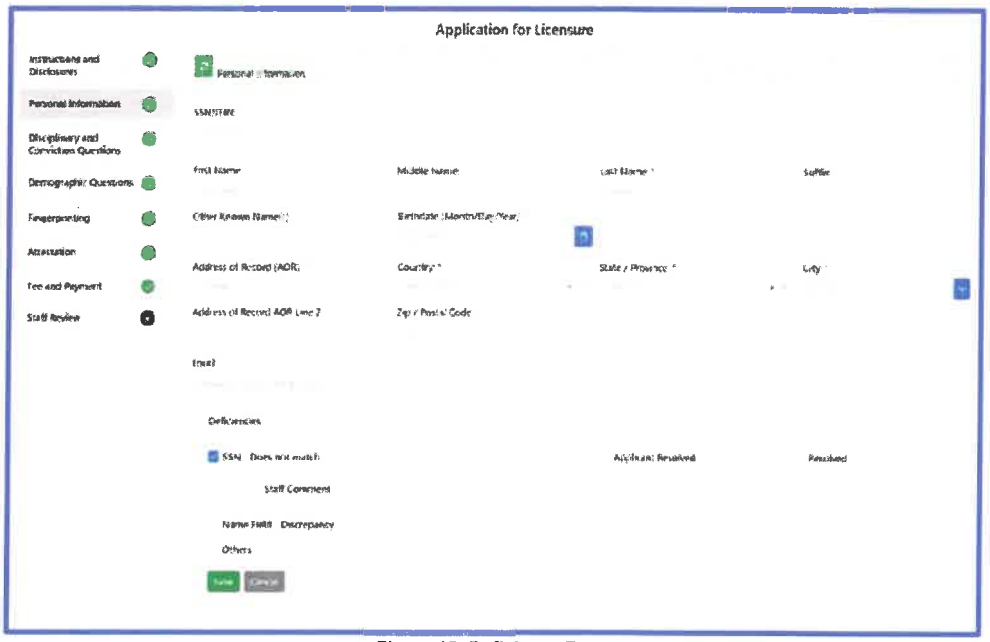


Figure 15: Deficiency Error

As i3 Verticals system is an "all-in-one" database solution, records for businesses and relationships to individuals (i.e. current and past owners, responsible charge, associated licensees, etc.) are established and maintained. Any licensure dependencies based on the WVDOA's rules and regulations can be enforced via configuration of business rules and validations. The figure below is an example of using a business search to find and associate a related individual.

An example record is below, reflecting how all current and past information, including licensure records, application history, compliance, inspections, documents, etc. are managed, tracked and monitored per the agency's needs. This can include owners, licensees and even unlicensed responsible charges associated to an establishment:

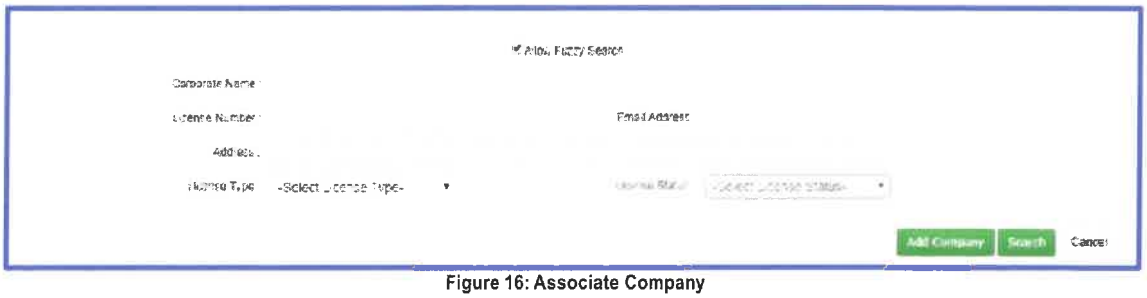


Figure 16: Associate Company

Figure 17: Company Record

Application Submission

Although initial and renewal applications will typically differ, most if not all will require review and approval by WVDOA staff. For the tracking of application requirements and deficiencies, the system will automatically keep track of all requirements and deficiencies for each transaction and license application process (initial, renewal, reinstatement, reactivation, etc.) according to predetermined rules based on WVDOA's processes. The system can also notify customers and staff of those requirements fulfilled and deficiencies via display along with notification(s) to the appropriate individual to act on them.

Regardless of how an application has been submitted (online, postal mail, in person) and received by the Program, the program can associate the application to the applicant's record and review. Application processing workflows can differ based on the origin of the application. Applications entered via the Back Office by WVDOA staff would be initiated within the Application queue, as shown in the below figure and prompted for entry of a Received Date.

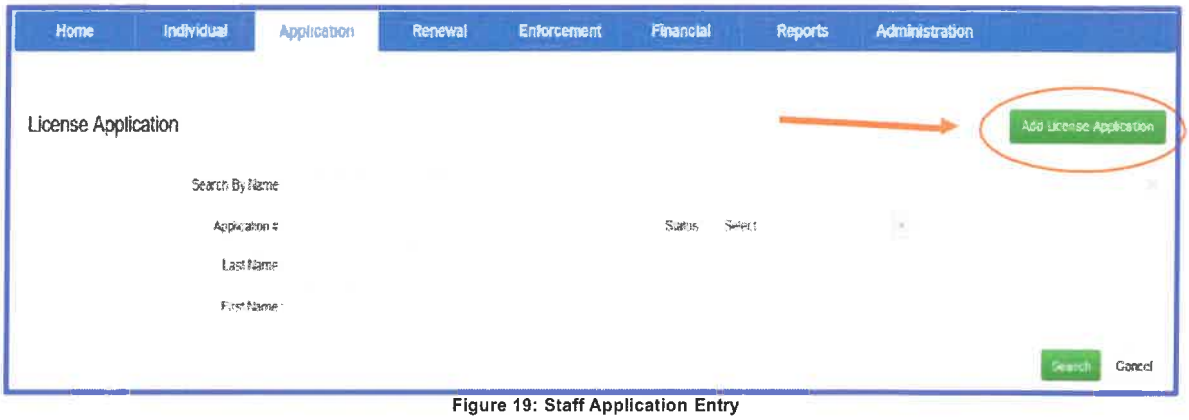


Figure 19: Staff Application Entry

Alternately, those applications started online by the applicant are launched from the Applicant's dashboard and do not prompt for a Received Date. The figure below is an example of this.

Once the appropriate application type has been selected by either the applicant via the online portal or staff member from the applications queue, the system will generate the online form for the application record.

As you can see in the below example, the application record is separated by logical "sectioning", which is referenced by 'tabs' shown on the left-side of the screen. This navigation is used to help Applicants (and Licensees, Permittees, etc.) navigate the New (or Renewal) application process. As a tab is completed and the validation rules are satisfied, the red circle with a white 'X' ( ) is replaced with a green circle with white check mark ( ).

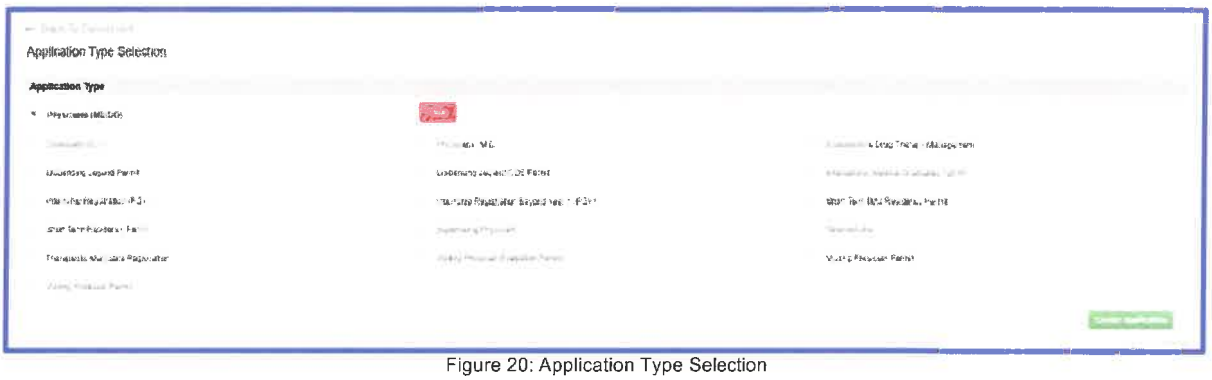


Figure 20: Application Type Selection

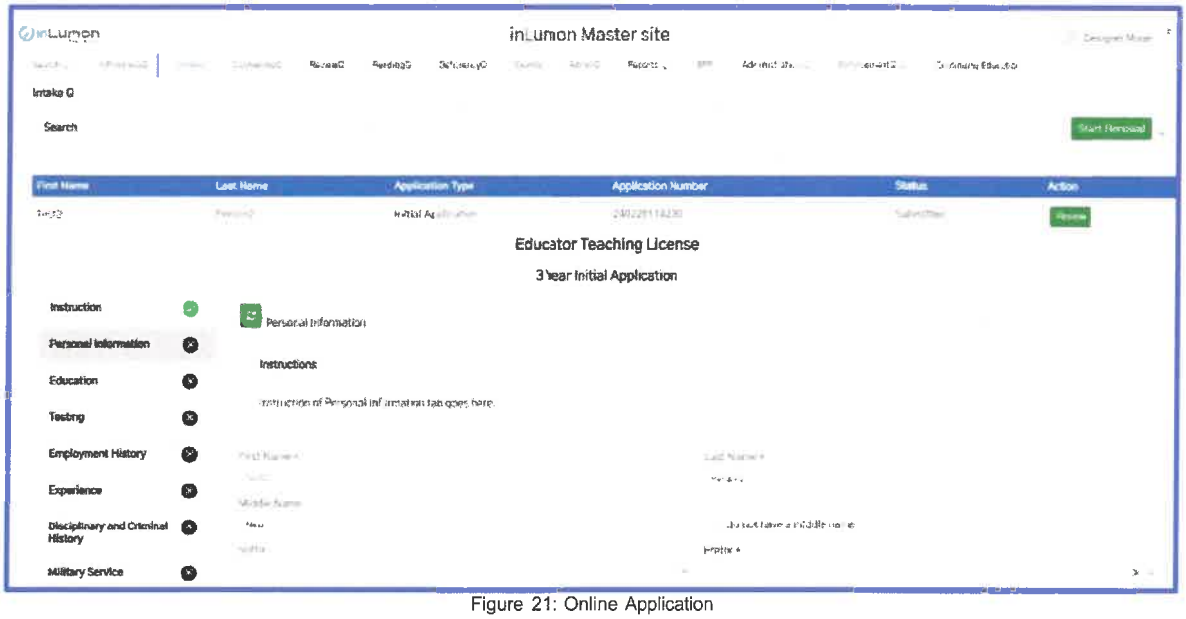


Figure 21: Online Application

As each tab is completed, the system performs a series of validations based on rules defined by WVDOA. If there are errors, the user is notified and required to correct the fields before the next tab is entered. In this manner, data validation is performed before the application is submitted,

thereby placing the burden for data validation on the rules and the Applicant / Licensee that is filling out the application, and thereby correcting errors before an application is allowed to be submitted. i3 Verticals looks forward to working with the WVDOA to help define and configure each of these validation rules used during the application process.

Upon completion and submission of an application, the Applicant (as well as other stakeholders) can be notified of status via automatically generated email, SMS text, and via their online portal. The below figure reflects this process.

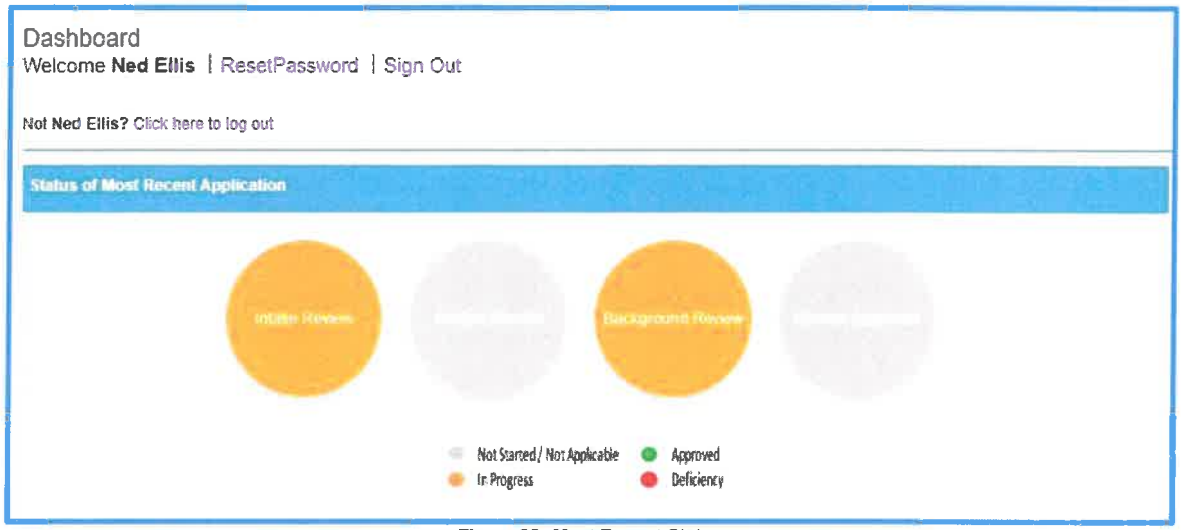


Figure 22: Most Recent Status

Application Review and Workflows

To support WVDOA's workflows (in addition to the system's inherent configurability), i3 Verticals flexible workflow module can be customized to meet customer transaction workflow requirements. Workflow can vary based on application type, regulatory processes, etc. and highlights of the solution's user configurable workflow capabilities including the following:

- Integration of customer roles, groups, and tasks defined using our workflow screens
- Definition of activities and transactions with appropriate approval steps
- Integration with imaging and images associated with workflow routed activities
- Support of manual routing allowing supervisors and authorized users to change and monitor assignments
- Reprioritization support for activities in authorized user work queues
- Provision of features such as suspend/resume/cancel

i3 Verticals looks forward to working with WVDOA to identify the necessary workflows that satisfy all internal requirements and optimize licensure and certification operations.

The application review process is typically achieved by segmenting the applications and renewals within workflow queues based on the specific license or permit application types of business processes.

Figure 23: Application Queue

For instance, WVDOA staff can be enabled to determine which applications require review and approval, as well as those with prior data and application content. The above figure shows several applications with different statuses and action options. Once an application is determined to be 'complete' after initial review, it can then be 'gated' to an '(Analyst) queue' where the appropriate WVDOA staff member reviews the application and determines if the application requirements have been met for licensure for final approval, license issuance and so on.

The example shown above illustrates how applications placed in a queue to be reviewed by analysts are listed. The information can be sorted by any of the columns, in either ascending or descending sequence. The Action column is highly customizable. Icons can be created for any status indicator necessary for processing an application. For example, in the image above, there are indicators that show whether an application fee has been paid (a green $ versus a red $), where there are problems with the application (red STOP icon), and so on.

If the initial and/or renewal application can be approved, staff can press the 'Approve' button, as seen to the right, which will in addition to changing the status to 'Approved' it will:

- Create a license for this Licensee
- Send emails to the Licensee associated with renewal approval

Figure 24: Approve Button

Additional Back Office Features and Processes of Note

i3 Verticals system can support and record the 'final' results for background checks. For example, with our Nevada Department of Education client, the State has provided the ability for organizations that initiate fingerprint/background checks, both private companies and law enforcement, using either Live Scan or paper cards, to have limited access via a 'Business Partner Portal' (BPP) to inform the system when the background check process has started. In this manner, the State knows when an individual has started the background check process.

As shown in the figure below, the system allows for staff to monitor the background check process from the time it has started until the results are received. It displays the status of both

FBI and State background checks, along with the date of each status change. In the case of Nevada, State law does not allow for background check results to be stored electronically, but the system can do this if required.

Figure 25: Background Check Review

The system is also capable of storing any Subsequent Arrest Notices, should the State allow such information to be collected and stored electronically. The product can be configured easily to support specific requirements surrounding background checks. i3 Verticals looks forward to working with the WVDOA to identify necessary changes to the system in order to satisfy all requirements related to receiving fingerprint background "final" results, manually or electronically.

All activity, including contact history, emails, correspondence, etc. will be recorded and stored in the system. The image to the right illustrates how contacts can be recorded by DCA staff and stored associated to an individual or business.

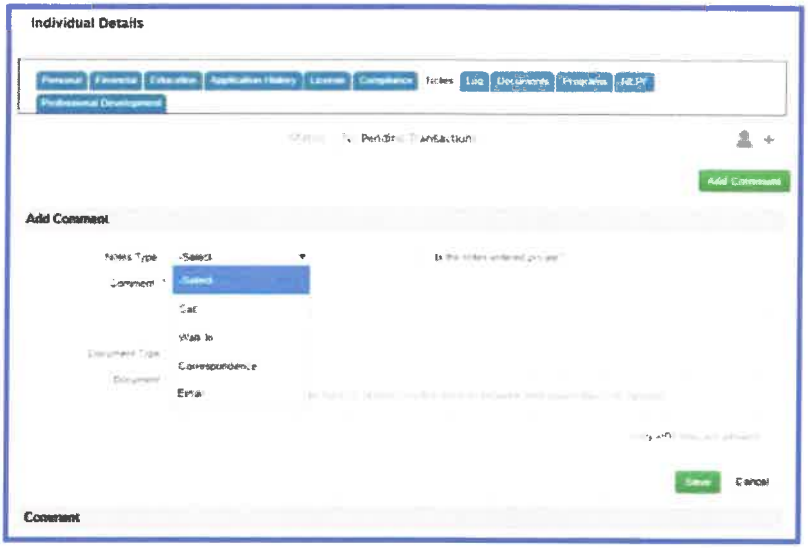


Figure 26: Individual Details

Below is an example of information available related to application history. That is, it shows all the license applications that have been submitted by the Licensee over time. The i3 Verticals solution can display as much or as little of this information that is available to be imported into the system for viewing by authorized state staff.

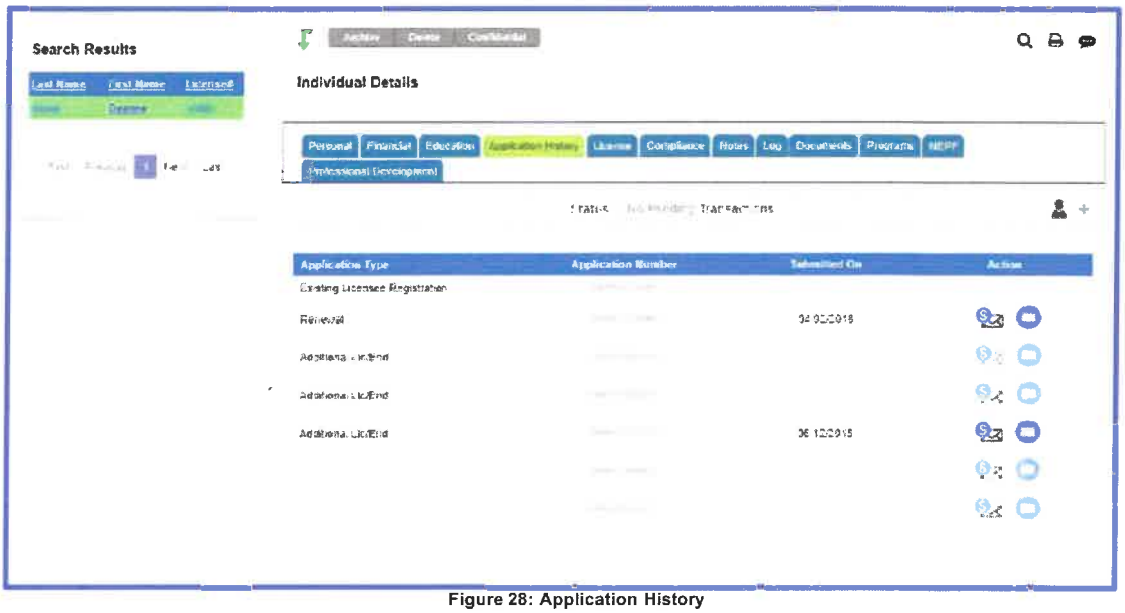
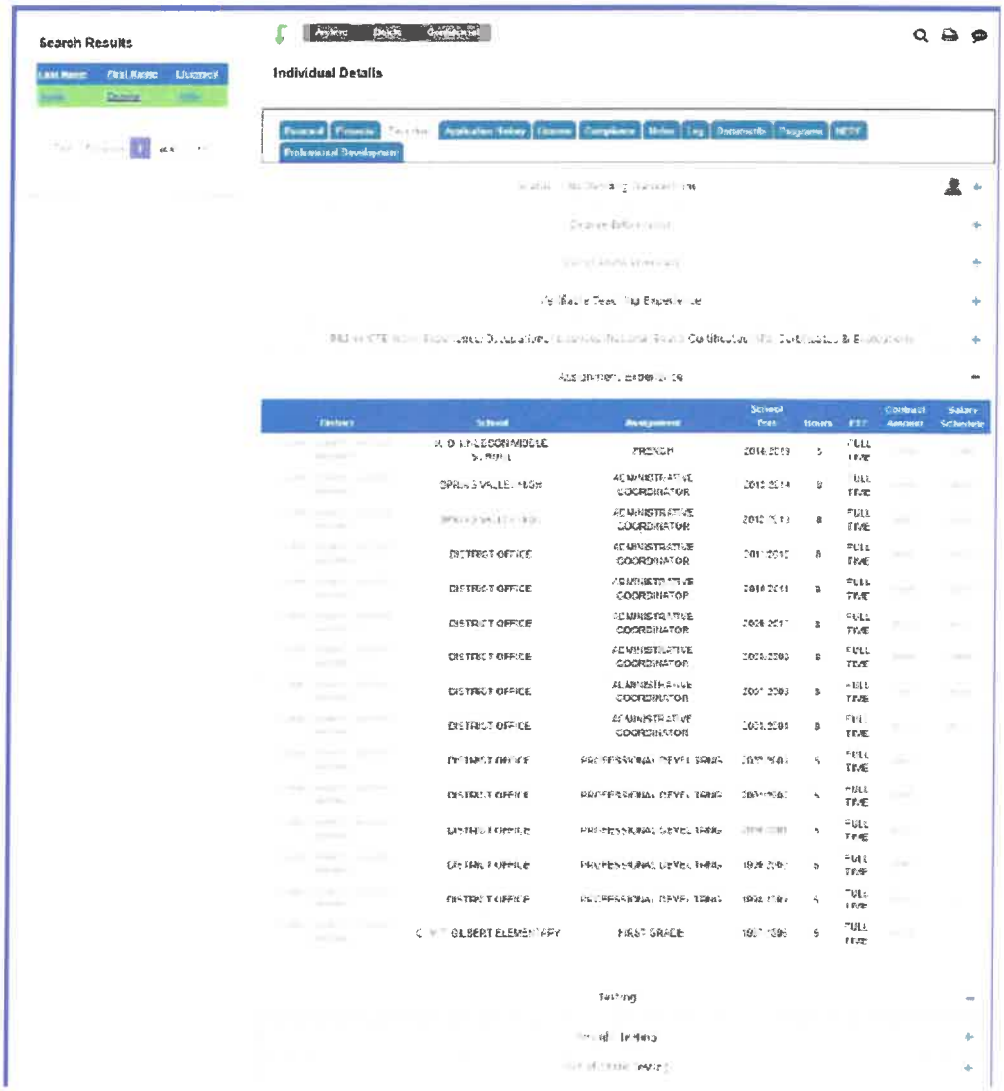


Figure 28: Application History

i3 Verticals software solution provides the capability to retrieve historical records, as long as they can be migrated and associated with a specific individual in the database.

Furthermore, the i3 Verticals system provides the ability to retrieve historical records associated with every individual (Licensee or Applicant) maintained in the system. The figure below shows all historical information related to education (note the assignment information that has been displayed for the last 20 years):



c

Figure 29: Assignment Experience

All actions taken within the system are logged into an audit file. The log can be viewed by looking at an individual's record in the database using the Individual Info function, and clicking on the Log tab. Here all actions taken against this user are displayed. Additionally, with proper access, the entire audit log may be searched to see actions taken on a specific individual within

the database, or by a specific user, within any range of dates. This helps answer who did what to whom in the system. The figure below is an example of an Action Log when viewing an individual Licensee's record:

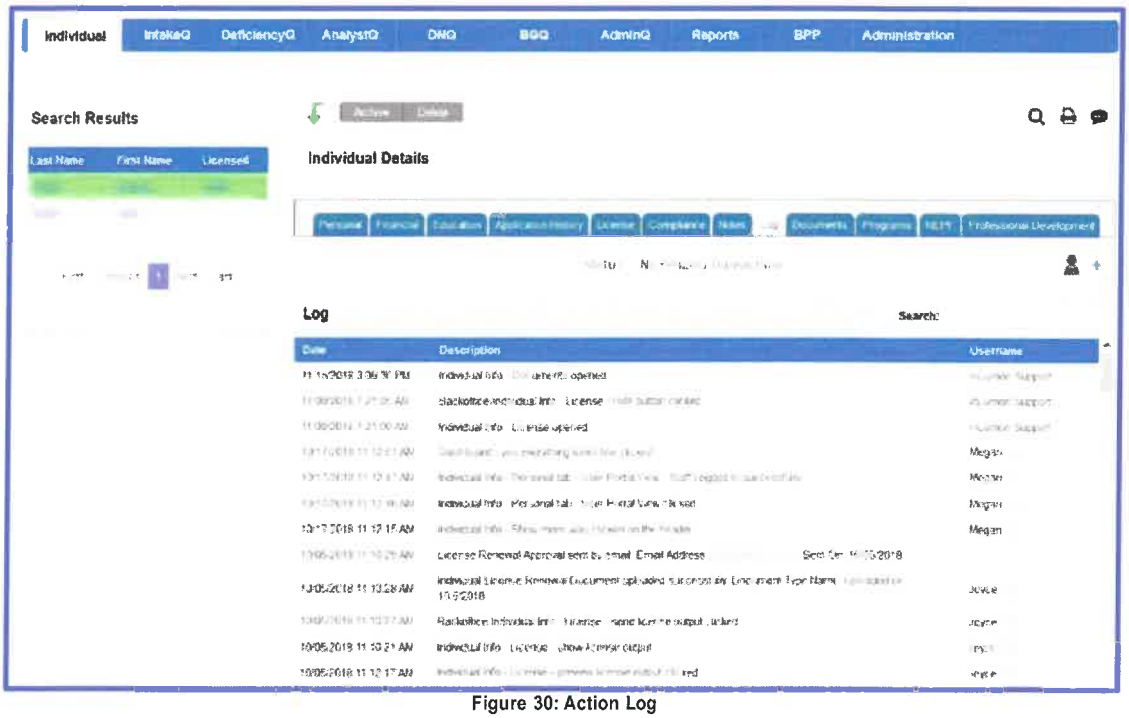


Figure 30: Action Log

In the figure above, the date & time stamp is shown for each action, as well as a description of that action. The Username (or 'System') responsible for that change is also shown for each logged action. The system also includes the Search and Print functionality within the audit log.

The foundation of the i3 Verticals design is a controlled and efficient business environment with emphasis placed on overall flexibility, customer-focused transactions, and reduction of manual intervention. The entire application is driven through configured business rules that can be easily modified and implemented independently. Through the setup and execution of these rules, the system will verify accurate data throughout and consistently process, route and perform tasks in alignment with the agency's legislative mandate, statutes and requirements - thereby enforcing how the agency regulates. Workflows automate the system and can vary considering:

- application type (license, permit, registration, certification, renewal, etc.),
- regulatory process (background checks, complaints, inspections, investigations, etc.),
- business unit/ department (accounting, licensing, exams, compliance, audit, education, legal, enforcement, etc.),
- staff roles (administrator, manager, supervisor, clerk, etc.),
- location (region, office),
- intake method, originating party, etc.

Deficiency Management

One example of a workflow automated by the software solution is the tracking of application missing items and/or deficiencies. The system captures all the pre-requisites (e.g. mandatory information and documents to process an application, background and/or fingerprint checks) and manages these through the application life cycle. For instance, Board staff can review an application and in cases of items missing or deficient information and/or documentation, be prompted to select from a list of typical deficiencies related to that section of the application along with any specific notes. An example of this is shown in the figure below.

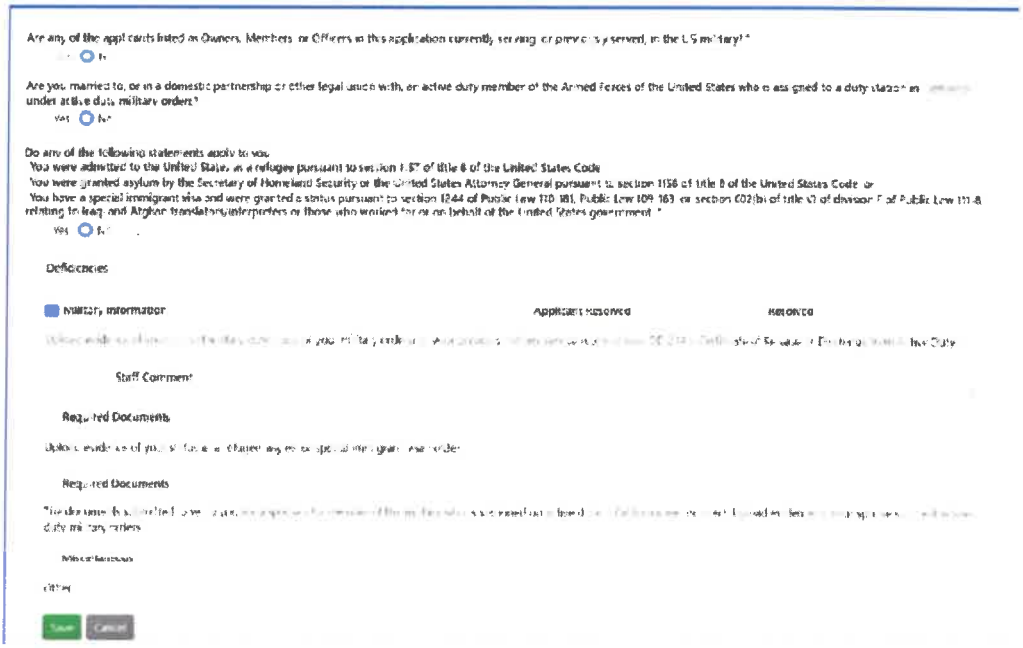


Figure 31: Deficiency Example

Based on predetermined rules, the system can automatically keep track of all deficiencies for each transaction and can notify customers of those deficiencies via print out (letters), display on Applicant Portal, and email notification(s) (using Board defined templates) for the customer to act. In the following figure, an automatically generated email template is activated from the application review page.

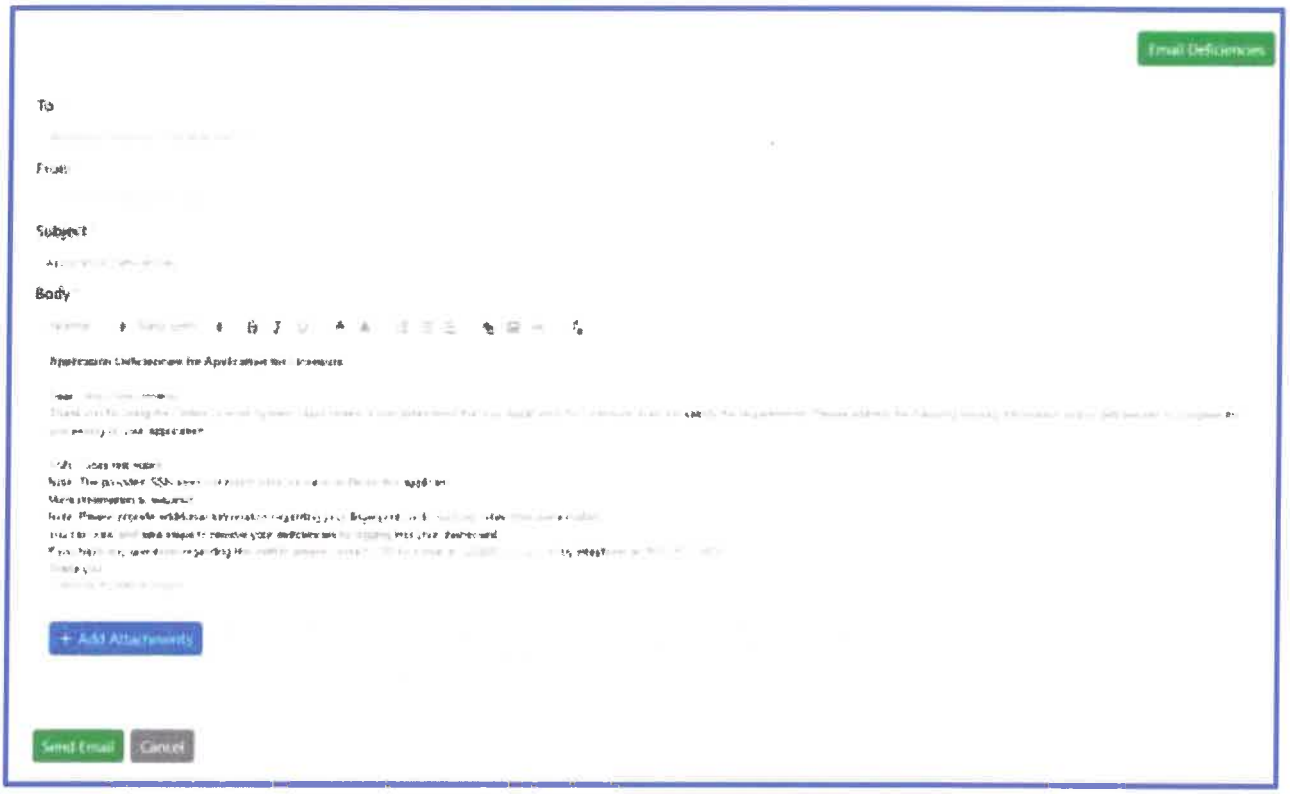


Figure 32: Deficiency Email

Furthermore, leveraging the secure communications capabilities of the system, **WVDOA** staff can communicate deficiencies directly to applicants via the portal, as shown in the following figure. Concurrently, Applicants are notified via their online portal dashboard of any deficiency and can be enabled to resolve the specific section(s) or items. See the image below for example icons and colors used along with section of dashboard providing details of deficient item. When Applicant selects 'Resolve Deficiency' button, they are directed to the specific section or item(s) that require attention. This way the Applicant only addresses the deficiencies versus submitting another complete application and wasting both Applicant and Board processing time.

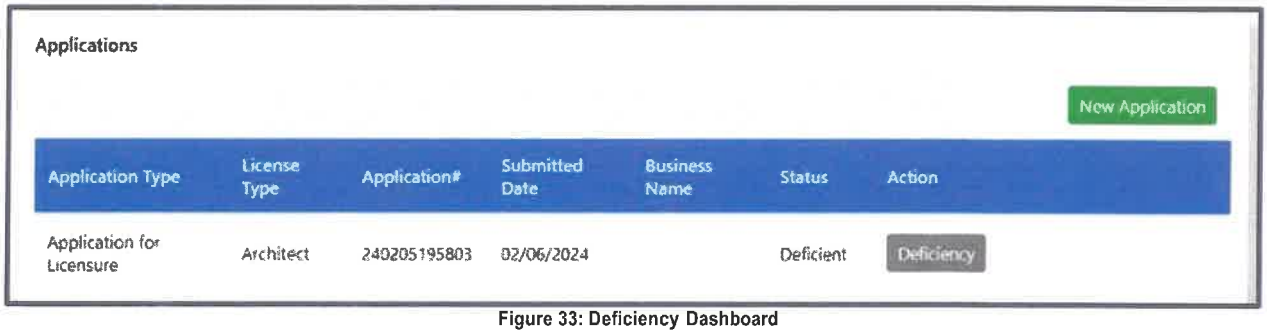


Figure 33: Deficiency Dashboard

Upon Applicant resolution of deficiency, such as uploading of additional documentation providing more information, Board staff will receive notification that application is now ready for re-review

(based on Board's process). See the following image for an example of Secure Communications message notification on Board staff member's home screen.

Figure 34: Secure Communication

i3 Verticals system provides an intuitive and highly efficient deficiency identification and processing capabilities. This is one of many ways the system will reduce application processing time, improve data quality, reporting and communication.

Automatic Notifications

The system has the capability of automatically generating and sending correspondence, letters, emails and/or SMS (text) messages using templates defined and managed by the WVDOA. For instance, notifications and alerts can be automatically sent to an individual Licensee or Applicant as their application moves through the application submission, review and outcome portions of the application workflow as well as the status of background checks. This provides real-time information to the Licensee/Applicant about the processing of their application. The below figure displays a few examples:

Figure 35: Automatic Notifications

Additionally, our Secure Communications capability allows secure, confidential communications to take place between WVDOA staff and other stakeholders within the system securely. This is similar to secure communications used within the banking industry.

An example of this would be if an application is deemed to be deficient, a secure communication is sent to the Applicant/Licensee, which appears on their dashboard, similar to the figure to the right. Furthermore, to notify the individual of secure communication, an email and/or text is sent to the individual. All secure messages are also stored under the User's (Licensee or Applicant) Individual Information, on the Correspondence tab.

Figure 36: Secure Communications

Communications to WVDOA Staff will appear on the individual staff member's portal, enabling the exchange of messages, etc. Just like all transactions peRFQrmed in the system, all correspondence is tracked and recorded in the system, providing the WVDOA a complete, auditable record of communications to/from staff.

Communication to/from Applicants/Licensees (individual) and businesses are stored in the system, under the entity's unique record. For example, all communication to/from that individual can be viewed via Individual Info, Documents tab, in the Correspondence region of the record. All system generated and tracked Email (type 'E') as well as SMS (TXT) messages (type 'S') are listed here in reverse chronological order as well. The exact contents of that communication can be viewed by clicking on the action icon on a line item. An example of how this list looks is in the following figure.

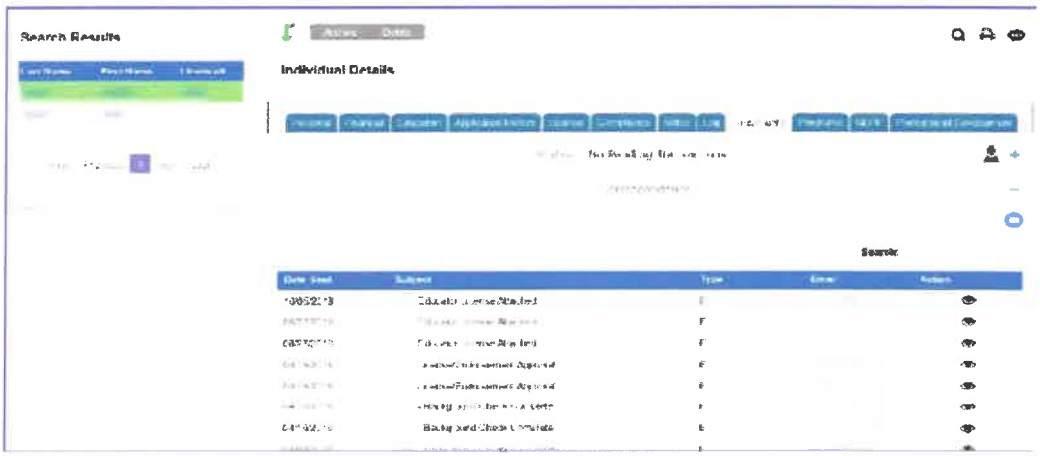


Figure 37: Correspondence Tab

Email and SMS message 'templates' are managed within the Template Management feature of the system. This allows the WVDOA "super-user(s)" to quickly update correspondence templates that are automatically generated and delivered by the system. In addition, templates can be created ahead of time and a 'start date' specified for when the template will first be used. An example of how the Template Management function looks is provided in the following figure.

Figure 38: Template Management

i3 Verticals plans to work closely with WVDOA to train staff on how these templates are managed and can be tested during User Acceptance Testing (UAT). To update any template, staff can simply click on the 'Edit' icon in the Action column. A partial screen of this email template is shown in the following figure. What is not shown is a previews screen for the template as well as the 'Save' and 'Cancel' buttons at the bottom of the screen.

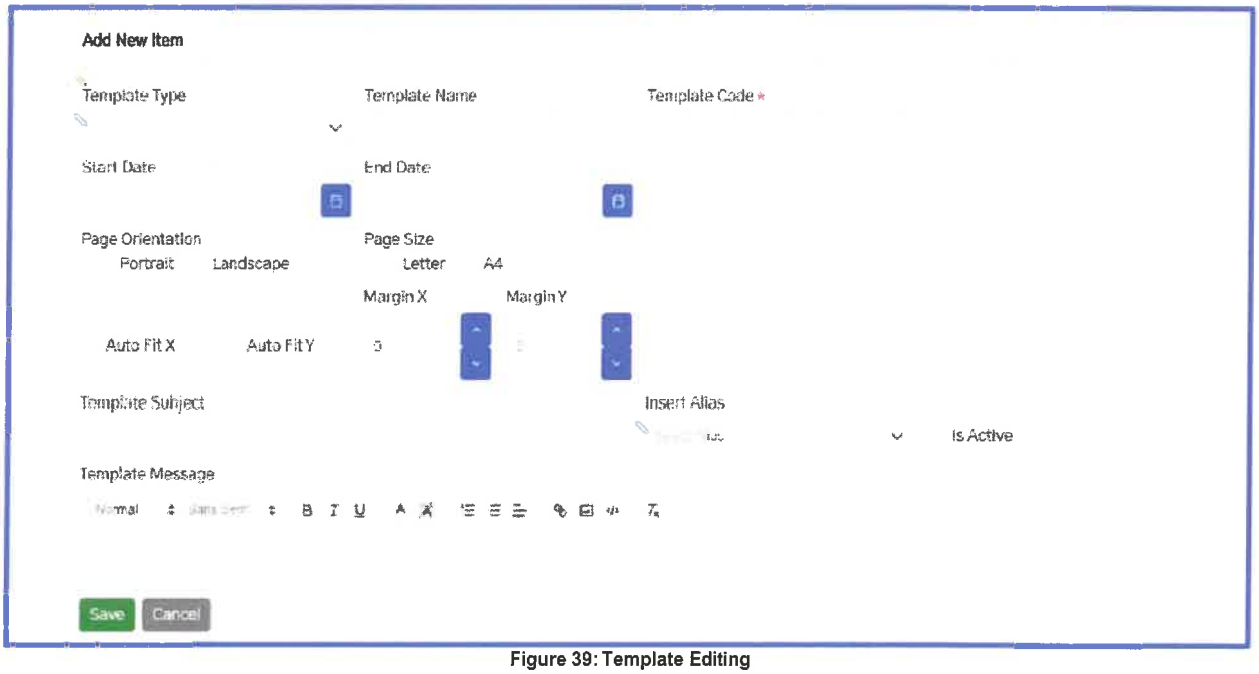


Figure 39: Template Editing

Furthermore, electronic document management is an inherent capability of the i3 Verticals framework, allowing for single and multiple documents, images and other files to be uploaded and associated with the applicable record(s) for ease of access, review and retention. The following Figure 43: Document Upload illustrates how scanned documents and files can be uploaded, associated to an individual record and stored:

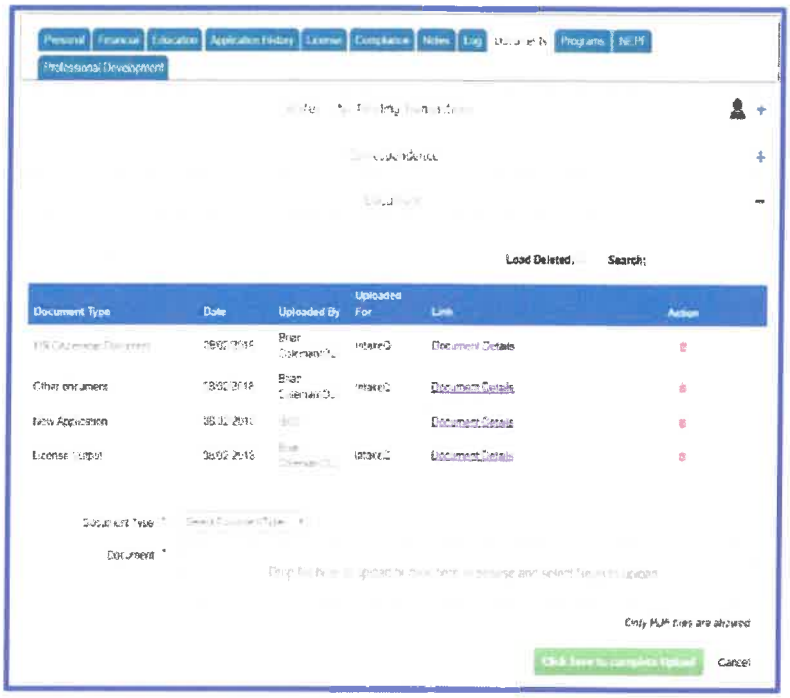


Figure 40: Document Upload

Process and Document Enforcement Activity

i3 Verticals regulatory enforcement module allows for the creation and management of cases and other enforcement / compliance activities, such as conducting investigations, audits, and inspections. Given that regulatory enforcement activities and processes vary greatly between agencies, the i3 Verticals solution allows for full module configuration supporting the WVDOA's audit, complaint, investigative, and case management processes.

i3 Verticals configures and customizes specific client systems to manage cases, enforcement processes and audits per individual agency rules, regulations and workflows. Specific requirements related to WVDOA's processes are discussed during the project Discovery Phase and implemented as part of requirements definition. A complaint originates from one of multiple potential sources (letter, phone call, online, etc.) and moves through a queue-based workflow. In the following figure, a complaint originates from an online complaint form via the board's website. A complainant can fill out the minimum information required to generate and open a complaint. Submission of this form triggers the business rules and pushes the complaint into the workflow and required queues for review and further action.

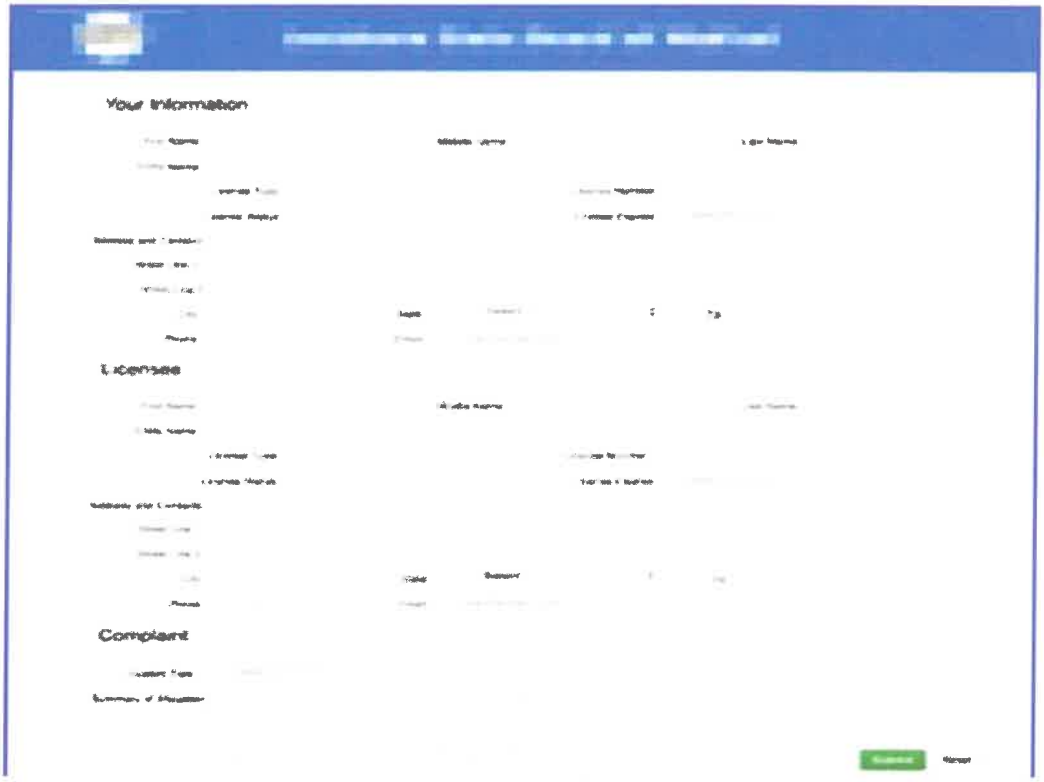


Figure 41: Complaint Form

Investigative notes, violations, etc. are managed through all the steps and case statuses following the creation and assignment of a case to an individual that is being investigated. When an actionable complaint is filed against a Licensee, a case is established and attached to that individual. Figure 42: At a Glance below Illustrates an example of a case summary within an "intake queue".

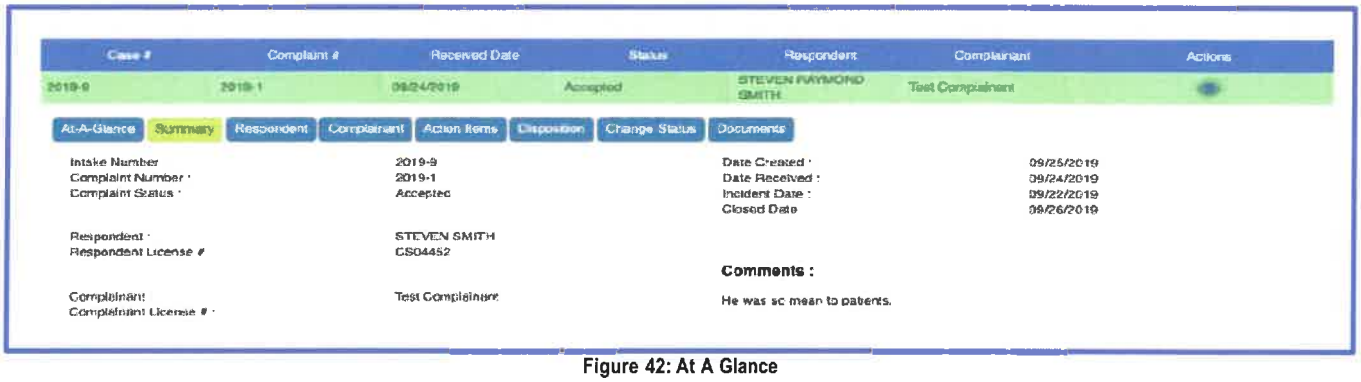


Figure 42: At A Glance

All investigative notes collected, and any supporting documents are uploaded and managed in the assigned case file. This includes investigative outcomes and recommended / proposed disciplinary actions, dates of key milestones, and related items. The figure below is an example of an enforcement document upload area.

Figure 43: Investigation Document Upload

As with our entire platform, access to certain parts of the Enforcement and Investigations can be controlled through security roles and permissions. In terms of investigations and compliance case management, involved parties (i.e. Complainant, Attorneys, etc.), investigative case notes, documents and evidence are also associated with the case number. In the below figure below, an individual investigator has access to only his cases.

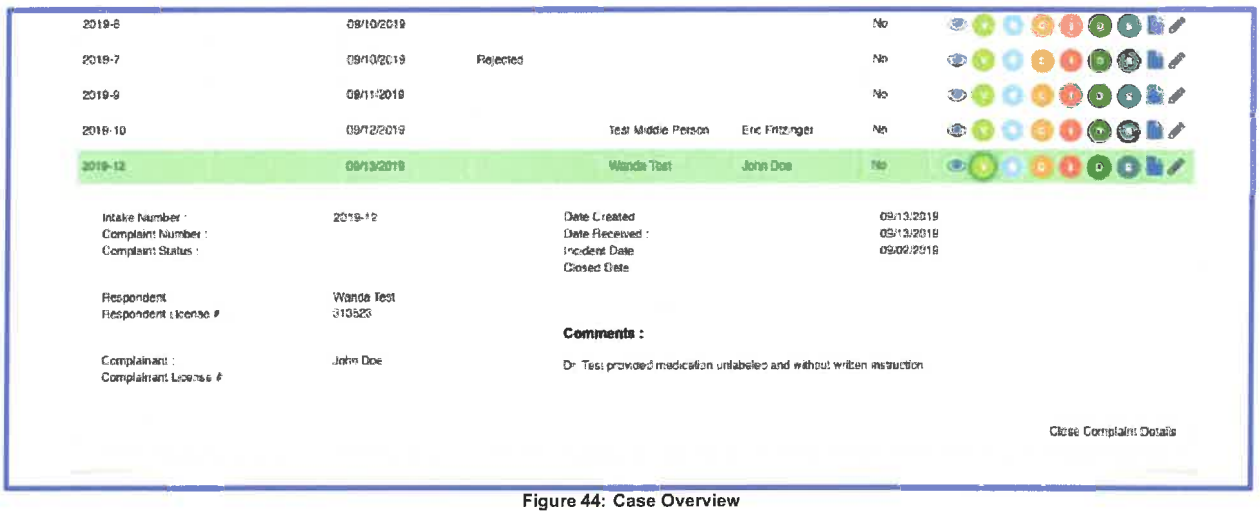


Figure 44: Case Overview

Cases can have a disposition assigned to it, thereby moving it into either a "legal queue" or "director queue" or other. According to the business rules and appropriate workflows, additional items can be added to the case. This can include the outcome of the investigation and recommended / proposed disciplinary action, managing outcomes, dates of key milestones or related items, etc. The following figure demonstrates this.

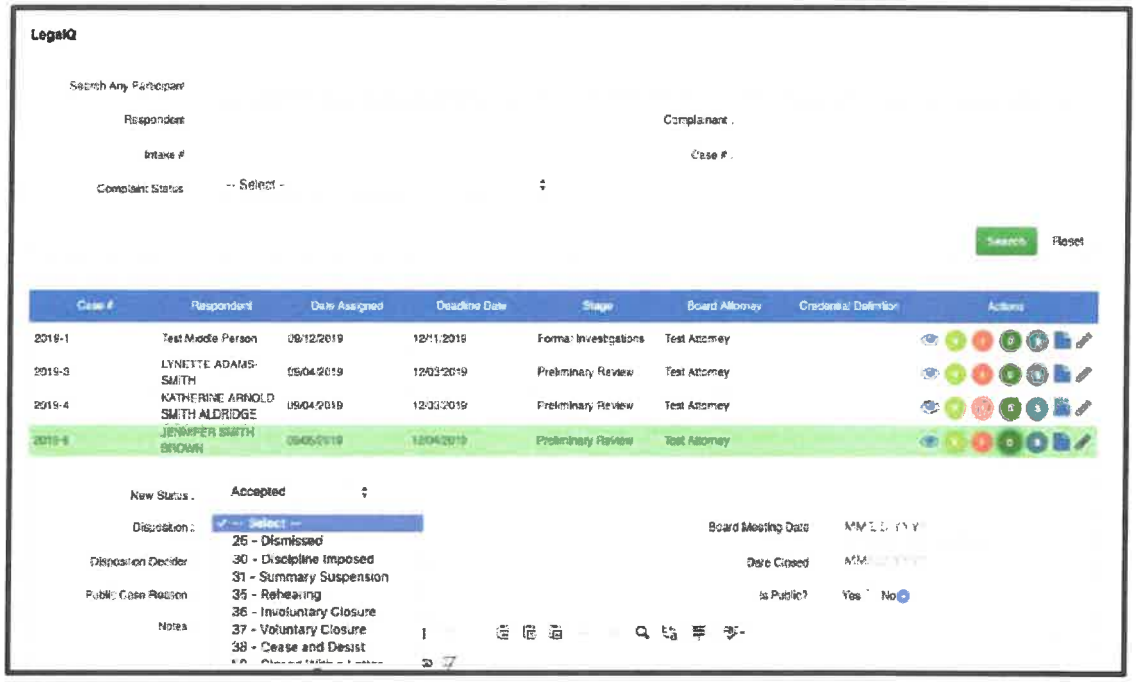


Figure 45: Case Overview

Some clients' case notes are reviewed by legal staff before being forwarded to a hearing officer, Board or Commission so as to not unduly impact the hearing officer/Board/Commission. Sub- case files are created so case documents can be viewed and connected to the hearing officer or Board. Investigative outcomes and recommendations can also be managed within the system, including proposed disciplinary actions, etc. An example of this is the investigative (and enforcement) module developed for another client as shown in the figure below.

Scheduling hearings, case reviews, and/or investigative meetings can be managed via a system calendar as shown in the figure below.

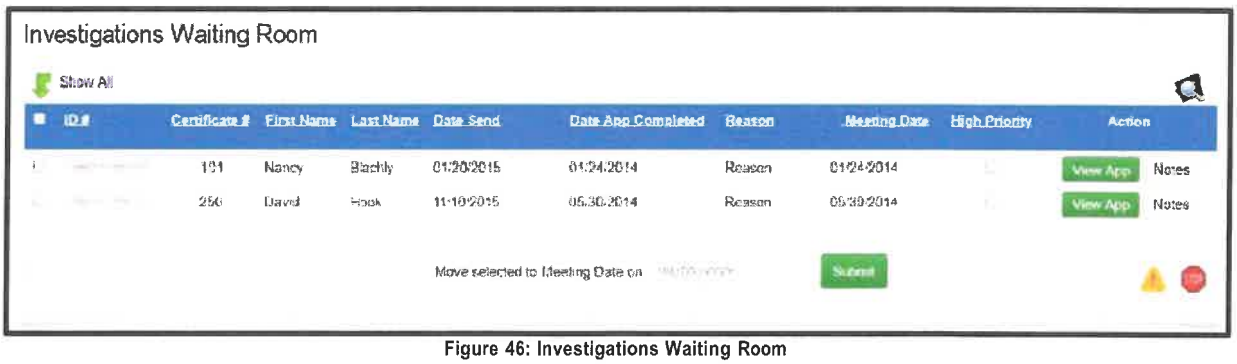


Figure 46: Investigations Waiting Room

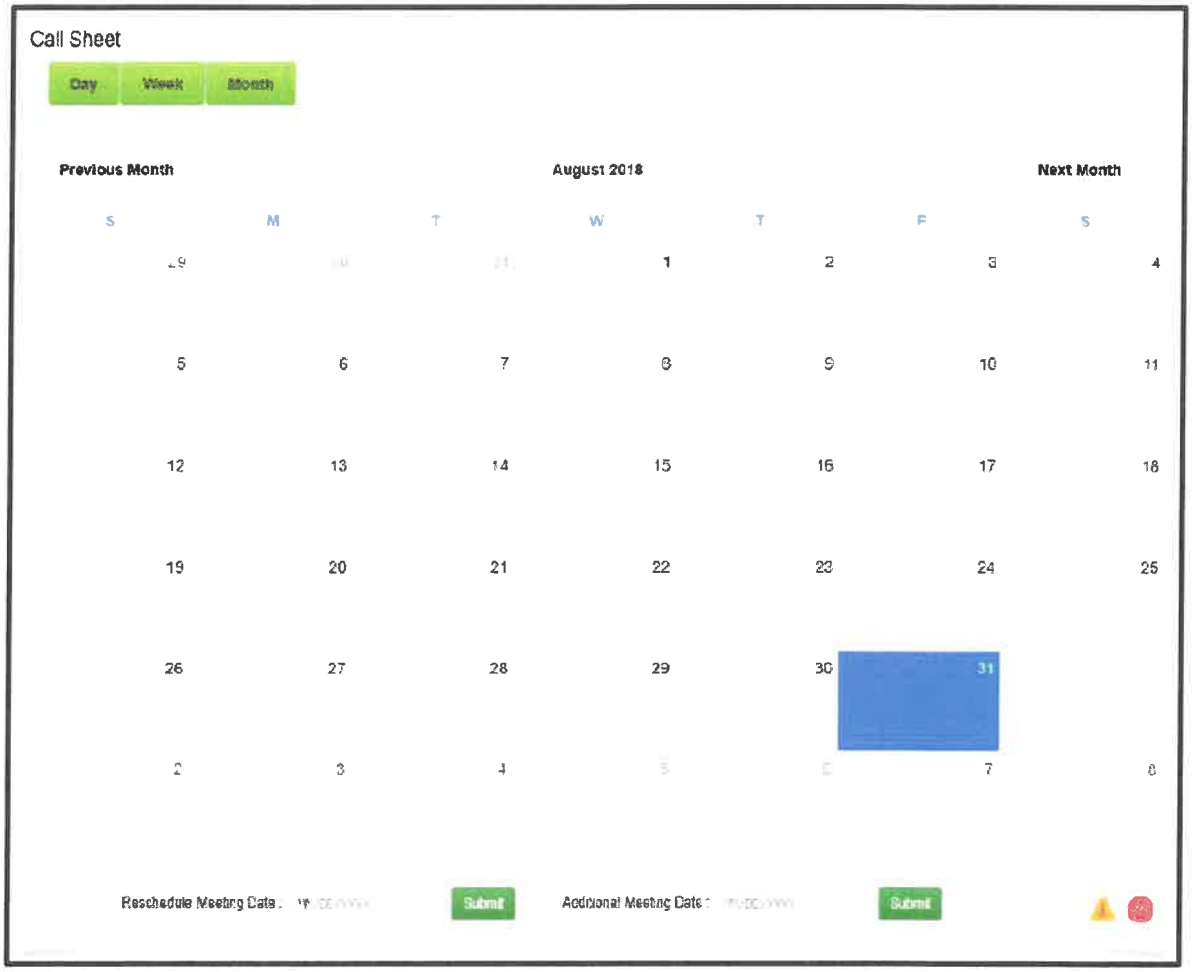


Figure 47: Call Sheet

An interesting note in Figure 47 is the traffic symbols in the bottom right of the screens. To leverage the system's automation capabilities via business rules, better communicate between staff managing the application workflow and those involved in the investigations, the i3 Verticals solution includes specific controls to help agencies share information and inhibit processes from moving forward if not legal to do so. For example, if a business has an open complaint case being investigated, the system can automatically disallow a renewal to be processed until cleared. A 'caution' flag (represented by the yellow triangle with the red exclamation point) can also be displayed letting licensing staff know they know the business is being investigated and why application is halted.

Should the investigation unit determine that disciplinary action should be taken against an individual, the Stop sign is used to notify all staff to STOP working on anything related to this business. As one might imagine, it would not be desirable to authorize or renew a license for an individual if the organization is about to impose disciplinary action. These rules are built into the solution, so the system enforces how WVDOA regulates, and the visual symbols help keep staff aligned.

Inspections can also be tracked, assigned, peRFQrmed and violations tracked according to WVDOA's workflow processes. The following figure illustrates how an inspector can search for a licensee or business from their back-office queue in order to update or generate an inspection process.

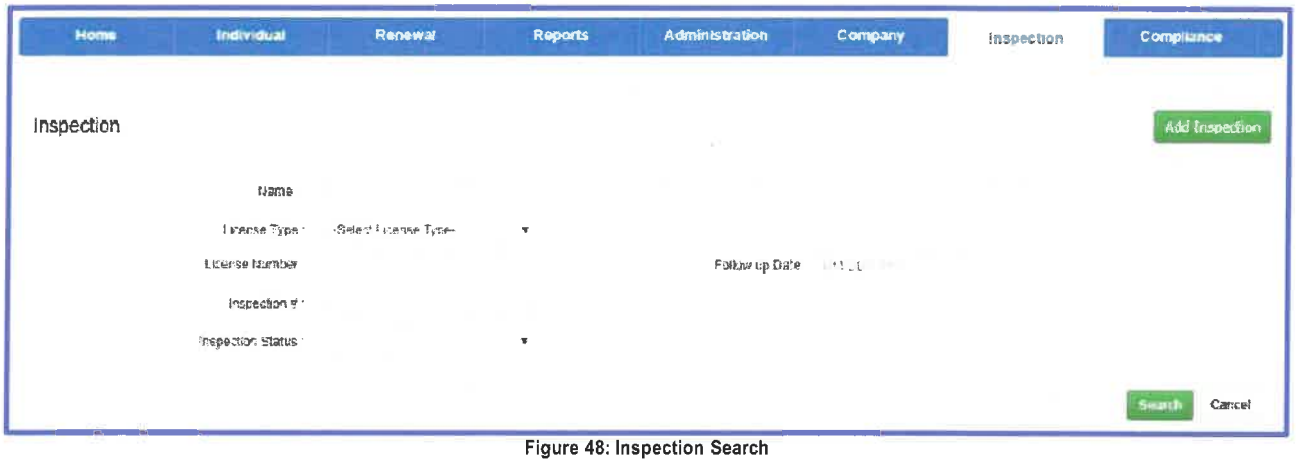


Figure 48: Inspection Search

Instead of physical forms, inspectors can be empowered to utilize a portal similar to the figure for conducting inspections in which the inspection process is as automated and standardized as possible per the WVDOA's requirements and needs.

Figure 49: Inspection Form

The figure to the right shows how the system can be configured to track violation codes associated with an inspection, investigation or complaint.

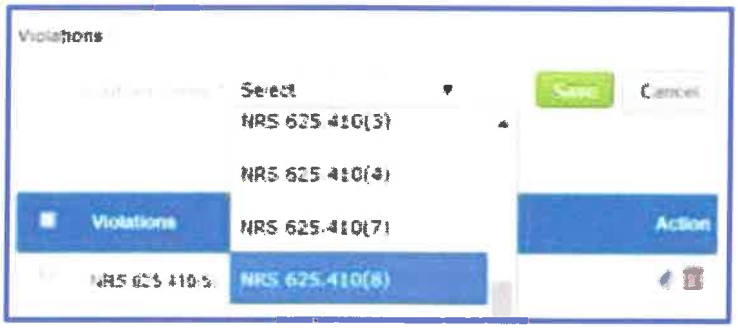


Figure 50: Violation Codes

We also can deploy functionalities on mobile devices utilizing the same underlying system components as the agency's licensing system, empowering staff in the field (inspectors, investigators, surveyors, etc.), constituents and the public to peRFQrm activities, submit and/or access information per the Agency's requirements. i3 Verticals mobile Inspection APP can save time, standardize methods and optimize the effectiveness by automating dispatch, forms utilized, tracking violations, capturing images, signatures, and outputs (violation letters, reports, fines, etc.) of inspections.

The figures below are examples of mobile Inspection APP screens illustrating a few of the capabilities:

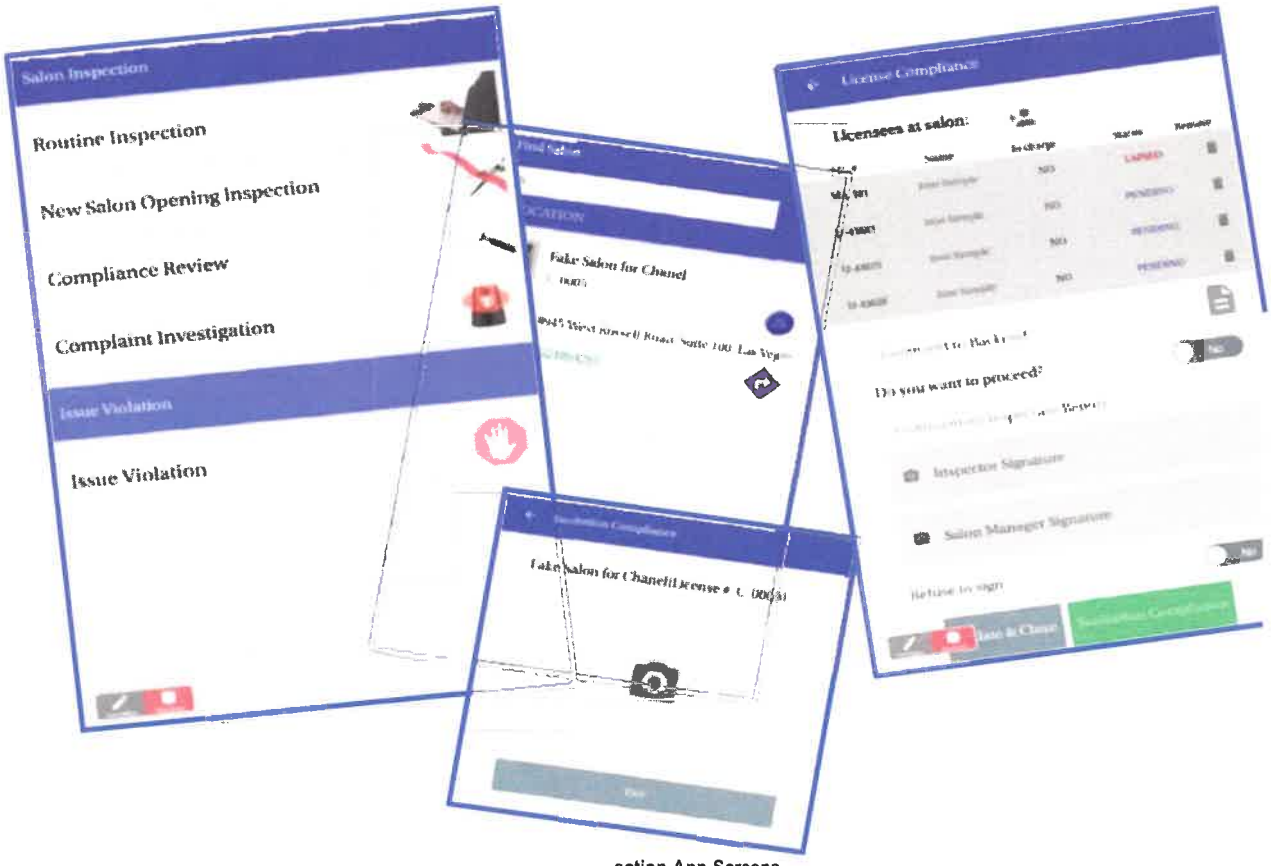


Figure 51: Inspection App Screens

Software Solution Reporting

In addition to reporting needs met via an integration with WVDOA's current business intelligence platform, the software solution will provide authorized staff the ability to create customized, real- time reports and templates within the system that can then be saved, utilized and applied to specified data sets in the system.

Our Reporting Services subsystem enables the generation and distribution of reports from either the operational database or the reporting database. The Reporting Services subsystem helps in generating forms, correspondence, and other documents in printable format for distribution to various end users. The operational reports provide a more tactical view of the business operations. The operations report can run against the operational data source or the reporting database depending on the type and nature of the report being generated. Reports and document generation can happen in either an online "ad-hoc" manner and/or in batch mode.

For standard reports, the client selects the desired report from the Queries menu, provides any selection criteria as defined, and the report results are displayed on the screen. Results can be exported to Excel or PDF if desired. As shown in the figure below, both types of reports are available under the Reports tab. 'Queries' display all of the defined (standard) reports, while the 'Query & Reporting' and 'Field Search Reporting' options open either the ad-hoc Query Tools:

To help with the standard or defined reports, early in the engagement, i3 Verticals works with our clients to define all reports they will need, based on reports they currently have or reports that they have always needed but were unable to get out of their legacy system. We use a simple approach to track all of the reports and provide 'mock-ups' and define any report selection criteria needed at the time the report is run. In this manner, when the i3 Verticals technical team is ready to work on those reports, the client has them already defined thereby eliminating any last-minute rush to define reports.

Once created, the reports are added to the Queries drop-down, as shown to the figure to the right. The client selects the desired report, provides any selection criteria as defined, and the report results are displayed on the screen. Here, the user has the option to output the results to Excel if desired. The same architecture can be used to generate a variety of business documents such as forms (blank or with data filled in), correspondence, and instructions.

In addition to creating user defined reports (many with parameters for filtering the data), the software solution provides the capability for clients to create ad hoc reports using either our built- in 'Query & Reporting' tool or 'Field Search Reporting' tool. When the Query & Reporting option is selected from the Reports tab drop-down, the Query Tool is displayed. Clients can select information to report on (from tables and columns), select data based on various selection criteria, as well as group and sort the output from the query. Results are displayed on the screen, but with the click of a button, can be exported to PDF, Excel or Word. Results exported to Excel can also be filtered and sorted by the client.

Yet another powerful reporting tool empowering users to select specific fields and easily define the parameters they desire to quickly find information and export to Excel or PDF is the system's Field Search Reporting Tool. The example below illustrates how a user of another system selected 'External Application Status Description' and is prompted to input parameters, etc.

Highlights of this query tool include:

- Queries can be created and shared among staff
- An existing query can be updated and resaved
- An existing query can be copied and used as a starting point for a new query
- Saved queries can be managed from this tool
- Query results can be exported to Excel
- Duplicates can be filtered out of results when the query is executed
- Bulk email can be created from the query tool, using the results of a query

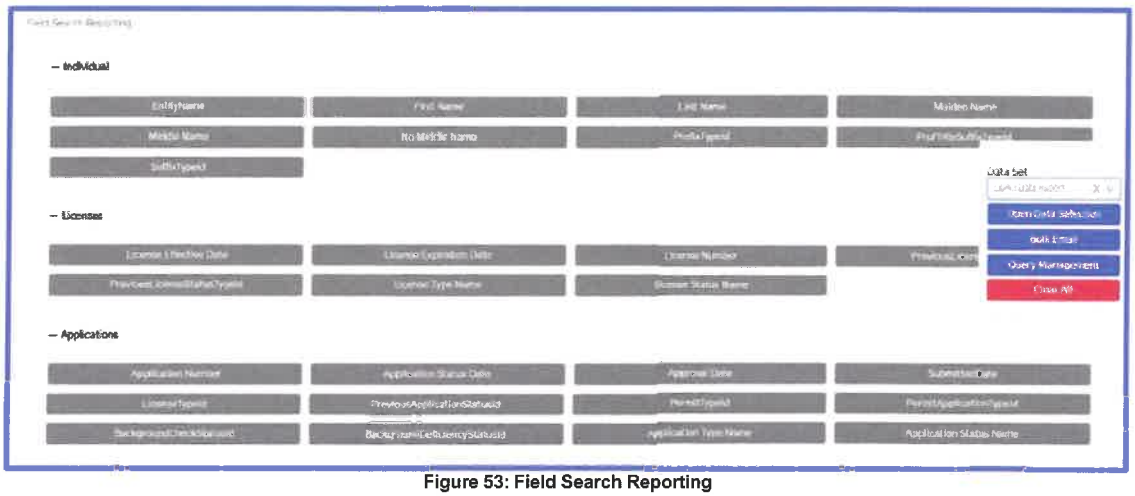


Figure 53: Field Search Reporting

Lastly, for the display and tracking of key peRFQrmance indicators (KPIs), graphs and/or tables of information specific WVDOA users desire, the system can be configured to display on their home screen, as illustrated below. Note that as the mouse hovers over the column for September, that month's specific figure opens and is displayed automatically.

Figure 54: Graphs at a Glance

In addition to back-office reporting capabilities, the software solution can provide stakeholders with real- time, accurate data, public portals and can allow public users to easily search for and report against any other public information the WVDOA desires to share, including final legal notices, board actions, affidavits, etc. for primary source verification.

The following figure illustrates how i3 Verticals deployed a client's public verification portal in which a user can search using specific data fields:

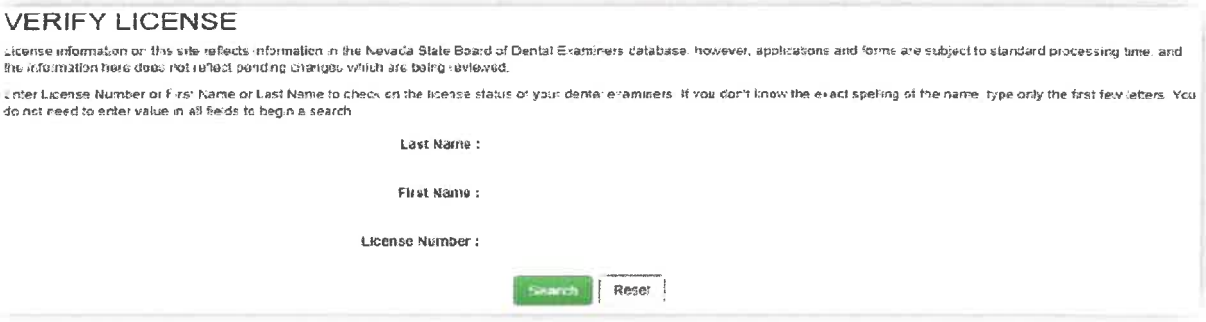


Figure 55: Verify License

When executed the user is presented with results linking to the records, data and associated documents, etc. that the agency determined is for public consumption, including board actions, as reflected in the next 2 figures.

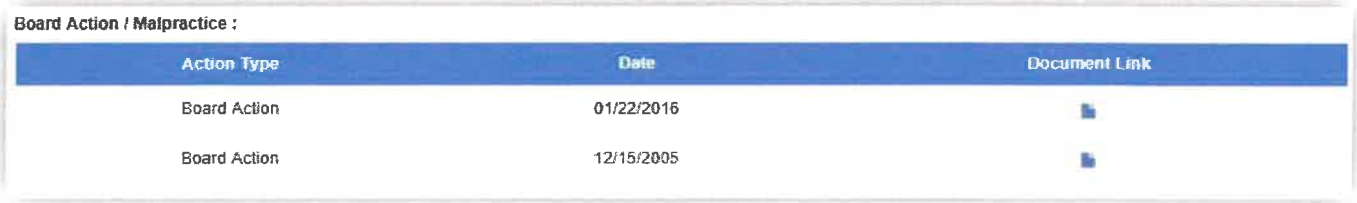
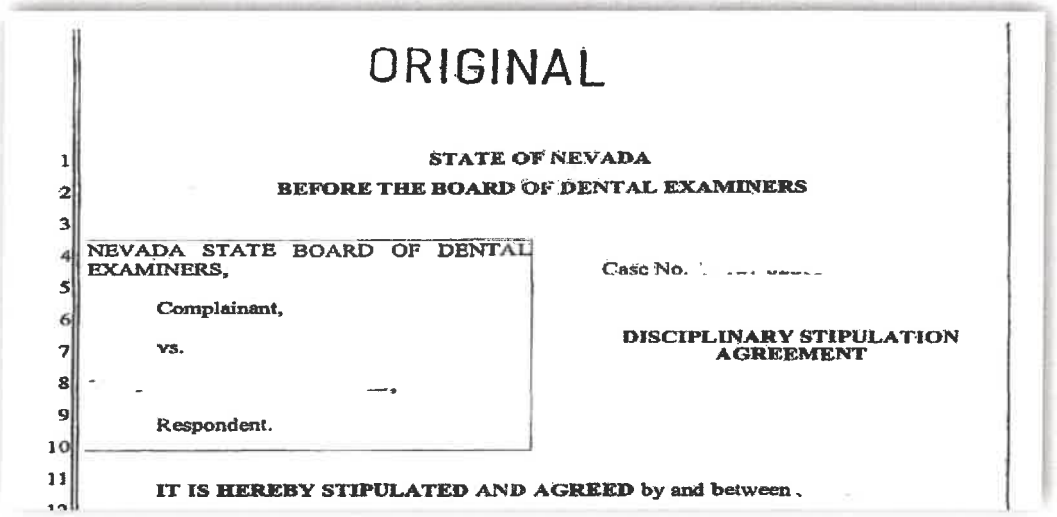


Figure 56: Board Action


ORIGINAL

STATE OF NEVADA
BEFORE THE BOARD OF DENTAL EXAMINERS

NEVADA STATE BOARD OF DENTAL EXAMINERS,

Complainant,

vs.

Respondent.

Case No.

DISCIPLINARY STIPULATION AGREEMENT

IT IS HEREBY STIPULATED AND AGREED by and between

Figure 57: Document Link

Cashiering

All financial transactions can take place within the system in real time utilizing the secure interface. i3 Verticals will integrate with WVDOA's payment vendor.

As financial transactions (such as a Licensee paying to renew their license) take place in the licensing system, the associated transaction is available in reports, queries, etc. The system can split any payment over multiple forms of payment (i.e., different credit cards). Upon payment success, in addition to the system automatically emailing a confirmation and payment receipt, the online portal allows for Applicants and Licensees to view and access receipts.

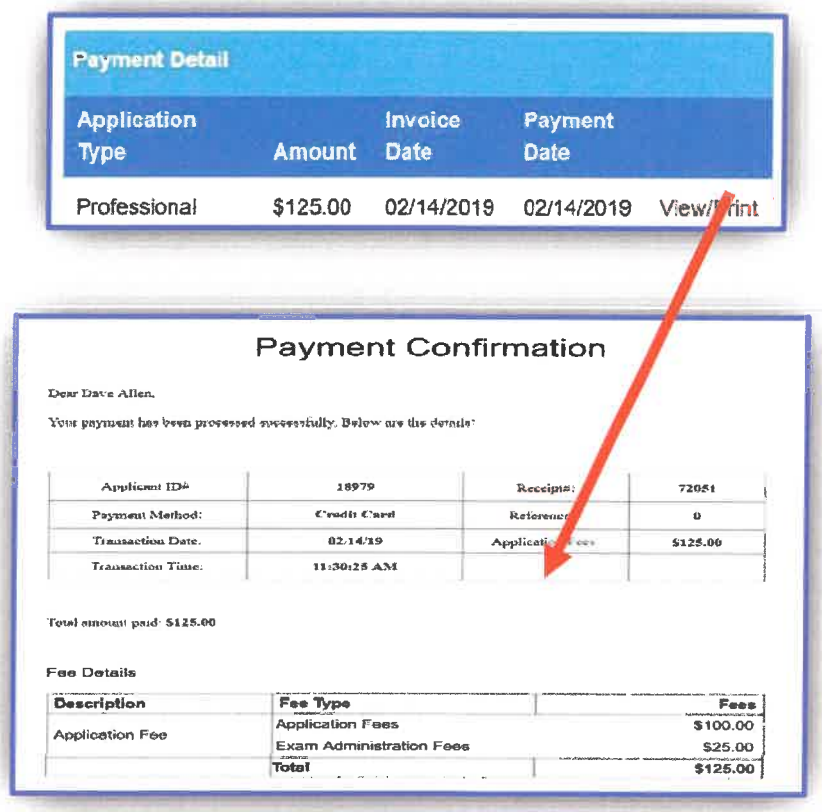


Figure 58: Payment Detail

i3 Verticals system allows for online payments using an API (Application Program Interface) with WVDOA's preferred payment merchant services, as determined agency's financial institution. There can also be alternate options and workflows: applications entered by the Applicant typically only allow for payment by debit/credit card, while those applications entered via the Back Office by WVDOA staff accept payment by check, money order or cashier's check, etc. Below is an example of an online payment section of an application.

Payment method can be selected, and the form can pre-populate the applicable fees associated with the selected application type.

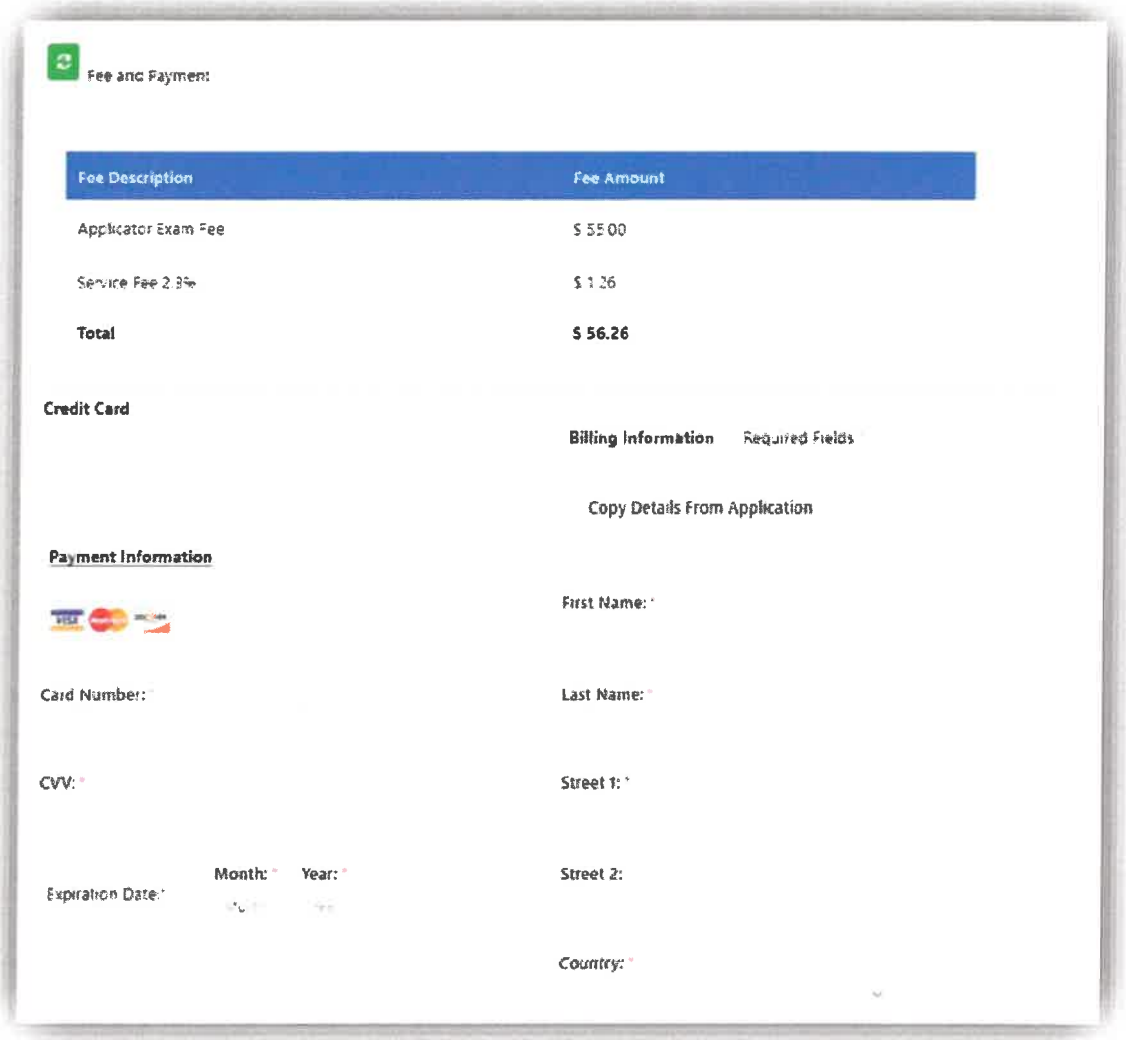


Figure 59: Fee and Payment

Other items shown in the screen shot above include:

- Override feature-this is only available for authorized State staff when entering payment for a paper application which has been entered via the 'Back Office'. This can be used to override any amount, including waiving of Late Fees, reduced rate for veteran status, etc.
- Method of Payment-while the online Licensee/Applicant can only see Credit/Debit Card or ACH, authorized State staff can see additional options such as Check, Money Order, Cashier's Check, etc.; some clients have decided that credit card information will not be taken by State staff.
- Client managed message regarding payments as being non-refundable, etc.
- Credit Card Processing-this is a link to the client's policy regarding credit card processing. Other clients also post a separate link regarding Privacy of Information, etc.

Most of these are driven by merchant services requirements or customer legal department/staff.

- Non-Sufficient Funds (NSF) against a customer and record. The system allows the charging of a handling fee whenever a check has been dishonored and returned by the bank. The system provides fines to be levied against and collected from customers. The system can also process restitutions for NSFs.

The i3 Verticals Licensing Framework's Financial Management subsystem supports tracking activities associated with the control and accounting of funds, including generation of fees, dues, fines, penalties, invoicing, payments and reporting. All financial processing and reporting functions reside within this logical subsystem. It encompasses processing of funds through electronic commerce (that is, credit card processing over the Internet) and point-of-sale (POS) transactions (for example, credit card, cash, check, debit card, and account processing through the POS functions).

The system also provides the ability to maintain information about fees, fines and taxes including type of tax or fee, effective dates, ending dates, account number, distribution amounts (including local levels), distribution percentages, and remittance information. The system also can configure fee types, including adding, modifying, and deleting fee types.

All financial transactions which can take place within the system occur in real time. That is, as a financial transaction (such as a Licensee paying to renew their license) takes place in the licensing system, the associated transaction is available in reports, queries, etc. For example, in addition to the system automatically emailing a confirmation and payment receipt, the Customer online portal allows for viewing and access to payment confirmations. Confirmations and correspondence are also stored in the system for ease of access by WVDOA staff, as shown in the figure below.

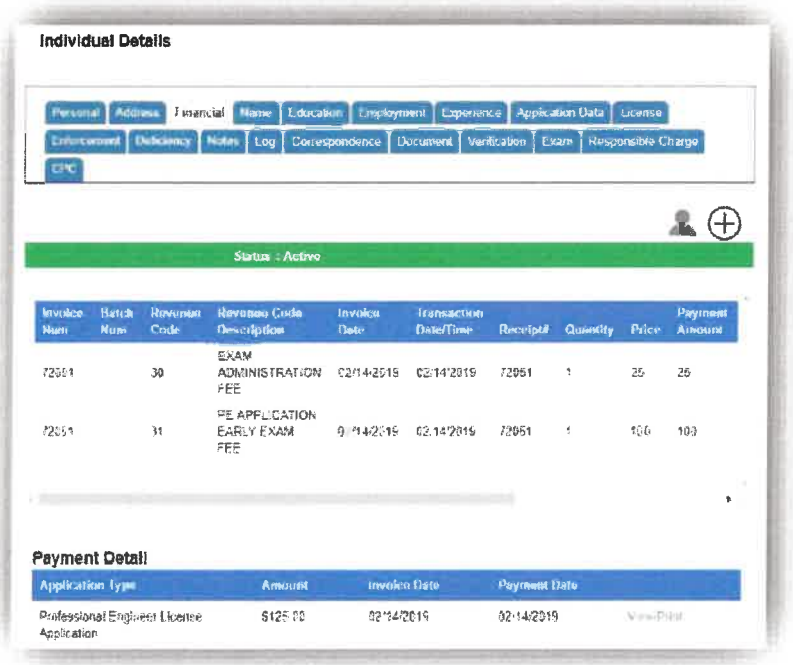
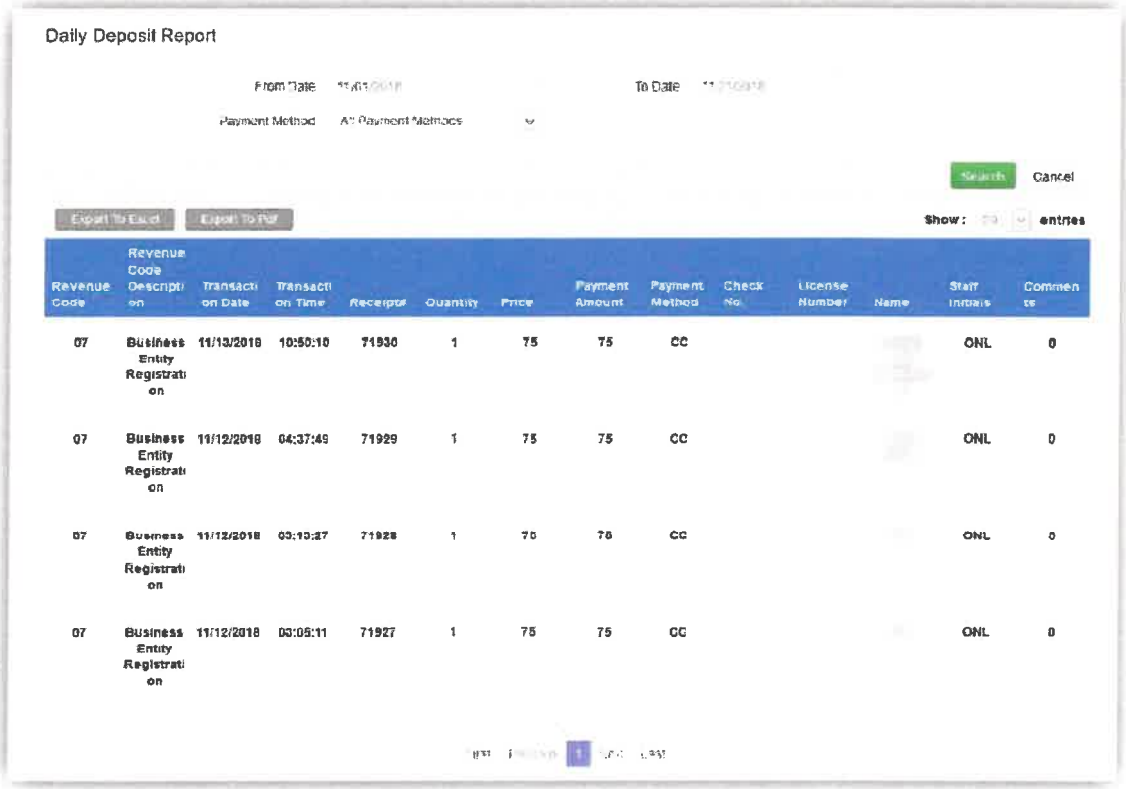


Figure 60: Individual Financial Details

Financial management functions and processes allow for daily, weekly, monthly, and yearly reporting at various levels. In addition, it encompasses the reporting characteristics required to support the ongoing monitoring, audit, and management of the various units. For instance, in the new system, there can be a built-in report called the Daily Deposit Report. When selected from the Reports menu, as shown in Figure 62: Daily Deposit Report Criteria below, this report first prompts for a From Date and then for a To Date-it will select only transactions that occurred during that window of time. The report lastly prompts for the Payment Method:

Figure 61: Daily Deposit Report Criteria

When the report is run, it will list all transactions that occurred during the defined time, even if that transaction took place just seconds before hitting the 'Search' button. For example, in the following figure, we selected a date range (11/1/2018 through 11/21/2018) and selected All Payment Methods to display. The results of that search are shown at the bottom of the page in that figure. Additionally, the figure shows that the information may be exported to either Excel or to a PDF.



Revenue Code	Revenue Code Description	Transaction Date	Transaction Time	Receipt#	Quantity	Price	Payment Amount	Payment Method	Check No.	License Number	Name	Staff Initials	Comments
07	Business Entity Registration	11/13/2018	10:50:16	71930	1	75	75	CC				ONL	0
07	Business Entity Registration	11/12/2018	04:37:49	71929	1	75	75	CC				ONL	0
07	Business Entity Registration	11/12/2018	03:15:27	71928	1	75	75	CC				ONL	0
07	Business Entity Registration	11/12/2018	03:05:11	71927	1	75	75	CC				ONL	0

Figure 62: Daily Deposit Report Results

WVDOA System Maintenance

The proposed software solution will provide WVDOA staff with an easy way to implement small (& large) changes to program systems without custom development, additional programming, time or costs. i3 Verticals takes pride in how the usability, configuration and development of our solution continually improves and is influenced by the latest software standards, technological improvements, and our clients' input and feedback. In many cases, our clients' users become so proficient in the use and configuration of the application that training is minimized or in some cases eliminated due to the inherent intuitive nature of the software solution they are exposed to and work with during the implementation process.

i3 Verticals software solution has evolved into a user-friendly, efficient and flexible solution, enabling our clients to effectively peRFQrm and optimally automate their regulatory activities while empowering them to make changes to the system, such as business rules, correspondence templates, reports, screens and more, via the user interface without custom development or programming to accommodate.

We have developed our solution anticipating change and to empower our clients to easily adapt their system. Whether it is updating templates to reflect new regulations in advance of effective dates, changing a fee amount, adding a new certification type, or case management process changes, i3 Verticals trains and empowers clients to adapt their systems without custom programming.

i3 Verticals will provide training for WVDOA OIS in the new system as well as training Administrators where all the tasks identified under the Administration tab are discussed in detail. Some highlights of user System Maintenance are shown in the figure below and to the right include:

- User Management-this is where user accounts can be inactivated when staff leaves, where passwords can be reset, etc.
- Template Message-This is where email and SMS (TXT) message templates are managed in the system. Staff can change messages being sent to licensees without assistance from i3 Verticals.
- Content Management-This allows clients to manage the content in their Application and Renewal forms without assistance from i3 Verticals. Staff can make changes in minutes which are reflected immediately when licensees or applicants open new or renewal applications.
- Configuration-Here staff can manage several system values themselves without assistance from i3 Verticals. This includes the number of days prior to expiration that a licensee can renew.
- Reference Table-This is where staff can manage all drop-down screens without assistance from i3 Verticals.
- Secure Communication-This feature allows our clients to communicate directly with licensees and/or applicants, all of which occurs within the system.

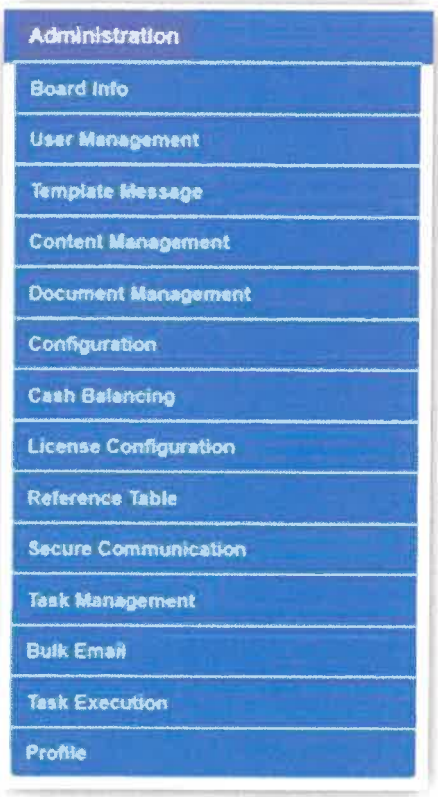


Figure 63: Administration Menu

- Task Management & Execution-This allows clients to create a message they wish to share (via email) to a select group of individuals within the database (task definition) and schedule when that task is to be run. Task Execution allows staff to see the results of the job and provides a list of individuals selected from the database by the task being run.
- Bulk Email-allows staff to define criteria to select individuals from the database and create the email message that will be sent to all those individuals.

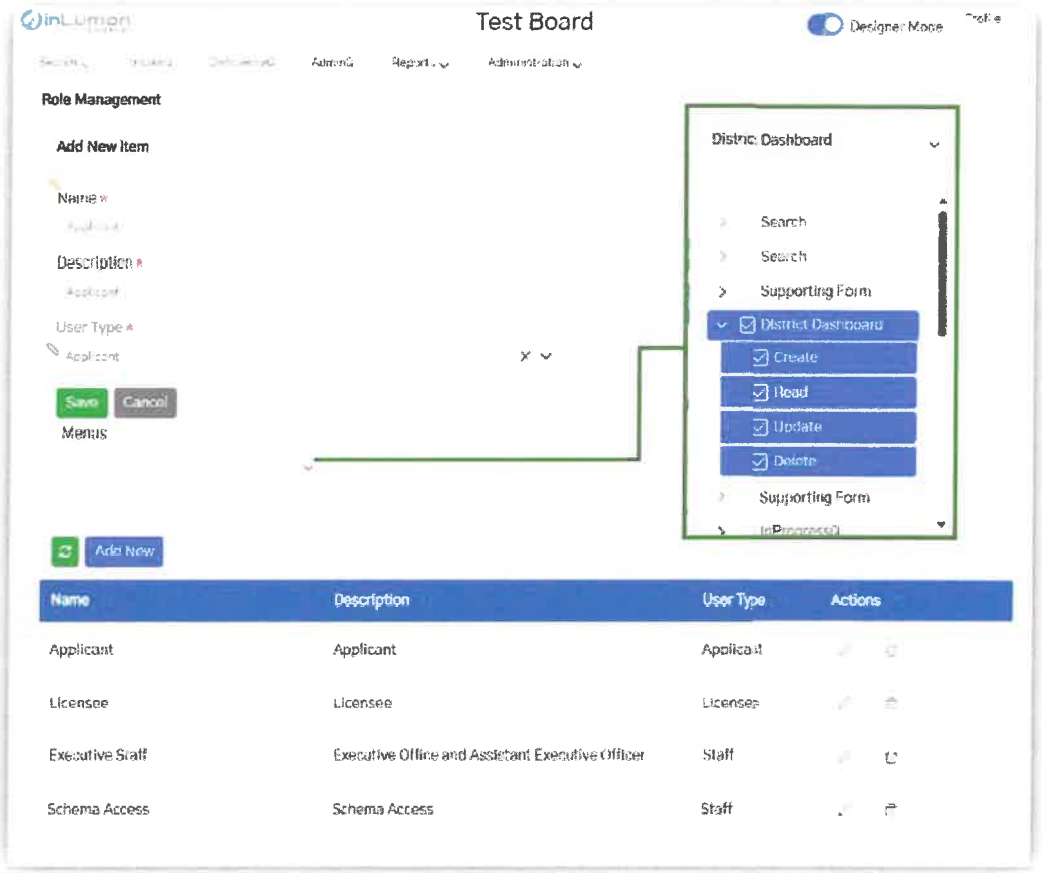


Figure 64: User Management

User Management

The above figure depicts a User Roles Management menu within the Administration menu of a system. Note the different groups (i.e. Staff, Applicant, School, etc.) and the configured user roles within each group. From this screen, WVDOA OIS can create, edit and change role permissions to create, update, delete and/or read objects within the system.

Below is an example of how role-based user security is defined and assigned in the system. The i3 Verticals Software Solution was designed to be as fully client configurable as possible. We firmly believe that all content in the system, including applications for licensure or renewal, should be managed by the agency without ongoing customization. The software solution enables our clients' "super-user(s)" to easily adapt their system by implementing small (& large) changes to their system without custom development, additional programming, time, or costs.

Figure 65: Role Management

The WVDOA staff will optimize the programs' regulatory activities by making changes to the system, such as business rules, correspondence templates, reports, screens and more, via the user interface without custom development or programming to accommodate.

Scalability

i3 Verticals highly configurable core platform can be configured to meet the needs of the State today and well into the future. The solution can be configured in a multi-tenant environment which will allow easy addition of new regulatory programs and functionality over time with configuration. This scalability allows the State and boards to add new license types/ application types/ make changes to existing easily using core configurations features.

i3 Verticals hosting infrastructure is also scalable. i3 Verticals hosting provider Azure had auto-scale feature. The auto-scale feature allows i3 Verticals to scale services up or out based on pre-configured criteria. Scale up, or vertical scaling, is when an instance size is increased or decreased. Scale out, or horizontal scaling is when multiple instances are created in line with the original instance.

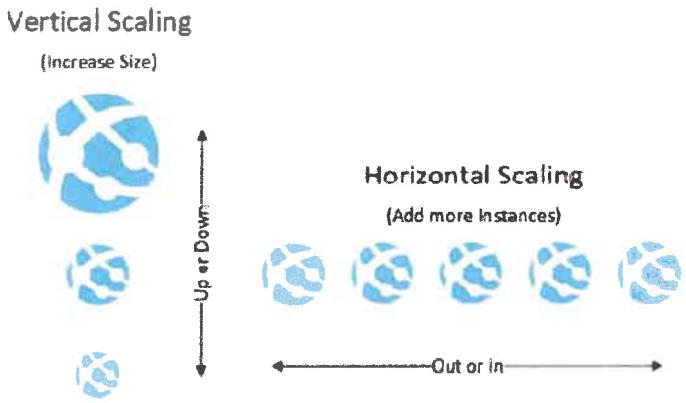


Figure 75: Scaling

4.2.1. Goals and Objectives -The project goals and objectives are listed below.

4.2.1.1 Vendors should provide a methodology and explain in detail how they would develop and create a user-friendly dashboard interface with public-facing. and internal agency components as a One-Stop-Shop Permitting Portal.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

4.2.1.2 Vendors should describe how they would implement a flexible and secure Role-Based Access Control system.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

4.2.1.3 Vendors should explain how they will design a user-friendly. and responsive interface that tracks applications through the approval process and the ability to apply for additional permits or other licenses as needed.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

4.2.1.4 Vendors should describe how the solution assists public users through the application process. i3 Verticals should implement an intelligent. interactive assistant (AI) or automated tool embedded within the public dashboard.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our solution is designed to provide public users—applicants, licensees, and permit holders—with a streamlined, intuitive, and supportive experience throughout the entire application process. To accomplish this, the platform includes an **embedded intelligent, interactive assistant** that guides users step-by-step, reduces errors, and improves overall completion rates.

AI-Enhanced Public User Guidance

The platform incorporates an **AI-powered virtual assistant**, integrated directly into the public dashboard, that provides:

- **Step-by-step guidance** on choosing the correct license, permit, or application type
- **Interactive question-and-answer support**, using natural language queries
- **Real-time explanations** for fields, document requirements, and eligibility criteria
- **Proactive prompts** if users appear stuck, confused, or inactive
- **Smart suggestions** (e.g., "Based on your answers, you may also need…")

This reduces help desk calls, eliminates user frustration, and accelerates application completion.

Dynamic, Context-Aware Application Assistance

The assistant adapts based on user inputs:

- If the user selects an incorrect option, the assistant provides clarifying questions and redirects them.
- If the applicant omits required information, the assistant surfaces the missing items dynamically.
- If documents need to be uploaded, the system explains accepted formats and provides examples.

This ensures applicants receive fully personalized guidance without needing agency staff intervention.

Embedded Support Tools

In addition to the AI assistant, the public dashboard includes:

- **Interactive tooltips**, hover-text explanations, and inline help icons
- **Auto-validation** of data (e.g., address verification, document completeness checks)
- **Logical branching workflows**, ensuring users see only the questions relevant to their application
- **Mobile-optimized UI**, ensuring guidance works seamlessly on phones and tablets
- **Pre-check eligibility wizards**, reducing unnecessary submissions

These intelligent features ensure consistent, error-free submissions.

Multilingual and Accessibility Features

The assistant supports:

- Multiple languages where required
- Screen readers, keyboard navigation, high contrast modes (WCAG 2.1 compliant)
- Plain-language explanations to improve comprehension
- Adaptive screen layouts for accessibility tools and mobile devices

This makes the application process equitable and accessible for all users.

Tracking, Transparency, and Follow-Up

Throughout the process, the assistant helps users:

- Review incomplete sections
- Track outstanding tasks and missing documents
- Understand processing timelines
- Receive automated notifications or reminders
- Respond to deficiency requests

Public users always know their progress and next steps.

4.2.1.5 Vendors should explain how the solution would implement a dynamic and transparent tracking system within the public dashboard that would provide public users with up-to-date visibility into the status and progress of their applications throughout the approval workflow.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our solution includes a **real-time, dynamic tracking system** built directly into the public user dashboard, ensuring applicants have clear, continuous visibility into the progress of their applications at every stage of the approval workflow. This eliminates uncertainty, reduces support requests, and improves user confidence in the permitting process.

Real-Time Status Updates

The dashboard displays the **current status** of the application with automatic updates triggered whenever an action occurs, such as:

- Submission received
- Initial review underway
- Additional information requested
- Payment completed or pending
- Inspection scheduled or completed
- Final approval or denial

Users always see the most current information without refreshing or contacting the agency.

Visual Workflow Timeline

The platform presents a clear, visual representation of the application lifecycle using:

- Progress bars
- Step-by-step timelines
- Milestone indicators
- Icons that display completed, active, and upcoming tasks

This gives applicants a transparent, easy-to-understand view of where they are in the process and what remains.

Detailed Step Descriptions

Each workflow step includes:

- A brief description of what the agency is doing
- Estimated time frames (when applicable)
- Requirements for completion
- Any pending actions or documents needed from the user

This ensures users understand why each stage matters and what happens behind the scenes.

User-Specific Action Center

The dashboard includes an **action center** summarizing outstanding tasks such as:

- Missing or incorrect documents
- Pending payments
- Required forms
- Messages or requests from agency reviewers
- Scheduled inspections or hearings

Users can click directly into each item to complete tasks quickly.

Automated Notifications and Alerts

The system automatically sends alerts to keep users informed, such as:

- Application submitted
- Next step initiated
- Deficiency or missing information
- Approval/denial decision
- Inspection date/time updates
- Renewal reminders

Notifications can be delivered via email, SMS, or in-dashboard alerts.

Document and Communication History

Users have access to:

- A complete log of all uploaded documents
- Copies of agency correspondence
- A chronological timeline of actions taken by both the agency and the applicant

- Downloadable receipts and notices

This maintains full transparency and reduces follow-up requests.

Mobile-Friendly Tracking
All dashboard features—including tracking, notifications, action items, and document review—are optimized for smartphones and tablets, ensuring that users can monitor application progress at any time.

Secure Access and Privacy Protection
The tracking system:

- Displays only information authorized for the user
- Masks sensitive data
- Protects workflow information with secure authentication
- Ensures compliance with privacy laws and state IT security policies

4.2.1.6 Vendors should explain how the solution will implement a robust session management and draft-saving system for mid-process applications.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our solution includes a **comprehensive, secure session management framework** combined with an **intelligent draft-saving system** that ensures applicants can start, pause, and resume applications without losing progress. This reduces user frustration, supports longer or multi-step applications, and aligns with modern usability best practices.

Session Management

Secure, State-Aware Sessions
The system uses secure session tokens to maintain continuity as users move through the application. Sessions are:

- **Authenticated and encrypted** to prevent unauthorized access
- **Time-bound** with agency-configurable timeout settings
- **Stateful**, meaning progress is preserved even when switching between devices or browser tabs

Session security follows industry standards, including automatic invalidation after logout or extended inactivity.

Graceful Timeout Experience
When a user's session nears timeout:

- A **warning notification** appears giving the option to extend the session
- If no action is taken, the session closes safely
- The user's work is preserved so nothing is lost

This prevents data loss and protects sensitive information.

Draft-Saving Capability
Automatic Draft Saving
The system automatically saves application progress as a draft at key intervals, including:

- After each form entry
- When navigating between sections
- During document uploads
- When saving after partial completion of a step

This eliminates the need for users to remember to manually save their progress.

Manual Save Option
In addition to autosave, the platform offers a clear **"Save as Draft"** button so users can intentionally pause the process at any point.

Resume-On-Demand
Users can log in at any time and resume their application from the exact point where they left off. The dashboard displays:

- In-progress applications
- Percentage of completion
- Outstanding requirements
- Next recommended step

This helps users complete applications on their schedule.

Multi-Device Continuity
Because draft data and session states are stored securely in the backend—not locally on the user's machine—the applicant can:

- Start an application on a laptop
- Continue on a tablet or mobile phone
- Finish on another device entirely

This supports modern, mobile-first usage patterns.

Version Control and Data Integrity
The draft-saving system protects data using:

- **Transactional saving**, ensuring no partial or corrupted data
- **Versioning**, so changes are not overwritten incorrectly
- **Field-level validation**, catching errors early
- **Integrity checks**, ensuring drafts always open correctly

This ensures reliable, error-free draft recovery every time.

Draft Expiration and Cleanup Rules
Administrators may configure:

- How long drafts remain active
- Automatic reminders to users about incomplete applications
- Purging of stale drafts after a defined retention period

This keeps the system organized and compliant with records policies.

User-Friendly Draft Experience
The platform is designed so that draft-saving is invisible to users:

- A **draft badge** appears in the dashboard
- Users can rename drafts for clarity
- The system displays which sections are complete and which require attention
- The application wizard visually guides users to resume progress

This improves completion rates and reduces abandonment.

Security and Compliance
All session and draft data are protected with:

- Encrypted storage
- Time-based token validation
- Secure cookie flags
- MFA-backed reauthentication for sensitive steps (e.g., payment)
- Compliance with privacy, retention, and state IT security standards

The system ensures users' work is preserved without compromising data security.

4.2.1.7 Vendors should describe how the solution implements a transparent and dynamic time-tracking module within the public dashboard.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our solution includes a **dynamic time-tracking module** embedded directly in the public dashboard, giving applicants complete visibility into how long each stage of their application may take and how long it has been in progress. This promotes transparency, manages user expectations, and reduces support inquiries.

Real-Time Display of Processing Timelines

The public dashboard presents a clear breakdown of the application's timing information, including:

Current Step Duration

- Displays how long the application has been in the current review stage
- Updates automatically as agency staff take actions
- Shows indicators such as "Under Review – Day 3 of 7 Expected Days"

Overall Processing Timeline

- A visual timeline from submission to final decision
- Time spent on completed steps
- Estimated time remaining based on configurable SLAs or historical averages

This ensures applicants understand where delays may occur and why.

Milestone-Based Time Tracking

Each major workflow step—such as intake, completeness review, fee payment, inspections, or final adjudication—includes:

- **Start and end timestamps**
- **Actual vs. expected processing duration**
- **Green/yellow/red indicators** to signal whether each phase is on track

This increases trust and makes the permitting process more predictable and transparent.

Dynamic Adjustment Based on Agency Actions

The time-tracking module updates instantly when:

- Agency reviewers complete or advance a workflow step

- A deficiency request is issued
- An inspection is scheduled or completed
- The applicant responds to a request
- Additional documentation is submitted

This dynamic behavior ensures that timelines remain accurate and reflect real-world progress.

Public-Friendly Visual Indicators

To make timing information easy to understand, the module uses visual elements such as:

- Progress bars
- Color-coded timelines
- Percentage completion indicators
- Icons marking submitted, in progress, paused, or completed stages
- Tooltips explaining expected durations and next steps

These visual elements allow people of all technical skill levels to quickly understand their status.

Expected vs. Actual Time Comparison

When appropriate, the dashboard can show:

- **Estimated SLA-based timeframes** for each step (e.g., "Typically reviewed in 3–5 business days")
- **Current processing duration** ("Your application is on Day 2 of Review")
- **Delay indicators** if the application is pending longer than expected

This helps manage expectations and increases transparency into agency workflows.

Time-Tracking for Applicant-Driven Actions

The system also tracks time related to tasks assigned to the applicant, such as:

- Document submissions
- Payment completion
- Responses to deficiency notices
- Scheduling inspections or hearings

Applicants can see:

- How long each item has been pending
- How delays on their end may affect the overall process
- When responses are required to avoid expiration

This encourages proactive completion and reduces abandoned applications.

Notifications and Reminders Based on Timelines

The time-tracking module integrates with automated alerts for:

- Approaching deadlines
- Overdue applicant tasks
- Extensions or timeline updates
- Notification when a delayed step resumes progress

Notifications can be sent via email, SMS, and dashboard alerts.

Mobile-Optimized Time Tracking

All timeline and time-tracking visualizations are fully responsive, allowing:

- Mobile-friendly progress bars
- Scrolling time charts
- Touch-optimized milestone views

Public users can track timing information anytime, anywhere.

Security and Compliance

The time-tracking module respects privacy and legal requirements through:

- Role-based access to timing details
- Masking of internal agency comments or reviewer actions
- Compliance with public records and state transparency mandates

Only timing-related data appropriate for public users is displayed.

4.2.1.8 Vendors should explain how the proposed solution implements a mobile-friendly, offline-capable inspection module that allows field inspectors to work seamlessly without network connectivity. then queue those for automatic upload once connected to a network.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our proposed solution includes a fully mobile-friendly, offline-capable Inspection Module designed specifically for field environments where network connectivity may be intermittent or unavailable. The module supports seamless inspection workflows on tablets, laptops, or mobile devices and ensures that inspectors can complete all required tasks without disruption.

1. Mobile-Responsive Interface

- The Inspection Module is built with a responsive web framework that automatically adapts to any screen size (tablet, mobile phone, or laptop).

Notifications and Reminders Based on Timelines

The time-tracking module integrates with automated alerts for:

- Approaching deadlines
- Overdue applicant tasks
- Extensions or timeline updates
- Notification when a delayed step resumes progress

Notifications can be sent via email, SMS, and dashboard alerts.

Mobile-Optimized Time Tracking

All timeline and time-tracking visualizations are fully responsive, allowing:

- Mobile-friendly progress bars
- Scrolling time charts
- Touch-optimized milestone views

Public users can track timing information anytime, anywhere.

Security and Compliance

The time-tracking module respects privacy and legal requirements through:

- Role-based access to timing details
- Masking of internal agency comments or reviewer actions
- Compliance with public records and state transparency mandates

Only timing-related data appropriate for public users is displayed.

4.2.1.8 Vendors should explain how the proposed solution implements a mobile-friendly, offline-capable inspection module that allows field inspectors to work seamlessly without network connectivity, then queue those for automatic upload once connected to a network.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our proposed solution includes a fully mobile-friendly, offline-capable Inspection Module designed specifically for field environments where network connectivity may be intermittent or unavailable. The module supports seamless inspection workflows on tablets, laptops, or mobile devices and ensures that inspectors can complete all required tasks without disruption.

1. Mobile-Responsive Interface

- The Inspection Module is built with a responsive web framework that automatically adapts to any screen size (tablet, mobile phone, or laptop).

- Inspectors can access forms, checklists, location data, attachments, and prior inspection history in a clean, simplified interface optimized for field use.
- All core inspection functions (viewing violations, taking notes, reviewing license data, capturing photos, signatures, etc.) are fully available on mobile devices.

2. Full Offline Functionality
   - The module uses secure local storage to support full offline operation.
   - Inspectors can:
     - Start new inspections
     - Access assigned inspections
     - Enter findings and notes
     - Capture photos and videos
     - Record GPS coordinates
     - Complete checklists and violation codes
     - Add attachments and signatures
       — entirely without an active internet connection.
   - No functionality requires an online session once the inspection has been downloaded.
3. Smart Synchronization and Automatic Upload
   - When network connectivity is restored (Wi-Fi or mobile data), the system automatically:
     - Queues all offline inspections
     - Validates data
     - Syncs changes with the central database
     - Uploads attachments and media in the background
   - Inspectors do not need to take any manual action. The system handles conflict resolution, version control, and confirmation of successful uploads.
   - The sync engine is built to prevent duplicate uploads and ensures data integrity across devices.
4. Secure Local Storage and Data Protection
   - All offline data is encrypted at rest to comply with state security requirements and NIST recommendations.
   - Authentication tokens and access permissions remain enforced even when offline.
   - Only inspections assigned to the inspector—or those the user has explicit permission for—are downloaded to the device.
5. Configurable for WV One Stop Requirements
   - The offline inspection forms are fully configurable based on West Virginia's regulatory rules, inspection types, checklists, workflows, and data fields.
   - New forms or modified checklist items can be published by administrators and automatically pushed to inspectors' devices.

6. Proven Implementation

- The same inspection framework is currently deployed with other state agencies (e.g., agriculture, professional licensing), where inspectors routinely operate in remote areas without connectivity.

4.2.1.9 Vendors should explain how the solution is accessible with mobile devices for both public and agency users. the system should be designed with an approach that ensures full functionality, usability, and performance across mobile devices such as smartphones andtablets.

Our proposed licensing and permitting solution is fully mobile-responsive and designed to deliver complete functionality, usability, and high performance across all major mobile devices—including smartphones and tablets—for both public users (applicants, licensees) and agency staff.

1. Mobile-Responsive Design for All User Groups

- The platform is built using a responsive UI framework that automatically adapts to the screen size and orientation of any device (iOS, Android, Windows, tablets, smartphones, and hybrid devices).
- No mobile app download is required; all features are accessible directly through mobile browsers.
- Both public and staff users receive a consistent, intuitive interface that looks and performs like a native mobile application.

2. Full Functionality on Mobile Devices

All major features are fully supported on mobile devices without limitation, including:

For Public Users (Applicants and Licensees)

- Create accounts and log in using mobile-friendly authentication
- Submit new license or permit applications
- Upload documents and photos directly from the phone's camera or gallery
- Complete renewal applications and pay fees using mobile-optimized payment workflows
- Receive notifications and review status updates in real time
- Respond to deficiency requests and upload missing items

For Agency Users (Staff)

- Review and process applications
- Manage tasks, workflows, and checklists
- Approve/deny applications or request additional information
- Access dashboards, reports, and messages
- Perform inspections using mobile devices (including offline capability if requested elsewhere in the RFP)

All screens, forms, tables, dashboards, and workflows are optimized for touch input and responsive layouts.

3. High Performance on Mobile Browsers

- The platform uses lightweight components and modern APIs to minimize data loads and maximize responsiveness on mobile networks.
- Lazy loading, compressed assets, and optimized rendering ensure fast pages even on slower connections.
- Media uploads automatically compress for efficient mobile performance.

4. Accessibility and Compliance

- The system meets WCAG 2.1 AA accessibility standards across all device types.
- Text resizing, proper color contrast, keyboard/tab navigation, and screen-reader compatibility are fully supported on mobile devices.
- All mobile interactions maintain ADA and Section 508 compliance.

5. No Functional Degradation Between Desktop and Mobile

- All features available on the desktop are available on mobile devices.
- There is no "read-only" mobile mode; mobile users can complete all actions, including submitting applications, payments, inspections, approvals, and renewals.
- The system is tested across a wide range of screen sizes and mobile operating systems to ensure consistent behavior.

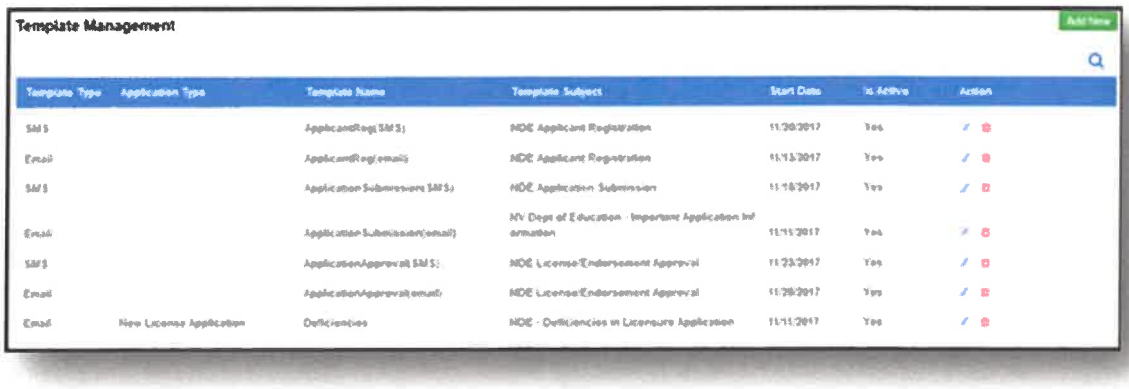
6. Configurable for WV One Stop Requirements

- Mobile layouts, application forms, custom fields, checklists, and workflows can all be configured to align with West Virginia's specific licensing and permitting requirements.
- Agency administrators can publish updates, which automatically appear on all mobile devices without requiring a separate app update.

4.2.1.10 Vendors should describe how the solution implements a flexible and user-controlled notification system. The system should allow users to be able to sign up for and receive workflow notifications throughout the process through email, mobile phone, or both as the individual chooses.

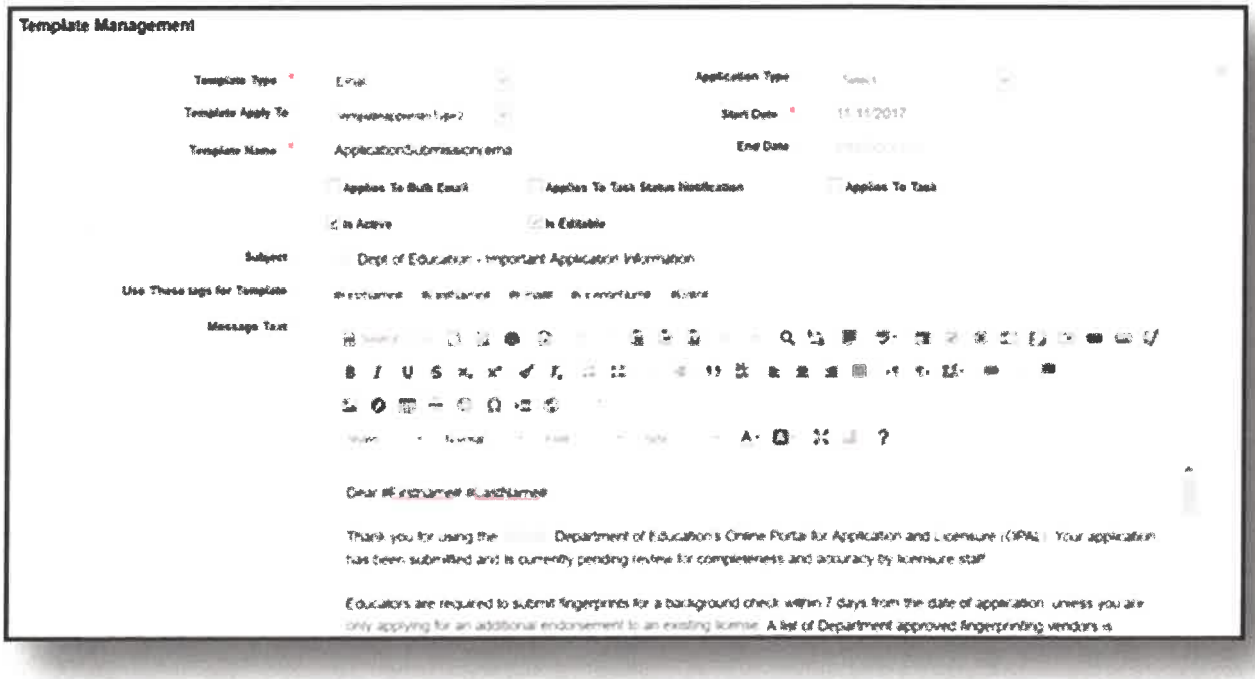
Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements

Letter, email, and SMS message 'templates' are managed within the Template Management feature of the system. This allows "super-user(s)" to quickly update correspondence templates that are automatically generated and delivered by the system. In addition, advance templates can be created and a 'start date' specified for when the template will first be used. *An example of Template Management is provided below:*



Template Management

Staff can simply click on the 'Edit' icon in the Action column to update any template. A partial screen of this email template is shown in the figure below. What is not shown is a preview screen for the template as well as the 'Save' and 'Cancel' buttons at the bottom of the screen.



Template Management Configuration

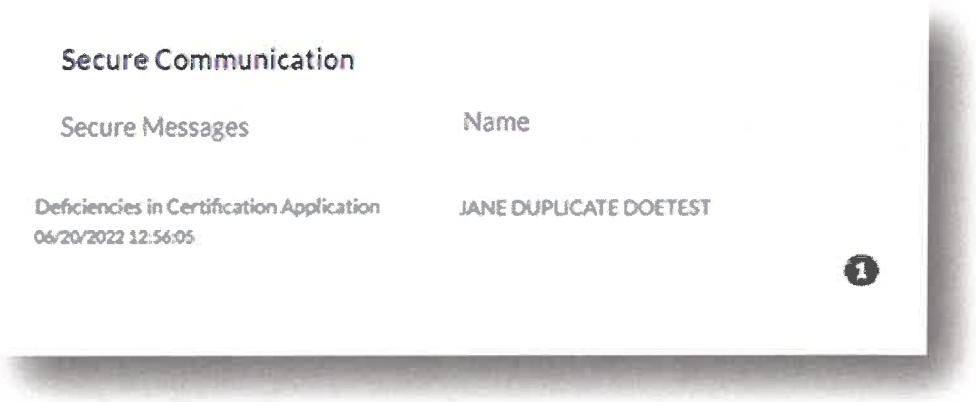
i3 Verticals plans to work closely with WVOT to train staff on how these templates are managed.

- The system can be configured to generate and send automated correspondence, triggered by business rules established during the configuration process. Those rules

can be to send correspondence upon completion of a certain step in the process when a license is about to expire, and more. Automated correspondence is highly configurable.

- Applicants/licensees can view their correspondence, and back-office users can view correspondence sent to applicants/licensees, depending on their security role. Custom correspondence can also be generated by back-office users to be sent to one or many applicants/licensees.
- If there is communication for the applicant/licensee, they will see a notification in the Secure Communication section.

The notification will look like the image below.



Secure Communication

- The applicant/licensee clicks on the notification to open the message. The message will open along with an entry field for the applicant/licensee to respond to the message

Below is a sample message. In this instance, the applicant had incomplete or missing items in their application.

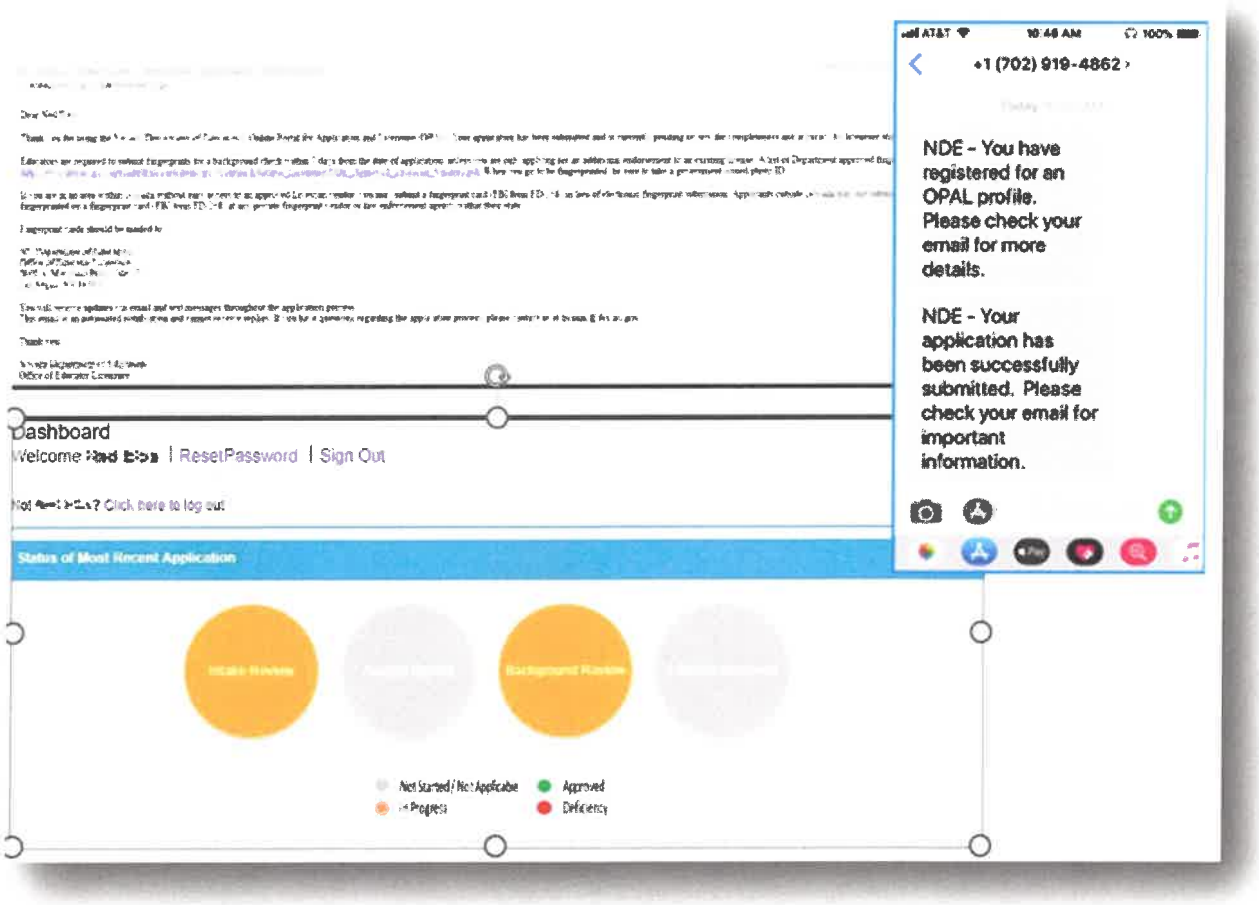
Secure Communication

- The entry field at the bottom of the message allows the applicant/licensee to respond directly to the message. Their response will show up on the dashboard of the back-office user who sent the message initially sent the message. The back-office user can see their reply and respond as necessary.

The image below shows the Secure Communication portal from the perspective of a back-office user.

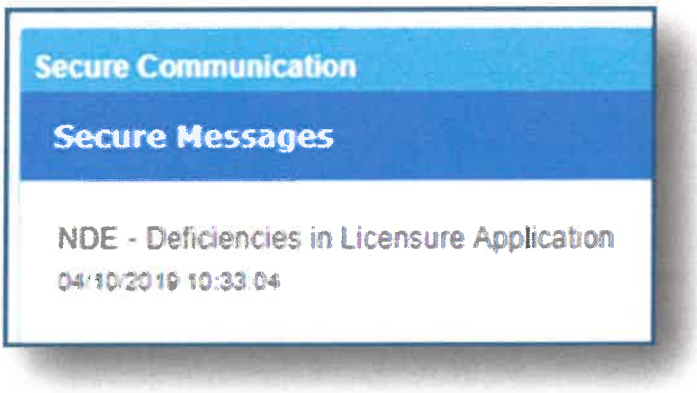
Secure Communication Portal

Notifications and alerts can be automatically sent to an individual Licensee or Applicant as their application moves through the application submission, review and outcome portions of the application workflow as well as the status of background checks. This provides real-time information to the Licensee/Applicant about their application.



Notification and Alarms Configuration

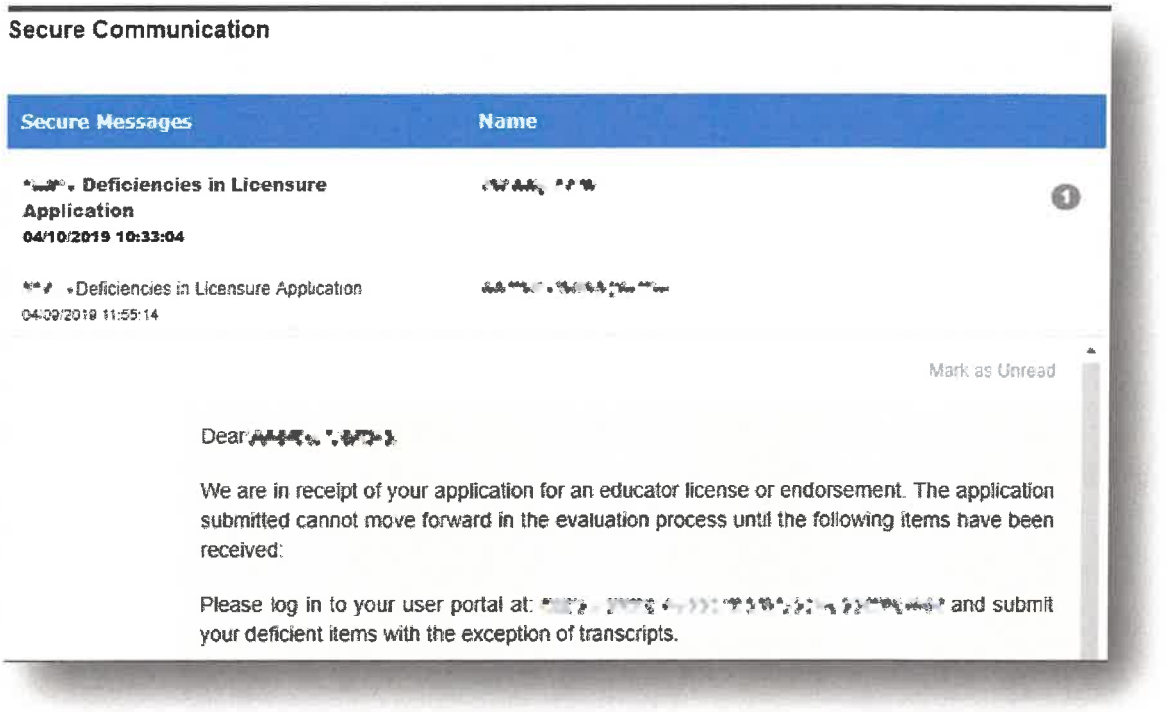
Additionally, our Secure Communications capability allows confidential communications to take place between agency staff and other stakeholders within the system. This is similar to secure communications used within the banking industry.



Secure Communication

For example, if an application is deemed to be deficient, a secure communication is sent to the Applicant/Licensee, which then appears on their dashboard. The individual is notified of secure communication by email and/or text. All secure messages are stored under the User context (Licensee or Applicant) on the Correspondence tab.

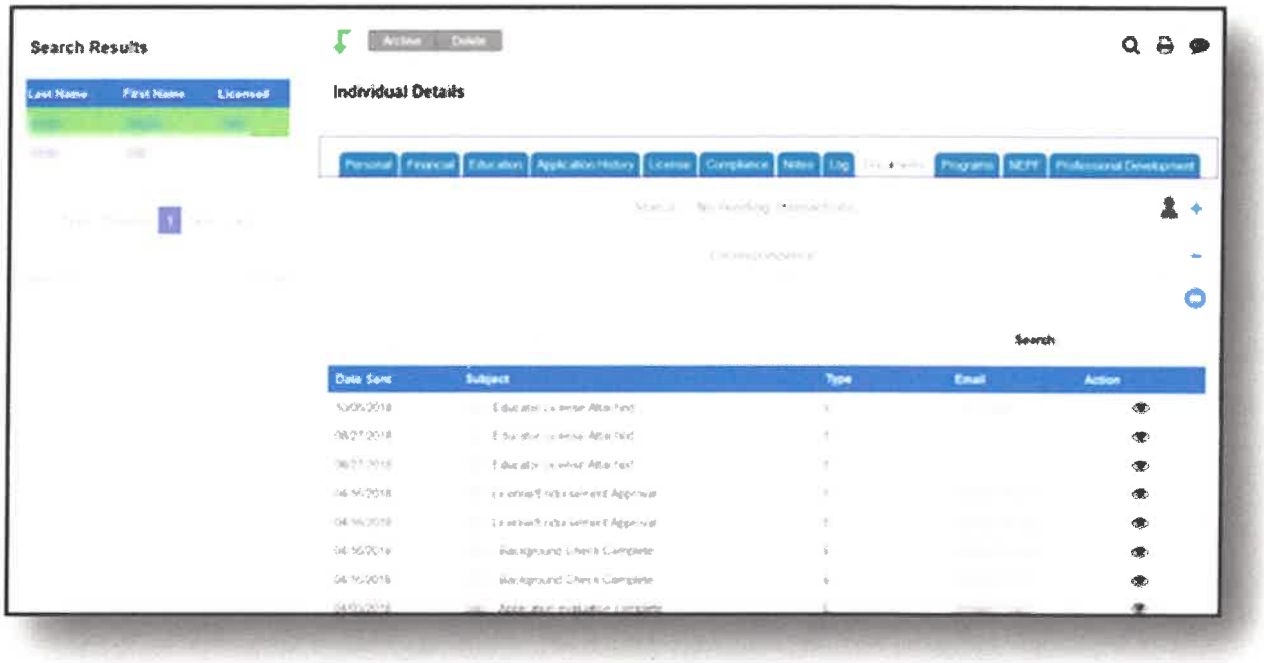
Communications to West Virginia Office of TechnologyStaff appear on the staff member portal, enabling the exchange of messages. Correspondence is tracked, logged, and recorded in the system, providing the agency with a complete, auditable record of communications to/from staff.



Secure Messages

Communication to/from Applicants/Licensees (individuals) and businesses are stored in the system under the entity's unique record. For example, all communication to/from an individual can be viewed via Individual Info, Documents tab, in the Correspondence region of the record. System-generated and tracked Emails (type 'E') as well as SMS (TXT) messages (type 'S') are listed in reverse chronological order. The exact contents of that communication can be viewed by clicking on the action icon on a line item.

An example of how this list appears is shown below:



Secure Messages individual details

4.2.1.11 Vendors should explain how the solution includes a flexible, secure, and user-friendly form and document management module with the ability to upload documents or create fillable forms for certain permits as needed.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

Our solution includes a **comprehensive, configurable form and document management module** designed to support a wide range of permitting, licensing, and regulatory workflows. The module allows agencies to create, manage, and update all forms and required documentation while giving public users a seamless, intuitive experience for completing and submitting information.

Flexible Form Creation and Customization

Low-Code/No-Code Form Builder

The platform features a configurable form builder that enables agency staff (without coding knowledge) to:

- Create new permit or application forms
- Modify existing forms
- Add, remove, or rearrange fields
- Define conditional logic and branching questions

- Create repeating sections or dynamic tables
- Build multi-step wizards for lengthy applications

Form changes can be previewed before publishing and activated without system downtime.

Conditional Logic and Intelligent Routing

Forms adapt to user inputs through:

- Conditional fields
- Dynamic sections showing or hiding based on eligibility
- Automated routing based on user answers (e.g., directing users to the correct permit type)

This ensures users only see questions relevant to their application.

Secure Document Upload and Management

Intuitive Upload Experience

The system supports a simple, user-friendly interface for uploading required documents:

- Drag-and-drop upload
- Upload from desktop, mobile, tablet, or cloud sources
- Support for common file formats (PDF, JPG, PNG, Word, Excel)
- Inline validation to ensure correct file types and sizes

Users can add comments, descriptions, or notes to uploaded documents for agency reviewers.

Document Categorization and Requirements

Agencies can configure:

- Required vs. optional documents
- Document checklists
- Custom document categories per permit type
- Rules for expiration dates on documents (e.g., certifications, insurance, licenses)

The system clearly guides users through all required uploads.

Versioning and Audit Trails

Each document is stored with:

- Version history
- Upload timestamps
- User identity logs
- Hash-based integrity checks

This ensures compliance, traceability, and alignment with regulatory requirements.

Fillable and Dynamic Forms

Built-In Digital Forms

The solution supports fully digital **fillable forms** eliminating reliance on static PDFs. These forms offer:

- Autosave capability
- Real-time validation
- Digital signatures
- Prefilled data from user profiles or past applications
- Mobile-friendly layouts

PDF Form Support (When Required)

For permits requiring a specific format, the platform can:

- Convert existing PDF forms into fillable online formats
- Preserve regulatory templates while digitizing data entry
- Accept PDF uploads when signature types or statutory forms must remain unchanged

Secure Storage and Access Controls

Encryption

- All documents and form data are encrypted at rest using strong encryption standards (e.g., AES-256).
- All transmissions are encrypted with TLS 1.2+.

Role-Based Access

Agencies can control who sees what:

- Restrict documents to specific reviewer roles
- Mask sensitive data (SSN, financial info, medical data)
- Provide granular permissions for uploading, viewing, editing, or approving

Compliance and Records Retention

The module supports:

- State records retention schedules
- Automated document archiving or purging
- Secure deletion workflows
- Public records request facilitation

User-Friendly Design

Public User Experience

Users benefit from:

- A personalized checklist showing required documents
- Visual indicators showing which items are complete, pending, or missing
- Ability to replace, remove, or update documents
- Real-time validation to prevent incorrect uploads
- A mobile-first interface for capturing images directly from smartphones
- A dashboard showing all forms and documents submitted

Agency User Experience

Agency staff have:

- Centralized document review tools
- Side-by-side view of forms and supporting materials
- Ability to annotate documents or flag issues
- Deficiency issuance workflows connected directly to form fields and document requirements

Integration with Workflow and Approval Processes

Forms and documents connect seamlessly to the permitting workflow:

- Validated forms move directly to initial review
- Incomplete forms trigger automated deficiency notices
- Uploaded documents attach to inspection, adjudication, and enforcement steps
- All content is indexed for reporting and search purposes

This ensures documents and forms are available precisely when the agency needs them.

4.2.1.12 Vendors should demonstrate strategic implementation of the tool for both agencies and public users. vendors should showcase their ability to seamlessly integrate with existing portals and permitting systems while enhancing functionality, accessibility, and user experience.

Our proposed solution ensures that the State retains full ownership of all data tables generated under the Agreement. Powerful fea

Our licensing and permitting platform is designed with a strategic, phased implementation approach that ensures rapid adoption, minimal disruption, and significant enhancements to functionality, accessibility, and user experience for both agency staff and public users. We leverage proven methodologies, integration frameworks, and configuration tools to extend the value of existing systems while modernizing the overall environment.

1. Strategic Implementation Approach for Agencies

We implement the solution through a structured, collaborative process that minimizes operational impact and accelerates time-to-value:

A. Discovery and Alignment

- Conduct detailed sessions with each participating agency to understand current processes, forms, workflows, integrations, and pain points.
- Map existing permitting and licensing procedures to the new configurable framework while preserving agency-specific rules.

B. Configuration-Based Deployment

- Most capabilities are delivered through configuration—not custom code—allowing for fast setup, consistent updates, and lower long-term maintenance.
- Agencies can configure application forms, workflows, document requirements, fee schedules, review processes, inspections, and communication templates through an administrative interface.
- **C. Unified Experience Across Agencies**
- Agencies participate in shared governance while retaining autonomy over their business processes.
- The system supports multi-agency, multi-program operations, enabling each agency to function independently but within a unified statewide platform.

2. Strategic Implementation Approach for Public Users

Our platform is built to streamline the public experience by reducing friction, simplifying complex processes, and maintaining consistency across all participating agencies.

A. Single Entry Point for Applicants

- Public users can access all licensing and permitting services through a unified portal—whether for business registration, professional licensing, permitting, or inspection requests.
- A single user account provides access across agencies, reducing confusion and eliminating redundant data entry.

B. Guided, Mobile-Friendly User Journeys

- Applicants are guided step-by-step through application, renewal, payment, and upload processes.
- Dynamic forms show only the fields relevant to the applicant's license type, improving clarity and reducing completion time.
- All functionality is fully mobile-responsive.

C. Real-Time Tracking and Communication

- Applicants can track application status, receive alerts, and respond to deficiency requests directly through the portal.
- Automated notifications provide transparency and reduce support calls to agencies.

3. Seamless Integration with Existing Portals and Systems

Our solution is built with an integration-first architecture. It enhances—rather than replaces—existing systems where appropriate.

A. Integration with Existing Portals

- The platform can integrate with the WV One Stop Portal or other state-facing websites through APIs, SSO (Single Sign-On), and deep-link routing.

- User experience remains seamless even when multiple systems are in use behind the scenes.

B. Integration with Existing Permitting and Licensing Systems

We support secure integration with:

- Legacy permitting systems
- Payment gateways
- GIS/map services
- Document management systems
- State identity/authentication services
- Financial or ERP systems
- Email/SMS notification platforms
- Data warehouses and reporting tools

Integration methods include RESTful APIs, webhooks, file-based interfaces, and real-time message exchanges.

C. Data Migration and Consolidation

- Our team provides end-to-end data migration services from legacy licensing/permitting databases into the new unified system.
- Migration includes data cleaning, transformation, mapping, validation, and archival as needed.

4. Enhanced Functionality, Accessibility, and User Experience

Our platform significantly elevates usability and accessibility for all stakeholders:

- **WCAG 2.1 AA–compliant interface** for public and staff users
- **Mobile-first design** ensuring full access on smartphones and tablets
- **Intuitive dashboards** tailored for each user role
- **Simplified workflows** that reduce processing times and administrative burden
- **Configurable business rules** to allow rapid change without heavy IT involvement
- **Unified reporting and analytics** across agencies

These enhancements collectively reduce processing delays, improve transparency, and provide a modern, streamlined experience for applicants and agency teams alike.

4.2.1.13 Vendors should demonstrate how their solution would provide effective data security and protection, alongside ongoing support, maintenance, and adjustment of the program and dashboard to meet changing needs.

Our proposed solution is built on a security-first architecture and supported through a comprehensive, long-term maintenance and enhancement framework. We provide robust data protection, continuous monitoring, and proactive updates to ensure the system remains secure, reliable, and aligned with West Virginia's evolving regulatory and operational needs.

1. Enterprise-Level Data Security and Protection

A. Secure Cloud Infrastructure (FedRAMP-Aligned)

- The system is hosted within a highly secure, government-grade cloud environment with built-in redundancy, disaster recovery, and 99.9%+ uptime.
- Infrastructure is continuously patched and monitored to meet modern cybersecurity standards.

B. Encryption of Data

- **Data in Transit:** Fully encrypted using modern TLS protocols.
- **Data at Rest:** Encrypted using AES-256 or equivalent FIPS-validated standards.
- Sensitive documents, attachments, financial data, and PII are encrypted at the file and database level.

C. Identity & Access Controls

- Multi-factor authentication (MFA), role-based access control (RBAC), and least-privilege access enforced across all user groups.
- Agencies can configure and manage roles without vendor intervention.
- SSO integration with state identity providers is supported.

D. Application Security

- Static and dynamic code analysis, vulnerability scanning, and penetration testing performed on a scheduled basis.
- OWASP Top 10 security risks are actively mitigated through secure coding practices.

E. Audit Logging and Monitoring

- Full audit log of all system activity, including logins, updates, approvals, changes, and administrative actions.
- Logs are immutable and exportable for compliance needs.
- Real-time alerts and monitoring help detect misuse or anomalous activity.

F. Compliance and Regulatory Alignment

- System aligns with **NIST 800-53**, **CJIS (if required)**, **WCAG/ADA**, and state/federal privacy guidelines.
- The platform supports secure integration with payment providers that comply with **PCI-DSS** standards.

2. Ongoing Support, Maintenance, and Enhancements

A. Dedicated Support Team

We provide a U.S.-based support team available via phone, email, and ticketing system with defined SLAs for:

- Issue resolution
- Incident response
- Enhancement requests
- Configuration support

Critical issues are addressed 24/7.

B. Continuous System Monitoring

- Automated monitoring of performance, uptime, load, and system health.
- Alerts trigger proactive intervention before users experience service degradation.

C. Regular Updates and Upgrades

- Continuous deployment of patches, security fixes, and performance updates.
- Feature enhancements and new capabilities are released without downtime.
- Agencies receive scheduled release notes and can choose when to enable new features.

D. Scalable Configuration for Changing Needs

The system is designed to evolve with regulatory and operational changes:

- Add or modify license types, workflows, forms, fields, fee schedules, and dashboards through a no-code configuration interface.
- Agencies can update rules without needing software development or vendor rebuilds.
- New agencies or programs can be onboarded using the same configurable framework.

E. Dashboard and Program Adjustments

- Dashboards are fully customizable with widgets, charts, KPIs, and metrics tailored for each agency.
- Agencies can easily modify dashboards to reflect changing priorities, new reporting requirements, workload metrics, or legislative updates.
- I3 Verticals team collaborates with agency stakeholders during periodic review sessions to adjust dashboards and optimize workflows.

F. Long-Term Partnership Model

Our approach is not a one-time implementation; it is an ongoing partnership:

- Quarterly optimization reviews
- Annual strategic planning sessions
- Continuous enhancements driven by agency feedback
- Governance meetings for roadmap alignment

This ensures the WV One Stop platform continues to modernize, scale, and evolve over time.

3. Summary of Key Benefits to West Virginia

- **Strong data protection** through encryption, secure access control, and constant monitoring
- **High system reliability** with cloud redundancy and automated failover
- **Future-proof configurability** to support new license types, rules, and workflows easily
- **Adaptive dashboards** reflecting real-time metrics and changing requirements
- **Dedicated, ongoing support** ensuring long-term operational stability and enhancement

4.2.1.14 Vendors should demonstrate a comprehensive, flexible, and secure approach that supports interoperability, minimizes disruption, and enhances operational efficiency.

Our proposed licensing and permitting platform is designed to deliver a comprehensive and flexible architecture that seamlessly integrates with existing state systems, minimizes operational disruption, and significantly enhances agency efficiency. The solution employs modern interoperability standards, strong security practices, and configuration-driven tools to ensure long-term adaptability and optimal performance for both West Virginia agencies and the public.

1. Comprehensive and Modern Platform Architecture

A. End-to-End Licensing, Permitting, and Inspection Management

Our platform provides a complete suite of capabilities—including applications, renewals, workflows, payments, inspections, enforcement, reporting, and public communications—within a single unified environment.

B. Modular Design

- Agencies can enable only the components they need.
- Additional modules (e.g., inspections, CE tracking, enforcement, GIS, LMS) can be added at any time.
- This allows West Virginia to expand the platform gradually without large-scale system replacements.

2. Flexible, Configuration-Driven Framework

A. No-Code Administrative Tools

Agencies can modify:

- Application forms and fields
- Workflows and review steps
- Fee structures
- Notifications and correspondence
- Dashboards and reports
  —through configuration instead of code changes.

This ensures rapid adoption of new legislative requirements, policy updates, and operational changes without relying on vendor engineering or lengthy development cycles.

B. Supports Multi-Agency Needs

- Each agency maintains its own business rules while sharing a common statewide platform.
- Autonomy and consistency are both preserved.
- Agencies can evolve independently without impacting others.

3. Secure, Interoperable Architecture

A. Standards-Based Integrations

The platform is built on an integration-first architecture using:

- **RESTful APIs**
- **JSON/XML data exchange**
- **Webhooks**
- **SSO and identity-provider integrations**
- **GIS/ESRI connectors**
  This ensures true interoperability with current and future state systems.

B. Seamless Integration with Existing WV Systems

Our solution can integrate with:

- Existing WV One Stop portal or state web properties
- Payment providers (PCI-compliant)
- GIS mapping systems
- Email/SMS delivery services
- Document repositories
- Financial/ERP systems
- Authentication and identity management platforms

Integrations preserve continuity while elevating functionality.

C. Advanced Security Controls

- Encryption at rest (AES-256) and in transit (TLS 1.2+)
- Multi-factor authentication (MFA)
- Role-based access control with least-privilege enforcement
- Continuous vulnerability scanning and patching
- Full audit logging for all system activity
- NIST-aligned security controls and SOC2 processes

Security is embedded at every layer, ensuring data protection and regulatory compliance.

4. Minimizes Disruption Through Strategic Implementation

A. Phased, Low-Risk Deployment

- Begin with discovery and requirements alignment
- Configure the platform using existing workflows as a baseline
- Conduct iterative reviews with agencies for early feedback
- Migrate data in controlled phases
- Roll out by program, agency, or function—minimizing downtime

This structured approach preserves continuity while introducing modernization.

B. Parallel Operation and Data Validation

- The platform can run in parallel with legacy systems during transition.

- Rigorous data validation ensures accuracy and integrity.
- **C. Comprehensive Training and Change Management**
- Training for agency staff, admins, inspectors, and public-facing support teams
- User guides, knowledge base, and video tutorials
- Detailed communication plan to ensure smooth adoption

5. Enhances Operational Efficiency

A. Automated Workflows

- Automated routing, reminders, assignments, and escalations reduce manual work.
- Review times shorten due to structured checklists and standardized processes.

B. Centralized Data and Reporting

- Unified dashboards provide real-time visibility into workload, backlog, license counts, revenue, and KPIs.
- Agencies spend less time searching for information and more time making decisions.

C. Reduction of Redundant Data Entry

- Single user account across all agencies prevents duplication.
- Interconnected modules ensure each piece of data is entered once and used everywhere needed.

D. Mobile-Friendly for Public and Agency Users

- Public users can submit applications and payments via mobile device.
- Inspectors and staff can work in the field with full or offline access.

6. Future-Proof and Scalable

- Scales to support additional agencies, programs, and license types.
- Flexible infrastructure ensures performance even as user volume grows.
- Continuous updates and improvements ensure long-term sustainability.

Summary of Benefits to WV One Stop

- **Comprehensive platform** covering end-to-end licensing, permitting, inspections, and enforcement
- **Flexible, configuration-based architecture** that adapts quickly to changing needs
- **Secure, interoperable system** with modern integrations and compliance controls
- **Minimal disruption** through phased implementation and data-driven migration
- **Significant operational efficiency gains** via automation, improved workflows, and real-time insights

4.2.1.15 Vendors should provide a clear, strategic recommendation regarding integration vs. replacement of existing agency systems, along with a realistic implementation timeline that aligns with the statutory deadline outlined in W.Va. Code §5A-13-I et seq., which mandates full implementation of the One-Stop-Shop Permitting Program by January 1,2027.

Our recommended strategy for West Virginia's One-Stop-Shop Permitting Program is a **hybrid approach** that combines **targeted integration** of high-value existing systems with **strategic replacement** of outdated or non-interoperable systems. This balanced approach minimizes risk, reduces disruption, preserves prior investments, and ensures the state can meet the statutory deadline of **January 1, 2027**, as required under **W. Va. Code §5A-13-1 et seq.**

1. Strategic Recommendation: Integration vs. Replacement

A. Integrate When Systems Are Modern, Supported, and Interoperable

We recommend integration for existing agency systems that meet the following criteria:

- Actively supported and maintained by the agency or vendor
- Provide reliable APIs, data-access interfaces, or export capabilities
- Contain essential historical or transactional data that does not require re-platforming
- Offer specific domain functionality that agencies rely on and prefer to retain

Examples of common integration targets:

- GIS / mapping services
- Payment gateways
- Identity management and authentication platforms
- Financial systems

Benefits of this approach:

- Preserves previous state investments
- Reduces migration effort
- Minimizes operational disruption
- Provides continuity for agency staff and public end users

B. Replace When Systems Are Legacy, Rigid, or Cannot Meet One-Stop Requirements

We recommend replacing existing systems when they exhibit:

- Outdated technology or unsupported software
- Limited configurability that cannot accommodate modern workflows
- Inability to integrate securely with One-Stop statewide infrastructure
- Fragmented user experiences for applicants and licensees
- Manual processes that hinder operational efficiency
- Insufficient mobile functionality
- Security vulnerabilities or lack of compliance with NIST/WCAG/ADA standards

Replacing such systems with our configurable, unified platform enables:

- Consistent statewide experience
- Mobile-friendly workflows for public and agency users
- Streamlined processes and shared data across agencies
- Lower long-term maintenance cost
- Enforcement of modern security controls

C. Unified Platform with Multi-Agency Governance

Even with a mix of integration and replacement, all agencies operate within:

- A *single statewide licensing & permitting framework*
- A *unified public portal*
- A shared authentication model
- A consistent user experience
- A standardized rules engine and workflow platform

This ensures the "One-Stop-Shop" vision is fully realized regardless of the differing technical baselines across agencies.

2. 12-Month Implementation Timeline to Achieve Full Compliance by Jan 1, 2027

The following timeline demonstrates how full implementation can be achieved **within 12 months** by using:

- A **parallel agency onboarding model**
- A **configuration-first deployment approach**
- A **repeatable implementation playbook**
- **Concurrent integration and migration workstreams**

This timeline is structured to meet the statutory mandate **without compromising quality, security, or agency adoption**.

Phase 1 — Mobilization, Discovery & Architecture (Months 1–2)

Jan–Feb 2026

Key Activities

- Establish governance, PMO, and agency implementation teams
- Detailed discovery with all participating agencies (parallel sessions)
- Finalize integration vs. replacement decisions
- Build statewide configuration standards and templates
- Stand up secure cloud environments
- Develop master data migration plan
- Define shared public portal structure

Deliverables

- Approved statewide configuration model
- Agency-by-agency implementation playbook
- Technical integration roadmap
- Detailed project schedule for the remaining 10 months

Phase 2 — Core Platform Configuration & Foundational Integrations (Months 3–5)

Mar–May 2026

Key Activities

- Configure core licensing, permitting, inspections, workflows
- Build unified public portal and mobile-responsive interface
- Implement SSO and identity integrations
- Begin integrations: payments, GIS, document management, notifications
- Create standardized templates for forms, workflows, and dashboards
- Begin test migrations using agency datasets

Deliverables

- Core One-Stop platform operational
- Public portal and key integrations ready
- Test migrations and validation complete
- Standardized agency templates approved

Phase 3 — Parallel Agency Onboarding & Full Data Migration (Months 6–10)

Jun–Oct 2026

This is the critical compression period, made possible by parallel workstreams.

Key Activities

- Onboard agencies in parallel batches (3–6 agencies at a time)
- Configure agency-specific forms, workflows, fees, and dashboards
- Build any agency-specific integrations or replace non-integrable systems
- Execute full data migration loads
- Conduct iterative UAT with agency teams
- Provide training for agency staff and public-facing support personnel

Deliverables

- All agencies configured, tested, and migrated
- Modernized replacement systems operational
- Integrated systems fully connected
- Staff fully trained on the new platform

Phase 4 — Statewide Stabilization, Optimization, and Final Compliance (Months 11–12)

Nov–Dec 2026

Key Activities

- Final statewide end-to-end testing across all agencies
- Performance tuning, security hardening, and accessibility validation
- Load testing and failover tests
- Final dashboard refinements and reporting alignment
- Public release readiness and communication
- Stand up 24/7 go-live support structure for Jan 1, 2027
- Cutover plan executed during final week of December

Deliverables

- Fully operational One-Stop-Shop Permitting Program
- All agencies live and functioning in unified statewide platform
- All integrations validated and stable
- Final compliance package completed

3. Achieving Full Statutory Compliance by Jan 1, 2027

By using a **compressed but realistic 12-month schedule**, the State of West Virginia can confidently achieve:

- Full multi-agency onboarding
- Unified statewide permitting and licensing workflow
- Secure integrations across existing systems
- Complete statutory compliance with **W. Va. Code §5A-13-1 et seq.**
- A mobile-friendly, ADA/WCAG-compliant public experience
- A modern, interoperable, future-ready statewide system

This approach balances **speed**, **quality**, **security**, and **operational continuity**, ensuring a successful implementation within the legislative deadline.

4.2.1.16 Vendors should describe their approach on how to implement a "train-the-trainer" model. i3 Verticals should deliver a structured, scalable training program that equips key agency users with the knowledge, tools, and confidence to train others effectively.

i3 Verticals has developed and executed training for various customers similar to West Virginia Office of Technology. We cater to different training requirements including business products, and application processing. Our training experience is effective and specializes in the following area:

- Computer Based (CBT) and Web-based training (WBTs) for system users
- Instructor-led training (ILTs) for users of the system
- Train-the-Trainer (TTT) training for trainers
- Technical team training (developers and support)
- Systems Administration Training
- Context sensitive online application help modules embedded within the application
- Helpdesk and application support training

As a standard practice, i3 Verticals provides a variety of training materials to effectively transfer knowledge of the concepts and functionalities related to the new system to West Virginia Office of Technology staff, as well as for end users. The following types of training materials will be developed for learning and reference:

- User Manual
- Quick Reference Guide
- Online Help Documents

i3 Verticals also provides other tools and training opportunities to ensure clients have the information and ability to apply knowledge of the new system. In addition to documentation, i3 Verticals produces self-study help videos that provide audio and visual materials for training on specific functions, system utilities, and user-centric topics.

i3 Verticals educates and enables customers to adapt their systems without custom programming. This puts the power and control into the hands of our clients without the need to rely on i3 Verticals programmers to make updates and changes. We provide training for user level staff in the new system as well as training for Administrators.

Our Train-the-Trainer (TtT) program is designed to empower key agency personnel to become **internal experts** capable of training, supporting, and guiding other users across their departments or programs. This approach ensures long-term sustainability, reduces ongoing training costs, and strengthens agency self-sufficiency as more programs and agencies join the One Stop platform.

Structured and Phased Training Approach

Phase 1: Training Needs Assessment

Before training begins, we conduct a comprehensive assessment to understand:

- The number and roles of agency trainers
- Required training formats (administrative, reviewer, inspector, call-center staff, etc.)
- Existing competency levels and learning preferences
- Program-specific workflows or regulatory requirements

This ensures the training content is tailored to agency operations.

Phase 2: Core Train-the-Trainer Program

Hands-On, Role-Based Instruction

Selected agency staff ("super users") receive in-depth training that covers:

- System configuration and administration
- Form and workflow management

- Document handling, approvals, and case management
- Reporting and dashboard creation
- User provisioning and role-based access control
- Troubleshooting common issues

Super users learn not only how to use the system, but how to **teach it to others**.

Instructor Preparation & Facilitation Skills

To ensure trainers can effectively teach their peers, we provide modules on:

- How to deliver training sessions
- Best practices for adult learning
- Creating lesson plans and walkthroughs
- Managing learning styles and pacing
- Handling questions and real-world scenarios
- Structuring hands-on practice sessions

This transforms super users into confident instructors, not just system experts.

Phase 3: Toolkits and Training Materials

Trainers receive a comprehensive **Training Toolkit**, which includes:

- Step-by-step training manuals
- Scenario-based exercises
- User role cheat sheets
- Quick-reference guides
- Printable job aids
- Troubleshooting tips
- Standardized PowerPoint decks for internal training
- Checklists for pre- and post-training preparation

All materials are provided in **editable formats**, allowing agencies to tailor them as needed.

Phase 4: On-Demand Learning & Digital Resources

To support ongoing internal training efforts, the platform includes a digital learning environment featuring:

- Pre-recorded training videos
- Interactive walkthroughs and simulations
- A searchable knowledge base
- Contextual help embedded directly within the system

- "How-to" articles linked to each functional area
- Role-based onboarding paths for new staff

This ensures new users can learn independently or supplement instructor-led training.

Phase 5: Certification of Trainers

Agency trainers may complete a **Trainer Certification Program**, which includes:

- Completion of structured training modules
- Hands-on exercises validating system proficiency
- Delivery of a mock training session monitored by our team
- Formal certification recognizing them as "Agency Trainers"

This creates a reliable network of internal experts across agencies.

Phase 6: Ongoing Support & Continuous Learning

Our support for the Train-the-Trainer model continues after go-live through:

- Refresher workshops
- Quarterly knowledge-share sessions
- Updated training materials for system enhancements
- Access to new learning modules when new features or agencies join
- Office hours or coaching for trainers during early adoption

This approach ensures training scales as the platform grows.

Scalability Across Multiple Agencies

The One Stop initiative is expected to expand over time. Our TtT structure is designed to scale by:

- Establishing a **statewide trainer cohort** across departments
- Standardizing training content while allowing agency-specific modules
- Creating reusable onboarding templates for new agencies
- Supporting centralized and decentralized training delivery models
- Enabling trainers to lead in-person, virtual, or hybrid sessions

This reduces vendor dependency and creates agency-driven sustainability.

Benefits of Our Train-the-Trainer Approach

- Reduced long-term training costs
- Faster onboarding for new hires and new agencies
- Greater adoption and higher user confidence

- Consistent training quality across teams
- Improved knowledge retention
- State ownership of training capabilities

Our structured, well-supported TtT framework ensures that WV agencies retain full operational confidence and can independently maintain user proficiency as the One Stop platform evolves.

4.2.1.17 Vendors should describe how the solution provides a comprehensive, accessible, and self-paced learning platform like on-demand that supports both agency users and constituents after implementation.

Our solution includes a **fully integrated, on-demand learning platform** designed to support ongoing training and long-term self-sufficiency for both agency users and public constituents. This platform provides continuous access to learning materials, step-by-step guidance, and interactive tools—ensuring that users can learn at their own pace, anytime, on any device.

Comprehensive Learning Resources for All User Types
The platform provides a wide range of training materials designed to meet the needs of diverse user groups:
For Agency Users

- Role-based training modules for administrators, reviewers, inspectors, supervisors, and program staff
- Scenario-driven exercises and walkthroughs for real-world workflows
- Advanced modules for system configuration, reporting, and analytics
- Refresher training for new features and updated processes
- Knowledge articles addressing common questions and "how-to" steps
- **For Public Users / Constituents**
- Simple, self-guided tutorials for creating accounts, submitting applications, uploading documents, and making payments
- Step-by-step help for renewals, amendments, inspection scheduling, and deficiency responses
- Plain-language instructions to maximize accessibility and reduce support calls
- Tutorials optimized for mobile devices

This comprehensive library ensures all users—public or agency—can quickly become self-sufficient.

Self-Paced, On-Demand Learning Experience
The learning platform is designed to support flexible, self-directed learning for all users:

- **On-demand video tutorials** available 24/7
- **Interactive, guided walkthroughs** embedded directly into the application
- **Searchable knowledge base**, organized by topic and user role
- **Self-paced learning modules**, allowing users to proceed at their own speed
- **Downloadable user guides** and quick-reference sheets
- **Practice exercises and simulations** for agency users to reinforce learning
- **Bookmarking and progress tracking**, allowing learners to pause and resume at any time

This approach supports varying learning styles and ensures no user is constrained by training schedules.

Accessibility and Inclusiveness
The learning platform is fully designed to meet accessibility standards and ensure equal access for all users:

- Fully compliant with **WCAG 2.1 AA** and **Section 508** accessibility requirements
- Support for screen readers, keyboard navigation, and color contrast rules
- Captioned and transcribed training videos

- Plain language explanations to support all literacy levels
- Mobile-first design to ensure training can be completed on smartphones and tablets

This ensures accessible learning experiences for individuals with disabilities and varying technical skills.

Integrated In-System Help and Contextual Guidance
Training is embedded directly into the platform so users can learn and act simultaneously:

- **Contextual tooltips and help icons** on form fields
- **Guided tours** for newly added features
- **In-app tutorials** triggered when the user accesses specific workflows
- **FAQ panels** directly within dashboards
- **Step-level instructions** displayed alongside application or review forms

Users receive help precisely where and when they need it—reducing frustration and improving adoption.

Continuous Learning Support After Implementation
Our on-demand learning platform is designed for long-term use and remains available beyond go-live:

- Updated training modules every time new features or enhancements are released
- Quarterly refreshers and new content added automatically
- Notifications sent when new or revised materials become available
- A feedback mechanism allowing users to request new training topics
- Centralized updates for all agencies and public users to ensure consistency

This maintains system proficiency throughout the lifecycle of the One Stop platform.

Scalable for Multi-Agency Expansion
As new programs or agencies are onboarded:

- Dedicated learning paths can be created for each agency
- Existing training modules can be repurposed or expanded
- Agency-specific customizations and workflows can be added to the knowledge base
- Trainers and administrators can upload their own reference materials
- Content management tools allow the State to maintain and update training resources independently

This ensures the training platform scales in parallel with the One Stop initiative.

Benefits of the On-Demand Learning Platform

- Reduces dependency on help desks and agency staff
- Supports new employees and constituents without scheduling constraints
- Ensures consistency and quality across all users and agencies
- Promotes long-term adoption and confidence
- Provides a centralized location for all learning and support materials
- Enhances user satisfaction through self-service empowerment

4.2.1.18 The State currently uses Google and Microsoft products for core functions like email, calendar, and meetings. vendors should ensure their solution is compatible and interoperable with these platforms to streamline adoption and maximize productivity.

Our proposed solution is fully compatible with both **Google Workspace** and **Microsoft 365** environments, ensuring seamless adoption by State of West Virginia agencies and maximizing productivity for both internal staff and external users. The platform is designed with an interoperability-first approach, allowing it to integrate naturally with the State's existing communication, collaboration, and productivity tools.

1. Seamless Integration with Microsoft 365

A. Microsoft Outlook (Email & Calendar)

- Email notifications, reminders, approval alerts, and correspondence can be sent through **Microsoft Outlook**.
- Calendar events—such as inspections, hearings, renewal deadlines, and workflow tasks—can be automatically pushed to **Microsoft Outlook Calendars**.
- ICS files are generated for direct add-to-calendar support.

B. Microsoft Teams Integration

- Agency users can launch **Teams meetings** directly from system tasks or communication screens.
- Automated notifications and reminders can be configured to route through Teams channels.
- Support for Teams-based collaboration (e.g., link sharing, document sharing) enhances efficiency.

C. Microsoft SharePoint & OneDrive

- Documents uploaded to the system can be stored in or exported to **SharePoint** or **OneDrive** if desired.
- Secure API- and OAuth-based authentication ensures safe transfer between systems.

D. Microsoft Azure AD / Entra ID

- Single Sign-On (SSO) via **Microsoft Azure AD/Entra ID** is fully supported.
- Role-based access and permissions can be mapped directly to agency identity groups.

2. Seamless Integration with Google Workspace

A. Gmail

- System-generated messaging—status updates, notifications, approvals, deficiency notices—can be sent through **Gmail**.
- DKIM, SPF, and DMARC compliance ensures high deliverability.

B. Google Calendar

- Inspection appointments, hearings, or other scheduled workflows can automatically push to **Google Calendar**.
- Users can subscribe to their personalized calendar feed for real-time updates.

C. Google Meet

- Agency staff can initiate or join **Google Meet** sessions directly from system workflows, tasks, or communication requests.
- Integration ensures inspectors and reviewers can quickly start virtual meetings with applicants or other staff.

D. Google Drive

- Documents (attachments, forms, inspection photos) can be imported from and exported to **Google Drive**.

- OAuth 2.0 ensures secure authentication and file exchange.

3. Productivity-Enhancing Integrations

A. Document Pre-Fill & Export

- Export forms, reports, certificates, and license documents to:
  - **Microsoft Word (DOCX)**
  - **Microsoft Excel (XLSX)**
  - **Google Docs**
  - **Google Sheets**

B. Secure File Storage & Collaboration

- Both Google Drive and SharePoint can be used for:
  - Document storage
  - Team collaboration
  - Versioning
  - External sharing

C. Embedded Links for Direct Access

- Inspection notices, agency tasks, and workflow items can include direct links to open associated files in Google Drive or SharePoint.

4. Interoperability Framework

A. Standards-Based Integration

The system uses:

- RESTful APIs
- OAuth 2.0 authentication
- Microsoft Graph API
- Google Workspace APIs
- Webhooks for real-time updates

These modern standards ensure long-term compatibility and future-proof interoperability.

B. No Additional Software Required

All integration capabilities operate through:

- Browser-based access
- Standard cloud connectors
- Native APIs
  No plugins or workstation-level installations are required.

5. Benefits to the State of West Virginia

- **Streamlined adoption** for staff already familiar with Google and Microsoft tools
- **Productivity gains** from integrated calendars, email, and collaboration
- **Reduced training burden** because users can continue working within their preferred platforms
- **Consistent communication** between agencies, applicants, inspectors, and licensees
- **Future-proof integration** through modern APIs and standards

4.2.1.19 Vendors should explain how the solution can be adjusted to meet the growing and changing needs of the State. The State anticipates additional agencies may desire to participate in the solution in the future, the platform should be able to evolve alongside the State's operational, technical, and organizational growth, flexible and scalable to adapt to increased requirements in future years.

Our proposed solution is built on a **low-code/no-code, configuration-driven architecture** specifically designed to evolve alongside the State of West Virginia's operational, technical, and organizational needs. The platform supports rapid change, multi-agency expansion, and continuous growth—without requiring custom development or major system rebuilds. This ensures that the State can easily onboard new agencies and meet future requirements as the One-Stop-Shop program expands beyond its initial scope.

1. Low-Code/No-Code Configuration for Rapid Adjustment

Because the platform is configuration-based—not hard-coded—West Virginia agencies can update system behaviors quickly and safely without vendor-led development. This includes:

A. Business Rules & Workflows

- Add or modify workflows (application routing, approvals, renewals, inspections)
- Update business rules, conditional logic, decision trees, and fee rules
- Configure triggers, escalations, and automated notifications
  All through intuitive administrative tools rather than custom coding.

B. Forms & Data Fields

- Add or change application forms, data fields, sections, and dynamic logic
- Configure dependent fields, multi-step wizards, document requirements, and validation rules
- Manage changes due to legislation, policy updates, or agency restructuring
- Changes can be published immediately without downtime.

C. Licensing & Permitting Types

- Introduce new license classes, endorsements, permit categories, CE requirements, or inspection types
- Clone and adapt existing templates for fast rollout
  This ensures agencies can evolve without lengthy software cycles.

2. Scalable Multi-Agency Architecture

The platform is architected for **multi-agency, multi-program expansion** from day one.

A. Unified Foundation, Agency-Level Autonomy

Each agency can:

- Maintain its own workflows, forms, dashboards, notifications, and business rules
- Manage its own administrators, roles, and permissions
- Decide whether to integrate or replace existing systems

This preserves independence while benefiting from a statewide system.

B. Shared Statewide Components

The platform provides:

- A unified public portal
- Shared user accounts across agencies
- Centralized authentication (SSO)
- Common reporting and data standards
- Standardized templates for onboarding new agencies

This expedites onboarding and promotes statewide consistency.

3. Scalable Technical Architecture

The system is cloud-native and horizontally scalable to support increasing demands as new agencies join.

A. Automatic Scaling

- Compute, storage, and bandwidth scale automatically based on usage
- High-availability architecture minimizes downtime
- Elastic scaling supports seasonal load spikes (renewals, hunting seasons, permitting cycles)

B. Modular Services

- Licensing, inspections, payments, CE tracking, GIS, and CRM modules can be enabled or disabled per agency
- New modules can be added without impacting existing operations

C. Integration-First Design

- Standards-based APIs support future integrations
- New agency systems can be integrated with minimal disruption
- Legacy replacements can be phased in over time based on agency readiness

This technical flexibility supports long-term statewide growth.

4. Operational Flexibility for Long-Term Expansion

A. Onboarding New Agencies with Repeatable Blueprints

We use a proven onboarding playbook:

1. Discovery and mapping
2. Configuration using templates
3. Workflow design
4. Data migration
5. Staff training
6. Go-live

This methodology allows multiple agencies to be onboarded **in parallel**, accelerating statewide expansion.

B. Adaptable Dashboards & Reporting

- Administrators can configure dashboards for new programs or roles
- New KPIs, metrics, or regulatory insights can be added at any time
- Reports can be built using drag-and-drop tools

C. Policy & Legislative Agility

When laws or policies change, agencies can update:

- Requirements
- Forms
- Fees
- Processes
- Notifications
- Inspection criteria
  —without waiting for software updates.

5. Future-Ready and Growth-Aligned Platform

The platform is designed to grow with the State for years to come, providing:

- Capacity for additional agency programs
- Support for new license types, inspections, and enforcement models
- Ability to add new integration endpoints
- Expansion into mobile, GIS, payments, CE tracking, CRM, and more
- Support for new reporting or transparency requirements
- Configurable public self-service workflows for new agency needs

Because the platform is low-code/no-code, the State avoids expensive redevelopment cycles and can pivot quickly as priorities evolve.

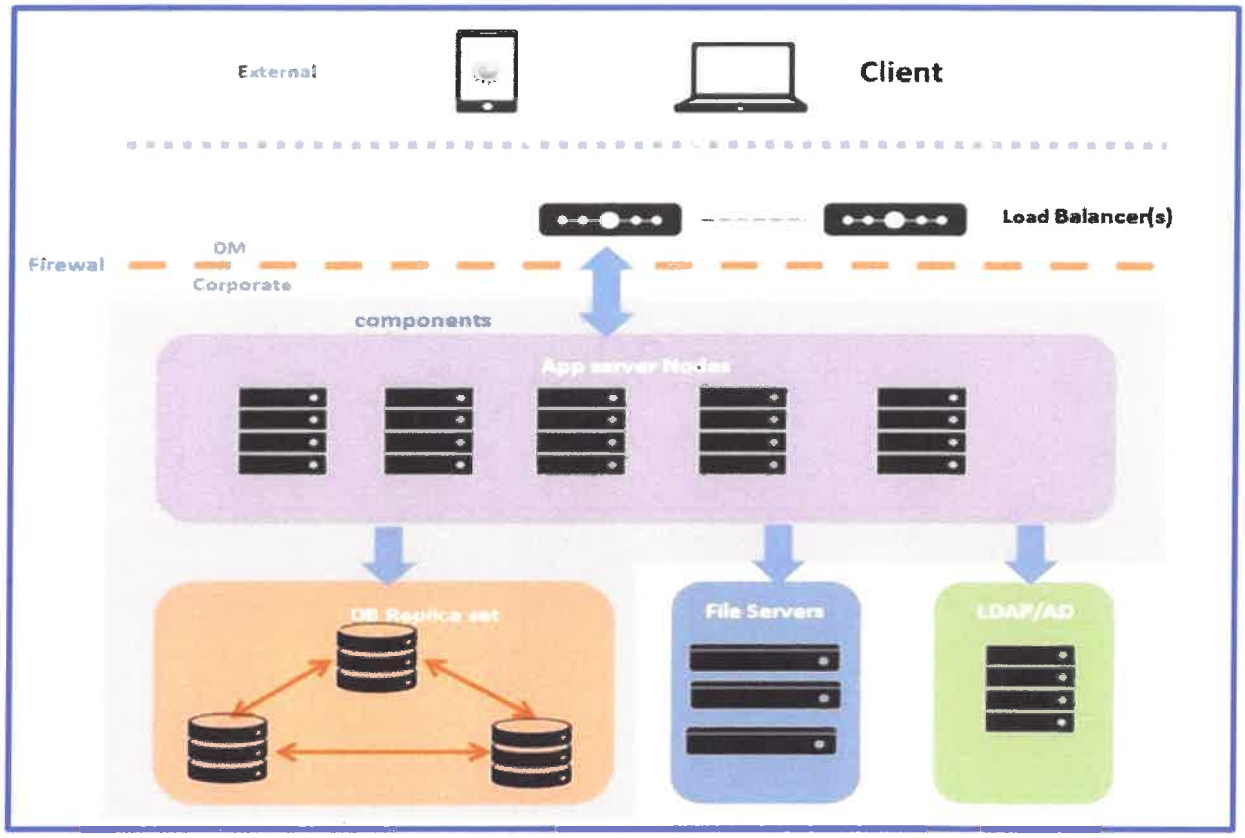
Summary of Benefits to West Virginia

- **Flexible**: Administrative tools allow rapid updates to forms, workflows, and rules
- **Scalable**: Cloud-native architecture supports new agencies and increased workloads
- **Interoperable**: API-driven design enables easy integration with existing systems
- **Future-Proof**: No-code configuration ensures adaptability to new legislation or program changes
- **Efficient**: Faster onboarding reduces cost and accelerates agency adoption
- **Unified**: All agencies benefit from a consistent statewide experience

4.2.1.20 Vendors should demonstrate commitment to high system availability, transparent maintenance practices, and rapid recovery protocols with downtime and planned maintenance windows being outside of business hours.

i3 Verticals Licensing and Regulatory Platform Is architected for scalability and performance to support current and future customer business needs. High availability is the fundamental feature of building software solutions in a cloud environment. The proposed architecture and hosting services are designed to meet the desired levels of security, scalability, performance and availability by guaranteeing computer environments have a desirable level of operational continuity.

- Data Backups, Recovery and Replication: Valuable data is never stored without proper backups, replication or the ability to recreate the data.
- Clustering: Clustering provides instant failover application services in the event of a fault. An application service falls back to a secondary server if the main server goes offline.
- Network Load Balancing: When server failure instances are detected, they are seamlessly replaced when the traffic is automatically redistributed to servers that are still running.
- Fail over Solutions: The architecture consists of a set of loosely coupled servers which have failover capabilities. In fail over scenarios, tasks are automatically offloaded to a standby system component so that the process remains as seamless as possible to the end user.
- Plan for failure: System gathers data through continuous monitoring of operational workload that is then used to isolate problems and analyze trends. The recovery plan is tested regularly to ensure its practicality when dealing with unplanned interruptions.



Whether it is the hosting environment or system performance, there are troubleshooting tools available to monitor and address production errors and issues. i3 Verticals will rely on availability monitoring as provided by Microsoft Azure. At the present time, Azure provides the following monitoring agents where data is collected.

- Event Logs
- Event Tracing for Windows (ETW) events
- Performance
- File based logs
- IIS logs
- .NET app logs
- Crash dumps
- Agent diagnostics logs

Furthermore, i3 Verticals conducts benchmark/performance testing to confirm satisfaction of nonfunctional and throughput requirements in a simulated test environment. Performance testing is designed to verify that the developed programs and system work as required at expected usage levels. The objective is to verify that the product is structurally sound and will function correctly at peak operation. The techniques employed are designed to validate that the application system's infrastructure is sound and reliable. Performance testing is conducted to evaluate the compliance of a program component or system with specified performance requirements or service levels. These may include subsets related to stress, volume, reliability, and load. The resulting consistent and repeatable tests identify bottlenecks in resource use, transaction RESPONSE times, and overall system performance.

Our solution is engineered for **enterprise-grade reliability**, ensuring uninterrupted service for public users and agency staff. We are committed to delivering a platform with high availability,

predictable maintenance, and rapid recovery procedures—meeting the operational needs of a statewide permitting environment.

Maintenance and Operations

- i3 Verticals will maintain the software solution configurations/customizations/interfaces in the cloud environment through the life of the contract.
- i3 Verticals will provide the required correction of Deficiencies as defined in the SLA requirements.
- i3 Verticals will monitor and manage the Solution to meet the contract SLA throughout the duration of this contract and will report the SLA metrics in the Monthly M&O Report.
- i3 Verticals will perform the necessary work defined and estimated in the WOA to address all impacts associated with product upgrades of the software solution as performed by the State-engaged software provider.
- i3 Verticals will provide a Monthly M&O Report that, at a minimum, documents the M&O activities completed in the previous month, including all knowledge transfer or system support activities
- i3 Verticals document in a Maintenance and Operations Plan (M&O Plan) the activities and processes that will be used to support the responsibilities in maintaining the software solution and deploying additional functionality
- i3 Verticals will document in the M&O Plan i3 Verticals approach to monitoring, managing, measuring, and reporting the SLA throughout the duration of this contract.
- i3 Verticals review the impact that the software provider's product upgrades of the Platform will have on configurations, customizations, and interfaces. Such impact and associated work needing to be performed by i3 Verticals will be included in the WOA. i3 Verticals will propose resolutions to any impacts and implement fixes to prevent any disruption to business operations because of the software provider's product upgrades.
- i3 Verticals will provide correction of Deficiencies per the SLA.
- i3 Verticals will correct all configuration, customization, and interface Deficiencies relating to all Severity Levels (as defined in the SLA) which are known to i3 Verticals or reported by WVOT to the Contractor.

High System Availability
99.9%+ Uptime Commitment

- The platform is designed to meet or exceed **99.9% availability**, excluding scheduled maintenance windows. This is achieved through:
- Load-balanced, redundant application servers
- High-availability database clusters
- Geographically redundant infrastructure
- Autoscaling resources during periods of increased demand
- Continuous monitoring for performance, health, and potential disruptions

Fault-Tolerant Architecture

- The system leverages cloud-native resiliency patterns including:
- Distributed services to avoid single points of failure
- Automatic failover for critical components
- Real-time replication of data
- Stateless processing tiers that can be replaced automatically if issues occur

- These design principles ensure the system remains operational even when hardware, network, or localized failures occur.

Transparent Maintenance Practices
Scheduled Maintenance Outside Business Hours

- We conduct all routine maintenance—including updates, security patches, optimization, and releases—**outside of normal business hours**, typically during early morning or late-night windows.
- Standard maintenance window: evenings or weekends
- Maintenance schedule is published in advance
- Notifications are sent to agency administrators with full details
- Any maintenance requiring downtime is rare and minimized

Clear Communication & Advance Notice

- Agencies receive:
- At least **7 days' notice** for scheduled maintenance
- Real-time updates during the maintenance window
- Post-maintenance summaries outlining enhancements, patches, and resolved issues
- This ensures predictable operations and eliminates surprises.

Zero-Downtime Deployment (When Possible)

- For many updates, the platform uses:
- Blue/green deployments
- Rolling updates
- Hotfix release pipelines
- These techniques allow updates to occur without taking the system offline, further improving uptime.

Rapid Recovery Protocols
Documented Incident Response & Escalation Procedures

- We maintain a formal, tested incident response plan covering:
- Event detection and alerting
- Real-time triage and analysis
- Immediate mitigation actions
- Multi-tier escalation procedures
- Communication to agency leadership
- Root-cause analysis and corrective actions
- This ensures rapid containment and resolution of unexpected issues.

Disaster Recovery (DR) Readiness

- Our DR strategy includes:
- Continuous data replication to a secondary region
- Automated failover capabilities
- Nightly encrypted backups stored off-site
- Documented RTO/RPO objectives aligned with operational requirements
- **Annual DR exercises** to validate readiness

In the event of catastrophic failure, the system can be restored quickly and with minimal data loss.

Real-Time Monitoring & Automated Alerts

- Our monitoring stack continuously evaluates:
- Application uptime
- API responsiveness
- Database performance
- Storage and network health
- Security events
- Automated alerting ensures engineering teams are instantly notified of anomalies.

Commitment to Transparency & Continuous Improvement
We maintain a culture of operational transparency by providing:
- Monthly SLA and performance reports
- Incident summaries with root-cause analysis for any major disruption
- Change logs documenting updates, enhancements, and fixes
- Continuous optimization based on system analytics and user feedback

Agencies always have full visibility into platform health and operational performance.

Benefits for the State of West Virginia One Stop Program
- Stable, predictable uptime for public and agency users
- Minimal interruption due to off-hours maintenance
- Trust-building transparency around system changes and incidents
- Faster recovery and reduced risk due to robust failover processes
- High-performing environment capable of supporting statewide expansion

4.2.1.21 Vendors' solution must include a description of the project management approach and relevant tools to be utilized.

i3 Verticals is committed to customer satisfaction and solutions that exceed requirements. Our implementation management approach focuses on achieving project and organizational objectives - implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes rigorous monitoring and measurement tasks necessary to mitigate risks associated with all large system implementation efforts.

i3 Verticals follows industry accepted best practices for project management. As such, we have PMI certified Project Managers on our team and they apply this knowledge, leverage past experiences and lessons learned, and utilize industry accepted project management tools and techniques, to monitor and control implementation activities, to meet or exceed our customer's needs and objectives of the project.

i3 Verticals uses an adapted agile methodology. In general, the adapted agile methodology will deliver an updated build (code) depending on the frequency discussed and agreed. Builds will involve the team working through the full development life cycle including planning, requirements, design, development, unit and system testing, and acceptance testing.

i3 Verticals uses Adapted Agile Methodology as a Standard for implementing a Licensing System

The benefits of i3 Verticals iterative implementation approach:

- A short deliverable cycle allows developers to achieve visible results and a sense of accomplishment resulting from having smaller development tasks to plan, execute and deliver.
- WVDOA management, staff AND stakeholders see visible, short-term results from the effort.
- Stakeholder 'owners' of different business processes automated by the effort get to see incremental results in their piece of the project with frequency, leading to better client buy-in for the project's goals.

- The WVDOA users and staff get to provide feedback as each prototype deliverable of software is released to them for testing. This results in better, more frequent and more accurate communication of client requirements that will naturally evolve over the life of the development cycle.

The methodology will emphasize regular communication face-to-face or through online meetings and stakeholder feedback over extensive requirements gathering. It is expected that there will be three releases during the execution phase of the project. The Application will be released into production following the completion of all iterations and a comprehensive User Acceptance Test (UAT).

To avoid any implementation delays, the project will be monitored for the symptoms of occurrences of any of the risks that are identified and for the occurrence of new risks. The potential risks and the risk mitigation plan should be discussed in the Project Status meetings and the risk management plan is revised when necessary. Open communication in the team should be cultivated to obtain relevant information on potential risks. The steps that are being taken to mitigate the risks should be communicated as a part of the status report to all concerned. Where necessary, transparency should be maintained with the customer on potential risks to obtain guidance as well as support in mitigating/handling the risks.

Our implementation management approach focuses on achieving project and organizational objectives - implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes the rigorous monitoring and measurement necessary to mitigate the risks associated with all large system implementation efforts.

Project Management Methodology

We recognize that planning and administration for a project of this magnitude constitutes one of the most critical tasks requiring attention from all stakeholders throughout the entire process.

Simply stated, project management is the engine that drives the project towards its intended goals. i3 Verticals dedicates specific resources and time to collaborating with WVDOA in establishing the structure, timing, and expectations for the project. i3 Verticals Project Management Office (PMO) team, in collaboration and consultation with the customer team, reviews the proposed tools, methods, and resources, to establish the Project Management Model for the successful delivery of the WVDOA's new EIS System.

i3 Verticals is committed to customer satisfaction and solutions that exceed requirements. Our implementation management approach focuses on achieving project and organizational objectives: implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes rigorous monitoring and measurement tasks necessary to mitigate risks associated with all implementation efforts.

For i3 Verticals, implementation starts on the first day of the engagement and finishes only when our customer is completely satisfied with the solution we have implemented. Our implementation management approach focuses on achieving project and organizational objectives - implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes the rigorous monitoring and measurement necessary to mitigate the risks associated with all large system implementation efforts. We believe that successful implementations are dependent on three critical components:

1. The right resources with experience, capabilities, technology skills, and the positive, "get it done attitude". i3 Verticals proposes its "A" team for the implementation, leveraging resources that have multiple licensing application implementation experience, current technology capabilities and skills and have a reputation for "getting it done".
2. The appropriate processes to ensure that there is diligence, quality, and control on the project. i3 Verticals follows industry accepted best practices for project management based on the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK®). Utilizing the PMI practices as well as our own internal processes based on our experience implementing other licensing applications.
3. Leverage the right software development approach and tools to fit the work at hand. i3 Verticals prefers iterative and incremental agile software development. We define this as an 'Adapted Agile Methodology' approach.

Our Planning and administration team relies on standard Project Management methodologies as defined in PMBOK and Agile methods of Software Development to ensure successful deployment of the solution. Led by our Implementation Lead and Project Managers, the PMO works with the WVDOA to:

- Plan the steps for the solution configuration to meet the needs of the WVDOA
- Apply existing tools that add structure and predictability to the project implementation
- Set and follow strict guidelines to ensure quality and consistency at every level
- Manage resources, issues, risks, changes, and deliverable development to meet the project timeline
- Facilitate open communication and collaboration with WVDOA, its stakeholders and vendors

During the initial planning phase of the new project, i3 Verticals works with the customer project team to develop and agree on a detailed work plan and project schedule. This includes the planned deliverables listed above. The project schedule includes tasks, activities, durations, sequencing, dependencies, a work breakdown structure, expected completion dates, milestones, and resource assignments. Project milestone entrance and exit criteria are included in the deliverable acceptance documentation.

After meticulously analyzing the RFQ and all project requirements, i3 Verticals designed an approach to exceed the WVDOA goals and intended results of the project. Coupling these specific approaches with our team of technical and project management, we are prepared to deliver a successful implementation as WVDOA's selected implementation partner. i3 Verticals approach to successfully managing and implementing licensing solution revolves around four defining features.

i3 Verticals four axles that will support the project down the route to success:

- A deep understanding of the work to be peRFQrmed resulting in i3 Verticals Driving Principles for Success.
- An Engagement Design that serves as a blueprint for delivering the solution.
- An Execution and Implementation Approach that incorporates iterative implementation of the solution by a skilled team of competent individuals.

- A Next Generation Solution built by leveraging i3 Verticals Licensing Framework and Inspection APP integrated seamlessly with best-of-breed technologies.

These characteristics are fundamental to our engagement approach and technical approach. Equipped with expert technical skill, project management capabilities, and industry leading technologies, the i3 Verticals team is prepared to bring the same dynamic client engagement factors that have established i3 Verticals impeccable record of success.

i3 Verticals is a customer focused technology company with extensive experience in implementing large and complex licensing and enforcement system. We specialize in delivering integrated solutions using advanced technologies. Our experience in implementing licensing system is unmatched.

i3 Verticals understands the significance of implementation efforts to help make the organization more efficient and effective in delivering services. We recognize that this effort not only encompasses computing systems and information assets, but also business operations and processes. The solution provides a secure, single technical infrastructure that organizations can leverage to offer stakeholders multiple channels, products, and services. This solution consistently applies business rules to each service channel, regardless of stakeholder preference. The goal is to provide a channel-independent framework using a virtual delivery mechanism that centralizes all the business rules and data entered in the system. The system facilitates collaboration and information sharing with other agencies and organizations across the state and country.

i3 Verticals understands WVDOA needs a dependable, maintainable, scalable, future-oriented comprehensive Software for Application and Licensing system. To meet WVDOA's goals and objectives, as well as to ensure our approach will respond to business needs and workflow requirements, we developed guidelines as Driving Principles for the route to the project success.

These Driving Principles encompass what we will do to achieve project goals and objectives, as well as meet project requirements that we believe WVDOA identifies as success factors.

Comprehensively, our driving principles define the i3 Verticals Team's overall proposed implementation approach. These identified principles will serve as our initial roadmap for approaching the engagement with WVDOA.

Project Planning and Administration

We recognize that planning and administration for a project of this magnitude constitutes one of the most critical tasks requiring attention from all stakeholders throughout the entire process.

Simply stated, project management is the engine that drives the project towards its intended goals. To ensure creation of a comprehensive Planning and Administration document, our collective energies at the onset of the project are dedicated to directing the appropriate Project Management Team.

i3 Verticals dedicates specific resources and time to working with the WVDOA in establishing the structure, timing, and expectations for the project. i3 Verticals Project Management Office (PMO) team, in collaboration and consultation with the WVDOA PMO team, reviews the proposed tools, methods, and resources to establish the Project Management Model for the successful delivery of the new EIS Application and Licensing system.

Our guiding principle for the Planning and Administration processes is:

> *"Simplicity by employing the right Project Management tools at the right time ensuring that each task is measurable and auditable in real-time. Our unique licensing system architecture enables us to enhance every sub-task in a recursive fashion until the stated objectives are achieved, and all tasks are fully tested and delivered."*

Our Planning and administration team relies both on standard Project Management methodologies as defined in PMBOK and the Agile method of Software Development to ensure successful deployment of the solution. Led by our Implementation Lead and Project Managers, the PMO works with the customer to:

- Plan the steps for the configuration of our solution to meet the needs of the WVDOA
- Apply existing tools to add structure and predictability to the project implementation,
- Set and follow strict guidelines to ensure quality and consistency at every level, manage resources, issues, risks, changes, and deliverable development to meet the project timeline
- Facilitate open communication and collaboration with customer stakeholders and vendors

Project Kick-off

The purpose of Project Kick-Off Meeting is to define the overall parameters of a project and establish the appropriate project management and quality environment to complete the project.

Successful projects begin with a detailed project definition that is understood and accepted by all Stakeholders. At the onset of the WVDOA engagement, i3 Verticals executes Project Initiation activities following the start of Mobilization and Implementation activities. Project Initiation begins within the first ten business days after the contract is awarded. The Mobilization phase includes the planning and preparation for the mobilization of the project components. The Project Initiation phase includes the following processes/tasks:

- Prepare for the Project - The i3 Verticals project team begins to occupy the work site during completion of the Project Mobilization tasks. As the team begins the project initiation tasks, the project organization chart is reviewed with the WVDOA team to ensure that it is current and that the WVDOA has a clear understanding of the project structure, functions and responsibilities. This helps to instill confidence that the organization is viewed in a dynamic context if major activities and emphasis shifts during the course of the project.
- Define Cost, Scope, Schedules and Quality (CSSQ) - The Project Manager and Project Team reviews the project scope, budget, schedule, and quality standards.
- PeRFQrm Risk Identification - Identifies and documents any risks associated with the project.
- Refine Project Management Plan - The Project Management Plan is the management tool that sets forth the approach to manage and control the project. There are many components to this plan including risk management, issues, and a communication plan. During the initiation phase of the project, the i3 Verticals team will work closely with the WVDOA to refine and finalize the project plan.
- Project Orientation Participation - Development of the Project Charter is a pivotal starting point for the entire project, establishing the project definition that serves as the foundation for all future efforts. Since the WVDOA has already identified the objectives

and charter for the project, i3 Verticals participates in orientation sessions conducted by the WVDOA team to review this charter and other project related items.

- Kick off Meetings - i3 Verticals Team begins all of its projects with a kick-off meeting recognizing it as a critical success factor. The project team kick-off is the first meeting with the project team members to discuss the project and scheduled work. The kick-off meeting allows the State and i3 Verticals to:
    - Facilitate Introductions of WVDOA team & i3 Verticals Team, including:
    - Introduction of Project's Mission, its objectives and goal
    - Define State Commitment to the Project
    - Define i3 Verticals Commitment to the Project
    - Business and Technical Objectives
    - High Level Approach of Project Governance
    - Project Management Plan
    - Implementation Plan
    - Project Status and Reporting Plan
    - Communication Plan
    - Issue Management Plan
    - Risk Management Plan
    - Configuration Management Plan
    - Quality Management Plan
    - Identify and Represent Key Project Leadership
    - Publish High Level Project Schedule
    - Project Approach to meet the outcome of WVDOA
    - Requirements Engineering and JAD Approach
    - Solution Approach Overview - An implementation accelerator with reduced risk
    - Identify Tools to be used

Formally, the above activities benefit

WVDOA:

- To recognize the start of the project
- To define the project, its purpose, and expected goals and deliverables
- To define the tools, technology, processes
- To introduce the project members and briefly discuss roles and responsibilities
- To establish a timeline, Communication & Issue Resolution roadmap
- To define key success factors including key risks and problems to be managed

The project kick-off also allows stakeholders the opportunity to communicate commitment to project outcomes. It ensures that all team members are familiar with and share a common understanding of the approved plan and that they are aware of critical next steps. Including stakeholders in this meeting builds communication and coordination, making project success more likely.

Communication Management

The i3 Verticals Team's Communication Management approach, which is established and administrated in association with the WVDOA, includes processes to facilitate correspondence, communication procedures and communication structure between the WVDOA and the i3 Verticals Team. The Communication Management plan used by the i3 Verticals Team ensures that unburdened collaboration is maintained throughout the project.

The i3 Verticals Team focuses on implementing open and active communication between the Project Team and the WVDOA Team through the use of integrated organization-wide products and

communication techniques. This makes project information readily and conveniently available to all stakeholders and creates a productive conduit between i3 Verticals and customer teams. Our Communication Management Plan seeks to develop and maintain exceptional correspondence and discussion between the i3 Verticals Team, the customer, and subcontractor staff with the intent of cultivating and strengthening working relationships. The i3 Verticals Team is a highly qualified and coordinated group who works in concert with our partners to supply superior quality deliverables.

The i3 Verticals Team promotes consistent project reporting and deliverables by offering standard project templates and providing current information on risks, issues, and change requests. Managing the project requires principal leadership to define preventative or corrective actions addressing negative trends or delinquencies in the project, and to distribute and promptly discuss project status with appropriate project stakeholders. Possible changes and transitions in the project and subprojects are communicated with the participants and stakeholders to inform them of modifications that may need to be made and benefits that may result from the change(s). The i3 Verticals Team collaborates with the customer throughout project initiation to refine our communication plan and effective status reporting that addresses project stakeholder needs. If needed, communication channels may be expanded or augmented.

The Communication Management Plan, a subcomponent of the Project Management Plan which is delivered to the customer at the onset of the project. The plan includes processes to help facilitate the timely collection, analysis, creation, distribution, and storage of project information as well as how to follow these processes. This plan addresses project communication, stakeholder engagement and project meetings, and the overall communication schedule.

Status Reporting

The i3 Verticals Program Manager provides the agency Project Manager and upper management with monthly overall status/progress reports for the project and weekly status/progress reports for each sub-project for the duration of the contract. The i3 Verticals Team methodology requires regular and consistent communication with customer project personnel and stakeholders. This interaction is a key to the success and health of a project and provides transparency into the project. The Communications Plan contains details of program and project level meetings, reports, and report distribution. This also includes semi-monthly overall project and weekly sub-project status reports.

Status reports consist of upcoming tasks towards the completion of deliverables, variances, activities completed, activities to be completed, and help keep team members clearly informed about risks and their potential impacts on project peRFQrmance. Status reports and regularly scheduled meetings are critically important to communicate progress, escalate risks/issues, and obtain guidance as well as customer decisions. The i3 Verticals Team expects appropriate customer personnel to review status reports in a timely manner and be present at meetings. We will gather feedback from the department staff in order to refine the format, content and timing of these reports.

Project Meeting Minutes

The Meeting Minutes (MoM) document serves as a record of meetings held during the development and implementation phases of the project and is an important artifact of the project.

The i3 Verticals Team uses a standard meeting minute template that records meeting logistics facilitator, agenda, attendees, topics discussed, and action items agreed upon by all parties. In addition, the meeting minutes include agenda items for the next meeting and any unresolved items.

The i3 Verticals Team typically uses SharePoint to automate certain aspects of meeting management such as assignment of action items and correspondence of meeting minutes to attendees. This tracks action items assigned to project team members. Action items are displayed, and alarms are generated for overdue actions ensuring project issues are resolved quickly boosting accountability. SharePoint also supports functionality to attach relevant files to Meeting Minutes. A copy of the meeting minutes report is kept in the SharePoint store serving as a project repository for all document deliverables.

Meeting Minutes Protocol	Notes
Meeting Minutes are to serve as a record of the meeting	Minutes will include: • Date, time, place, initiator, agenda, action items, topics & attendees
Meeting Minutes should inform the reader of matters discussed	Minutes will include: • A record of status, progress, delays and updates
Meeting Minutes should assist in the resolution of project issues	Minutes will include: • Action items and alarms for overdue items
Meeting Minutes will be kept as a digital record	Minutes will be recorded in: • Primavera and SharePoint

Deliverables

All deliverables are aligned to the customer project process in order to standardize and manage monitoring, reporting and escalation management. In addition, a final report and presentation is given to the WVDOA project audience as outlined in the project schedule.

Change Management

Change management is an ongoing iterative process throughout the project lifecycle. It may involve many individuals at different levels within the organization. The purpose of the i3 Verticals Team's Change Management Process (CMP) is to ensure standardized methods and procedures are used for efficient and prompt handling of all changes. A formal, repeatable process minimizes the risk when introducing change to the production environment and helps preserve quality-of-service delivery. The CMP defines the activities, roles, and responsibilities necessary to effectively and efficiently manage and coordinate changes to project goals such as scope, schedule, and cost baselines.

The Integrated Project Management Plan discussed in the Project Management section of this proposal will be the guiding tool for managing all aspects of the project. The IPMP will be used in conjunction with the Change Management Plan (CMP), also discussed in the Project Management section, to manage the impact of change. The CMP is an ongoing process peRFQrmed throughout the project's lifecycle to ensure:

- Changes to base-lined project items are reviewed and approved in advance.
- Changes are coordinated across the entire project.
- Stakeholders are notified of approved changes to the project.

Quality Management

i3 Verticals implements a Continuous Quality Management (COM) approach on all its projects. COM requires that quality management occurs throughout the project life cycle and that quality is monitored continuously so that corrective action can be taken as soon as deviations are identified from the project quality benchmarks. Quality Management processes are built into our project management and control methodologies and tailored to accommodate the specific needs of each project. Specifically, during the planning phase of the Program, we will work with the State Project Manager to develop a quality management plan that outlines the quality standards and benchmarks for the project.

Once the quality targets are established, a Performance metrics plan is developed that identifies key quality metrics to ensure that agreed upon project quality standards are being met. From a quality management perspective, the focus of the project management team is two-fold: first, to ensure that the appropriate processes are instituted and are adequate to support quality levels that the customer expects. Second, processes can be institutionalized within the project as best practices for future use.

- A master QM plan (as part of the Project Management Plan or a separate document) is developed during the planning phase and is submitted to the project management team for review and sign-off.
- All QM activities subsequent to the sign-off of the QM Plan are Performed in accordance with the QM Plan.
- The QA team will participate in the preparation and the review of the development plan, implementing standards on the project and installing procedures on the project.
- The QA is responsible for Performing audits of the software engineering activities to verify compliance with the standards and the guidelines set forth in the QA plan.
- The QA team is responsible for auditing designated work products to verify compliance with the standards and the guidelines set forth in the QA plan
- Results from the software audits are presented to the project management team for review and action.
- Deviations from the set standards and guidelines found during the audit process are documented and reported.

i3 Verticals implements a quality management approach on projects as a core activity for project team members. We also require that quality management occurs throughout the project life cycle and that it is monitored continuously. This allows corrective actions to be taken as soon as deviations occur.

Quality management processes are built into our project management and control methodologies. These processes are tailored to accommodate the specific needs of each project. Specifically, during the planning stage of the Project, we work with the customer project manager to develop a Quality Assurance Plan that outlines the quality policies, goals, and standards to achieve process compliance and work product defect minimization.

- i3 Verticals typical Quality Assurance Plan covers the Review Plan, Standards, Conventions and Guidelines, List of Quality Records to be maintained for the project, a Metrics Plan, and a Defect Prevention (DP) Plan.

Quality Assurance Plan

The quality assurance plan is aimed at ensuring quality of deliverables within the budget, effort and schedule. The Project manager identifies the analysis measures during the project execution and corrective and preventive actions within a predetermined frequency. The techniques used to monitor these identified measures include defect prevention monitoring, project process monitoring, internal audits and configuration audits.

Review Plan

The Review Plan details the inspection and review process to be followed for each output (work products/ deliverables). It also defines clear roles and responsibilities for personnel assigned to this work. This plan is developed during the initial phase of the project in agreement with the customer project manager. The review plan identifies the following:

- Key deliverable name - name of the deliverable (e.g., Design documents, test plans etc.), this may be a document, or code component.
- Deliverable objective - defines the deliverable's purpose and what quality criteria the deliverable must fulfil.
- Key dates (review/ sign off) - defines when the deliverable must be prepared, made ready for review, when the review must be completed, and the deliverable signed off.
- Prepared by - defines who is responsible for preparing the project deliverable and who supports the development.
- Reviewed by - defines who is responsible for reviewing and "endorsing" the project deliverable.
- Deliverable approved by - defines who is responsible for authorizing the deliverable if different from the reviewer.

Quality Reviews

Quality Reviews are conducted periodically by a Team lead, or the project manager to measure overall compliance of the i3 Verticals Team project deliverables and artifacts with the quality standards (code review, naming convention, version control etc.) and benchmarks established for the project. Review techniques include peer review (within i3 Verticals Team project team); the results are reported internally to the QA team, Project Manager, Team Leads, and other project team members.

The i3 Verticals Team applies a formal Quality Review Process to implementation projects. Quality reviews are conducted on an on-going basis and are led by the i3 Verticals Project Manager. Reviews are submitted by the i3 Verticals project manager to develop a conformance plan addressing any issues that are identified in the quality review.

Cost Management

When bidding contracts that are firm-fixed price, we make every effort to manage customer costs. We take the time to make sure we build quality into our products, so we don't waste resources in areas that don't directly impact customer outcomes and satisfaction. In addition, i3 Verticals understands that our future business relies on solid long-term customer relationships

and client references. i3 Verticals carefully considers and evaluates our ability to successfully complete each project within a defined budget and take steps to maintain on-time delivery.

Agency Training

i3 Verticals has developed and executed training for various customers. We cater to different training requirements including business products, and application processing. Our training experiences are effective and specialize in the following area:

- Computer Based (CBT) and Web-based training (WBTs) for system users
- Instructor-led training (ILTs) for users of the system
- Train-the-Trainer (TTT) training for trainers
- Technical team training (developers and support)
- Systems Administration Training
- Context sensitive online application help modules embedded within the application
- Helpdesk and application support training

As a standard practice, i3 Verticals provides a variety of training materials to effectively transfer knowledge of the concepts and functionalities related to the new system to WVDOA staff, as well as for end users. The following types of training materials will be developed for learning and reference:

- User Manual
- Quick Reference Guide
- Online Help Documents

i3 Verticals also provides other tools and training opportunities to ensure clients have the information and ability to apply knowledge of the new system. In addition to documentation, i3 Verticals produces self-study help videos that provide audio and visual materials for training on specific functions, system utilities, and user-centric topics.

i3 Verticals educates and enables customers to adapt their systems *without custom programming.* This puts the power and control into the hands of our clients without the need to rely on i3 Verticals programmers to make updates and changes. We provide training for user level staff in the new system as well as training for Administrators.

Post Implementation Audit

A post-implementation audit is standard in our implementation process.

- First line support records and tracks all issues during implementation. This data is continually evaluated during implementation to ensure compliance with WVDOA SLA's.
- Secondary level support includes a post implementation survey to identify contact and stakeholders at WVDOA. This is normally accomplished via the web and email, but telephone coverage can be added for non-connected employees. This data is analyzed and shared with designated WVDOA personnel for discussion and quality improvement planning.

We understand and anticipate that i3 Verticals project management methodologies as well as our approach and plan likely require some refinement during the planning phase of the project. We look forward to partnering with you on this important project.

i3 Verticals is committed to customer satisfaction and solutions that exceed requirements. Our implementation management approach focuses on achieving project and organizational objectives - implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes rigorous monitoring and measurement tasks necessary to mitigate risks associated with all large system implementation efforts.

i3 Verticals follows industry accepted best practices for project management. As such, we have PMI certified Project Managers on our team and they apply this knowledge, leverage past experiences and lessons learned, and utilize industry accepted project management tools and techniques, to monitor and control implementation activities, to meet or exceed our customer's needs and objectives of the project.

i3 Verticals uses an adapted agile methodology. In general, the adapted agile methodology will deliver an updated build (code) depending on the frequency discussed and agreed. Builds will involve the team working through the full development life cycle including planning, requirements, design, development, unit and system testing, and acceptance testing.

i3 Verticals uses Adapted Agile Methodology as a Standard for implementing a Licensing System

The benefits of i3 Verticals iterative implementation approach:

- A short deliverable cycle allows developers to achieve visible results and a sense of accomplishment resulting from having smaller development tasks to plan, execute and deliver.
- WVDOA management, staff AND stakeholders see visible, short-term results from the effort.
- Stakeholder 'owners' of different business processes automated by the effort get to see incremental results in their piece of the project with frequency, leading to better client buy-in for the project's goals.

- The WVDOA users and staff get to provide feedback as each prototype deliverable of software is released to them for testing. This results in better, more frequent and more accurate communication of client requirements that will naturally evolve over the life of the development cycle.

The methodology will emphasize regular communication face-to-face or through online meetings and stakeholder feedback over extensive requirements gathering. It is expected that there will be three releases during the execution phase of the project. The Application will be released into production following the completion of all iterations and a comprehensive User Acceptance Test (UAT).

To avoid any implementation delays, the project will be monitored for the symptoms of occurrences of any of the risks that are identified and for the occurrence of new risks. The potential risks and the risk mitigation plan should be discussed in the Project Status meetings and the risk management plan is revised when necessary. Open communication in the team should be cultivated to obtain relevant information on potential risks. The steps that are being taken to mitigate the risks should be communicated as a part of the status report to all concerned. Where necessary, transparency should be maintained with the customer on potential risks to obtain guidance as well as support in mitigating/handling the risks.

Our implementation management approach focuses on achieving project and organizational objectives - implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes the rigorous monitoring and measurement necessary to mitigate the risks associated with all large system implementation efforts.

Project Management Methodology

We recognize that planning and administration for a project of this magnitude constitutes one of the most critical tasks requiring attention from all stakeholders throughout the entire process.

Simply stated, project management is the engine that drives the project towards its intended goals. i3 Verticals dedicates specific resources and time to collaborating with WVDOA in establishing the structure, timing, and expectations for the project. i3 Verticals Project Management Office (PMO) team, in collaboration and consultation with the customer team, reviews the proposed tools, methods, and resources, to establish the Project Management Model for the successful delivery of the WVDOA's new EIS System.

i3 Verticals is committed to customer satisfaction and solutions that exceed requirements. Our implementation management approach focuses on achieving project and organizational objectives: implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes rigorous monitoring and measurement tasks necessary to mitigate risks associated with all implementation efforts.

For i3 Verticals, implementation starts on the first day of the engagement and finishes only when our customer is completely satisfied with the solution we have implemented. Our implementation management approach focuses on achieving project and organizational objectives - implementing and maintaining the management framework needed to sustain collaborative relationships, and institutionalizing processes and procedures needed to meet the planned schedules while producing a quality product. It also includes the rigorous monitoring and measurement necessary to mitigate the risks associated with all large system implementation efforts. We believe that successful implementations are dependent on three critical components:

4. The right resources with experience, capabilities, technology skills, and the positive, "get it done attitude". i3 Verticals proposes its "A" team for the implementation, leveraging resources that have multiple licensing application implementation experience, current technology capabilities and skills and have a reputation for "getting it done".
5. The appropriate processes to ensure that there is diligence, quality, and control on the project. i3 Verticals follows industry accepted best practices for project management based on the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK®). Utilizing the PMI practices as well as our own internal processes based on our experience implementing other licensing applications.
6. Leverage the right software development approach and tools to fit the work at hand. i3 Verticals prefers iterative and incremental agile software development. We define this as an 'Adapted Agile Methodology' approach.

Our Planning and administration team relies on standard Project Management methodologies as defined in PMBOK and Agile methods of Software Development to ensure successful deployment of the solution. Led by our Implementation Lead and Project Managers, the PMO works with the WVDOA to:

- Plan the steps for the solution configuration to meet the needs of the WVDOA
- Apply existing tools that add structure and predictability to the project implementation
- Set and follow strict guidelines to ensure quality and consistency at every level
- Manage resources, issues, risks, changes, and deliverable development to meet the project timeline
- Facilitate open communication and collaboration with WVDOA, its stakeholders and vendors

During the initial planning phase of the new project, i3 Verticals works with the customer project team to develop and agree on a detailed work plan and project schedule. This includes the planned deliverables listed above. The project schedule includes tasks, activities, durations, sequencing, dependencies, a work breakdown structure, expected completion dates, milestones, and resource assignments. Project milestone entrance and exit criteria are included in the deliverable acceptance documentation.

After meticulously analyzing the RFQ and all project requirements, i3 Verticals designed an approach to exceed the WVDOA goals and intended results of the project. Coupling these specific approaches with our team of technical and project management, we are prepared to deliver a successful implementation as WVDOA's selected implementation partner. i3 Verticals approach to successfully managing and implementing licensing solution revolves around four defining features.

i3 Verticals four axles that will support the project down the route to success:

- A deep understanding of the work to be peRFQrmed resulting in i3 Verticals Driving Principles for Success.
- An Engagement Design that serves as a blueprint for delivering the solution.
- An Execution and Implementation Approach that incorporates iterative implementation of the solution by a skilled team of competent individuals.

- A Next Generation Solution built by leveraging i3 Verticals Licensing Framework and Inspection APP integrated seamlessly with best-of-breed technologies.

These characteristics are fundamental to our engagement approach and technical approach. Equipped with expert technical skill, project management capabilities, and industry leading technologies, the i3 Verticals team is prepared to bring the same dynamic client engagement factors that have established i3 Verticals impeccable record of success.

i3 Verticals is a customer focused technology company with extensive experience in implementing large and complex licensing and enforcement system. We specialize in delivering integrated solutions using advanced technologies. Our experience in implementing licensing system is unmatched.

i3 Verticals understands the significance of implementation efforts to help make the organization more efficient and effective in delivering services. We recognize that this effort not only encompasses computing systems and information assets, but also business operations and processes. The solution provides a secure, single technical infrastructure that organizations can leverage to offer stakeholders multiple channels, products, and services. This solution consistently applies business rules to each service channel, regardless of stakeholder preference. The goal is to provide a channel-independent framework using a virtual delivery mechanism that centralizes all the business rules and data entered in the system. The system facilitates collaboration and information sharing with other agencies and organizations across the state and country.

i3 Verticals understands WVDOA needs a dependable, maintainable, scalable, future-oriented comprehensive Software for Application and Licensing system. To meet WVDOA's goals and objectives, as well as to ensure our approach will respond to business needs and workflow requirements, we developed guidelines as Driving Principles for the route to the project success.

These Driving Principles encompass what we will do to achieve project goals and objectives, as well as meet project requirements that we believe WVDOA identifies as success factors.

Comprehensively, our driving principles define the i3 Verticals Team's overall proposed implementation approach. These identified principles will serve as our initial roadmap for approaching the engagement with WVDOA.

Project Planning and Administration

We recognize that planning and administration for a project of this magnitude constitutes one of the most critical tasks requiring attention from all stakeholders throughout the entire process.

Simply stated, project management is the engine that drives the project towards its intended goals. To ensure creation of a comprehensive Planning and Administration document, our collective energies at the onset of the project are dedicated to directing the appropriate Project Management Team.

i3 Verticals dedicates specific resources and time to working with the WVDOA in establishing the structure, timing, and expectations for the project. i3 Verticals Project Management Office (PMO) team, in collaboration and consultation with the WVDOA PMO team, reviews the proposed tools, methods, and resources to establish the Project Management Model for the successful delivery of the new EIS Application and Licensing system.

Our guiding principle for the Planning and Administration processes is:

> *"Simplicity by employing the right Project Management tools at the right time ensuring that each task is measurable and auditable in real-time. Our unique licensing system architecture enables us to enhance every sub-task in a recursive fashion until the stated objectives are achieved, and all tasks are fully tested and delivered."*

Our Planning and administration team relies both on standard Project Management methodologies as defined in PMBOK and the Agile method of Software Development to ensure successful deployment of the solution. Led by our Implementation Lead and Project Managers, the PMO works with the customer to:

- Plan the steps for the configuration of our solution to meet the needs of the WVDOA
- Apply existing tools to add structure and predictability to the project implementation,
- Set and follow strict guidelines to ensure quality and consistency at every level, manage resources, issues, risks, changes, and deliverable development to meet the project timeline
- Facilitate open communication and collaboration with customer stakeholders and vendors

Project Kick-off

The purpose of Project Kick-Off Meeting is to define the overall parameters of a project and establish the appropriate project management and quality environment to complete the project.

Successful projects begin with a detailed project definition that is understood and accepted by all Stakeholders. At the onset of the WVDOA engagement, i3 Verticals executes Project Initiation activities following the start of Mobilization and Implementation activities. Project Initiation begins within the first ten business days after the contract is awarded. The Mobilization phase includes the planning and preparation for the mobilization of the project components. The Project Initiation phase includes the following processes/tasks:

- Prepare for the Project - The i3 Verticals project team begins to occupy the work site during completion of the Project Mobilization tasks. As the team begins the project initiation tasks, the project organization chart is reviewed with the WVDOA team to ensure that it is current and that the WVDOA has a clear understanding of the project structure, functions and responsibilities. This helps to instill confidence that the organization is viewed in a dynamic context if major activities and emphasis shifts during the course of the project.
- Define Cost, Scope, Schedules and Quality (CSSQ) - The Project Manager and Project Team reviews the project scope, budget, schedule, and quality standards.
- PeRFQrm Risk Identification - Identifies and documents any risks associated with the project.
- Refine Project Management Plan - The Project Management Plan is the management tool that sets forth the approach to manage and control the project. There are many components to this plan including risk management, issues, and a communication plan. During the initiation phase of the project, the i3 Verticals team will work closely with the WVDOA to refine and finalize the project plan.
- Project Orientation Participation - Development of the Project Charter is a pivotal starting point for the entire project, establishing the project definition that serves as the foundation for all future efforts. Since the WVDOA has already identified the objectives

and charter for the project, i3 Verticals participates in orientation sessions conducted by the WVDOA team to review this charter and other project related items.

- Kick off Meetings - i3 Verticals Team begins all of its projects with a kick-off meeting recognizing it as a critical success factor. The project team kick-off is the first meeting with the project team members to discuss the project and scheduled work. The kick-off meeting allows the State and i3 Verticals to:
    - Facilitate Introductions of WVDOA team & i3 Verticals Team, including:
    - Introduction of Project's Mission, its objectives and goal
    - Define State Commitment to the Project
    - Define i3 Verticals Commitment to the Project
    - Business and Technical Objectives
    - High Level Approach of Project Governance
    - Project Management Plan
    - Implementation Plan
    - Project Status and Reporting Plan
    - Communication Plan
    - Issue Management Plan
    - Risk Management Plan
    - Configuration Management Plan
    - Quality Management Plan
    - Identify and Represent Key Project Leadership
    - Publish High Level Project Schedule
    - Project Approach to meet the outcome of WVDOA
    - Requirements Engineering and JAD Approach
    - Solution Approach Overview - An implementation accelerator with reduced risk
    - Identify Tools to be used

Formally, the above activities benefit

WVDOA:

- To recognize the start of the project
- To define the project, its purpose, and expected goals and deliverables
- To define the tools, technology, processes
- To introduce the project members and briefly discuss roles and responsibilities
- To establish a timeline, Communication & Issue Resolution roadmap
- To define key success factors including key risks and problems to be managed

The project kick-off also allows stakeholders the opportunity to communicate commitment to project outcomes. It ensures that all team members are familiar with and share a common understanding of the approved plan and that they are aware of critical next steps. Including stakeholders in this meeting builds communication and coordination, making project success more likely.

Communication Management

The i3 Verticals Team's Communication Management approach, which is established and administrated in association with the WVDOA, includes processes to facilitate correspondence, communication procedures and communication structure between the WVDOA and the i3 Verticals Team. The Communication Management plan used by the i3 Verticals Team ensures that unburdened collaboration is maintained throughout the project.

The i3 Verticals Team focuses on implementing open and active communication between the Project Team and the WVDOA Team through the use of integrated organization-wide products and

communication techniques. This makes project information readily and conveniently available to all stakeholders and creates a productive conduit between i3 Verticals and customer teams. Our Communication Management Plan seeks to develop and maintain exceptional correspondence and discussion between the i3 Verticals Team, the customer, and subcontractor staff with the intent of cultivating and strengthening working relationships. The i3 Verticals Team is a highly qualified and coordinated group who works in concert with our partners to supply superior quality deliverables.

The i3 Verticals Team promotes consistent project reporting and deliverables by offering standard project templates and providing current information on risks, issues, and change requests. Managing the project requires principal leadership to define preventative or corrective actions addressing negative trends or delinquencies in the project, and to distribute and promptly discuss project status with appropriate project stakeholders. Possible changes and transitions in the project and subprojects are communicated with the participants and stakeholders to inform them of modifications that may need to be made and benefits that may result from the change(s). The i3 Verticals Team collaborates with the customer throughout project initiation to refine our communication plan and effective status reporting that addresses project stakeholder needs. If needed, communication channels may be expanded or augmented.

The Communication Management Plan, a subcomponent of the Project Management Plan which is delivered to the customer at the onset of the project. The plan includes processes to help facilitate the timely collection, analysis, creation, distribution, and storage of project information as well as how to follow these processes. This plan addresses project communication, stakeholder engagement and project meetings, and the overall communication schedule.

Status Reporting

The i3 Verticals Program Manager provides the agency Project Manager and upper management with monthly overall status/progress reports for the project and weekly status/progress reports for each sub-project for the duration of the contract. The i3 Verticals Team methodology requires regular and consistent communication with customer project personnel and stakeholders. This interaction is a key to the success and health of a project and provides transparency into the project. The Communications Plan contains details of program and project level meetings, reports, and report distribution. This also includes semi-monthly overall project and weekly sub-project status reports.

Status reports consist of upcoming tasks towards the completion of deliverables, variances, activities completed, activities to be completed, and help keep team members clearly informed about risks and their potential impacts on project peRFQrmance. Status reports and regularly scheduled meetings are critically important to communicate progress, escalate risks/issues, and obtain guidance as well as customer decisions. The i3 Verticals Team expects appropriate customer personnel to review status reports in a timely manner and be present at meetings. We will gather feedback from the department staff in order to refine the format, content and timing of these reports.

Project Meeting Minutes

The Meeting Minutes (MoM) document serves as a record of meetings held during the development and implementation phases of the project and is an important artifact of the project.

The i3 Verticals Team uses a standard meeting minute template that records meeting logistics facilitator, agenda, attendees, topics discussed, and action items agreed upon by all parties. In addition, the meeting minutes include agenda items for the next meeting and any unresolved items.

The i3 Verticals Team typically uses SharePoint to automate certain aspects of meeting management such as assignment of action items and correspondence of meeting minutes to attendees. This tracks action items assigned to project team members. Action items are displayed, and alarms are generated for overdue actions ensuring project issues are resolved quickly boosting accountability. SharePoint also supports functionality to attach relevant files to Meeting Minutes. A copy of the meeting minutes report is kept in the SharePoint store serving as a project repository for all document deliverables.

Meeting Minutes Protocol	Notes
Meeting Minutes are to serve as a record of the meeting	Minutes will include: • Date, time, place, initiator, agenda, action items, topics & attendees
Meeting Minutes should inform the reader of matters discussed	Minutes will include: • A record of status, progress, delays and updates
Meeting Minutes should assist in the resolution of project issues	Minutes will include: • Action items and alarms for overdue items
Meeting Minutes will be kept as a digital record	Minutes will be recorded in: • Primavera and SharePoint

Deliverables

All deliverables are aligned to the customer project process in order to standardize and manage monitoring, reporting and escalation management. In addition, a final report and presentation is given to the WVDOA project audience as outlined in the project schedule.

Change Management

Change management is an ongoing iterative process throughout the project lifecycle. It may involve many individuals at different levels within the organization. The purpose of the i3 Verticals Team's Change Management Process (CMP) is to ensure standardized methods and procedures are used for efficient and prompt handling of all changes. A formal, repeatable process minimizes the risk when introducing change to the production environment and helps preserve quality-of-service delivery. The CMP defines the activities, roles, and responsibilities necessary to effectively and efficiently manage and coordinate changes to project goals such as scope, schedule, and cost baselines.

The Integrated Project Management Plan discussed in the Project Management section of this proposal will be the guiding tool for managing all aspects of the project. The IPMP will be used in conjunction with the Change Management Plan (CMP), also discussed in the Project Management section, to manage the impact of change. The CMP is an ongoing process peRFQrmed throughout the project's lifecycle to ensure:

- Changes to base-lined project items are reviewed and approved in advance.
- Changes are coordinated across the entire project.
- Stakeholders are notified of approved changes to the project.

Quality Management

i3 Verticals implements a Continuous Quality Management (COM) approach on all its projects. COM requires that quality management occurs throughout the project life cycle and that quality is monitored continuously so that corrective action can be taken as soon as deviations are identified from the project quality benchmarks. Quality Management processes are built into our project management and control methodologies and tailored to accommodate the specific needs of each project. Specifically, during the planning phase of the Program, we will work with the State Project Manager to develop a quality management plan that outlines the quality standards and benchmarks for the project.

Once the quality targets are established, a Performance metrics plan is developed that identifies key quality metrics to ensure that agreed upon project quality standards are being met. From a quality management perspective, the focus of the project management team is two-fold: first, to ensure that the appropriate processes are instituted and are adequate to support quality levels that the customer expects. Second, processes can be institutionalized within the project as best practices for future use.

- A master QM plan (as part of the Project Management Plan or a separate document) is developed during the planning phase and is submitted to the project management team for review and sign-off.
- All QM activities subsequent to the sign-off of the QM Plan are Performed in accordance with the QM Plan.
- The QA team will participate in the preparation and the review of the development plan, implementing standards on the project and installing procedures on the project.
- The QA is responsible for Performing audits of the software engineering activities to verify compliance with the standards and the guidelines set forth in the QA plan.
- The QA team is responsible for auditing designated work products to verify compliance with the standards and the guidelines set forth in the QA plan
- Results from the software audits are presented to the project management team for review and action.
- Deviations from the set standards and guidelines found during the audit process are documented and reported.

i3 Verticals implements a quality management approach on projects as a core activity for project team members. We also require that quality management occurs throughout the project life cycle and that it is monitored continuously. This allows corrective actions to be taken as soon as deviations occur.

Quality management processes are built into our project management and control methodologies. These processes are tailored to accommodate the specific needs of each project. Specifically, during the planning stage of the Project, we work with the customer project manager to develop a Quality Assurance Plan that outlines the quality policies, goals, and standards to achieve process compliance and work product defect minimization.

- i3 Verticals typical Quality Assurance Plan covers the Review Plan, Standards, Conventions and Guidelines, List of Quality Records to be maintained for the project, a Metrics Plan, and a Defect Prevention (DP) Plan.

Quality Assurance Plan

The quality assurance plan is aimed at ensuring quality of deliverables within the budget, effort and schedule. The Project manager identifies the analysis measures during the project execution and corrective and preventive actions within a predetermined frequency. The techniques used to monitor these identified measures include defect prevention monitoring, project process monitoring, internal audits and configuration audits.

Review Plan

The Review Plan details the inspection and review process to be followed for each output (work products/ deliverables). It also defines clear roles and responsibilities for personnel assigned to this work. This plan is developed during the initial phase of the project in agreement with the customer project manager. The review plan identifies the following:

- Key deliverable name - name of the deliverable (e.g., Design documents, test plans etc.), this may be a document, or code component.
- Deliverable objective - defines the deliverable's purpose and what quality criteria the deliverable must fulfil.
- Key dates (review/ sign off) - defines when the deliverable must be prepared, made ready for review, when the review must be completed, and the deliverable signed off.
- Prepared by - defines who is responsible for preparing the project deliverable and who supports the development.
- Reviewed by - defines who is responsible for reviewing and "endorsing" the project deliverable.
- Deliverable approved by - defines who is responsible for authorizing the deliverable if different from the reviewer.

Quality Reviews

Quality Reviews are conducted periodically by a Team lead, or the project manager to measure overall compliance of the i3 Verticals Team project deliverables and artifacts with the quality standards (code review, naming convention, version control etc.) and benchmarks established for the project. Review techniques include peer review (within i3 Verticals Team project team); the results are reported internally to the QA team, Project Manager, Team Leads, and other project team members.

The i3 Verticals Team applies a formal Quality Review Process to implementation projects. Quality reviews are conducted on an on-going basis and are led by the i3 Verticals Project Manager. Reviews are submitted by the i3 Verticals project manager to develop a conformance plan addressing any issues that are identified in the quality review.

Cost Management

When bidding contracts that are firm-fixed price, we make every effort to manage customer costs. We take the time to make sure we build quality into our products, so we don't waste resources in areas that don't directly impact customer outcomes and satisfaction. In addition, i3 Verticals understands that our future business relies on solid long-term customer relationships

and client references. i3 Verticals carefully considers and evaluates our ability to successfully complete each project within a defined budget and take steps to maintain on-time delivery.

Agency Training

i3 Verticals has developed and executed training for various customers. We cater to different training requirements including business products, and application processing. Our training experiences are effective and specialize in the following area:

- Computer Based (CBT) and Web-based training (WBTs) for system users
- Instructor-led training (ILTs) for users of the system
- Train-the-Trainer (TTT) training for trainers
- Technical team training (developers and support)
- Systems Administration Training
- Context sensitive online application help modules embedded within the application
- Helpdesk and application support training

As a standard practice, i3 Verticals provides a variety of training materials to effectively transfer knowledge of the concepts and functionalities related to the new system to WVDOA staff, as well as for end users. The following types of training materials will be developed for learning and reference:

- User Manual
- Quick Reference Guide
- Online Help Documents

i3 Verticals also provides other tools and training opportunities to ensure clients have the information and ability to apply knowledge of the new system. In addition to documentation, i3 Verticals produces self-study help videos that provide audio and visual materials for training on specific functions, system utilities, and user-centric topics.

i3 Verticals educates and enables customers to adapt their systems *without custom programming.* This puts the power and control into the hands of our clients without the need to rely on i3 Verticals programmers to make updates and changes. We provide training for user level staff in the new system as well as training for Administrators.

Post Implementation Audit

A post-implementation audit is standard in our implementation process.

- First line support records and tracks all issues during implementation. This data is continually evaluated during implementation to ensure compliance with WVDOA SLA's.
- Secondary level support includes a post implementation survey to identify contact and stakeholders at WVDOA. This is normally accomplished via the web and email, but telephone coverage can be added for non-connected employees. This data is analyzed and shared with designated WVDOA personnel for discussion and quality improvement planning.

We understand and anticipate that i3 Verticals project management methodologies as well as our approach and plan likely require some refinement during the planning phase of the project. We look forward to partnering with you on this important project.

Implementation Approach/Deployment Strategy

i3 Verticals uses an adapted agile methodology. In general, the adapted agile methodology will deliver an updated build (code) depending on the frequency discussed and agreed. Builds will involve the team working through the full development life cycle including planning, requirements, design, development, unit and system testing, and acceptance testing.

At the time of solution implementation, user stories are identified based on requirements, the user stories are prioritized, Sprint duration is identified, and a release plan is established with the customer. However, the i3 Verticals Team is amiable to adopt any other Agile methodology based on the customer's suggestions and preferences. Detail orientation is very important in an educator licensing system implementation, and we accomplish this by leveraging:

- A detailed task level plan with relevance to WVDOA system requirements (function and module wise)
- Early recognition of data conversion and interfaces
- Rules Engine
- POC early on in the project
- Artifacts and deliverables from our previous Licensing Framework implementations

We cannot emphasize more on the last point, for any vendor to be successful, it is critical to have reusable assets in the form of templates and deliverables that are enterprise licensing project specific.

Approach & Strategy

The i3 Verticals methodology emphasizes face-to-face communication and stakeholder feedback over extensive requirements gathering. It is expected that there will be three releases during the execution phase of the project. The Application is released into production only following the completion of all iterations and a comprehensive User Acceptance Test (UAT).

The approach involves three work cycles. i3 Verticals will identify any variance and develop necessary project plans, which are spread across two work cycles. The development work cycles will include post-UAT bug fix phases, with 30-day sprints. Upon group agreement on changes, the next phase will begin.

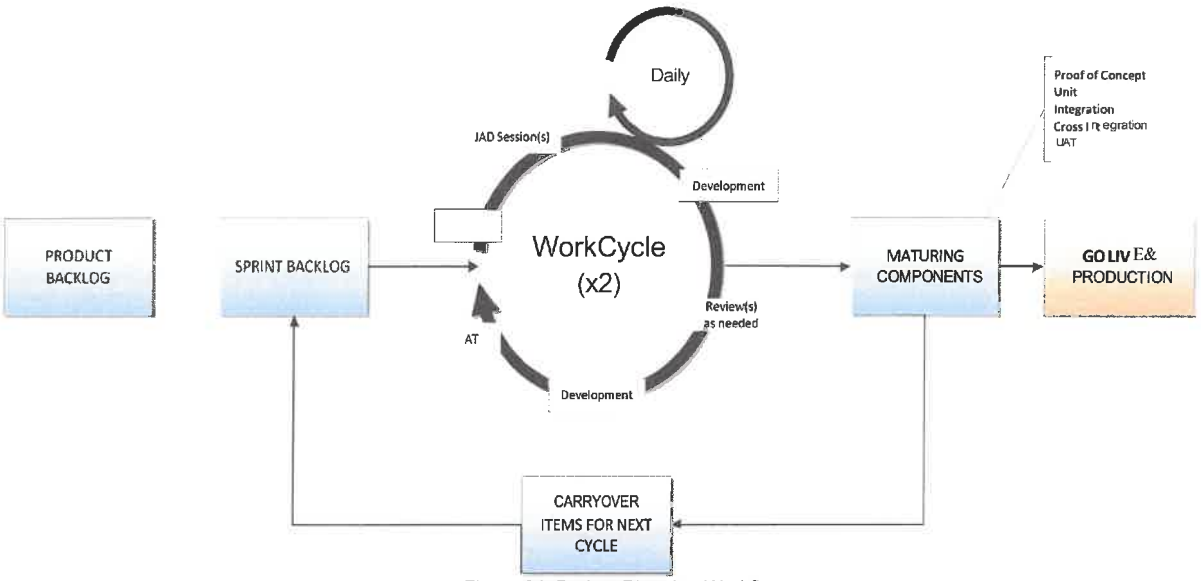


Figure 91: Project Planning Workflow

Test Strategy

i3 Verticals follows industry standard methodology for enabling comprehensive testing. These methodologies promote productivity, quality, and comprehensiveness in our testing practices, providing a better deliverable for the WVDOA users with reduced risk of solution failure. The methodology defines test-related activities from the initial stages of a project to the implementation of the final solution. The methodology encompasses test activities across each deliverable component. Our testing approach is very comprehensive and covers application software, system software, network and hardware.

Test plans are the primary means by which the testing team communicates what they plan to test, their environmental and resource needs and the schedule for each testing level that they will perform. The i3 Verticals Team will provide a comprehensive Test Plan that will account for unit, integration, end to end, system performance and final acceptance testing, as applicable. i3 Verticals utilizes consistent test plan templates that are consistent with industry testing best practices. Once the test plans are internally reviewed for accuracy, test plans will be delivered for final review and acceptance. Included in the test plan will be a list of test tools proposed for a specific test type or test function. The test plan will meet the following objectives:

- Describes the testing strategy for the new system
- Allocates roles and responsibilities to the appropriate project stakeholders for each testing type
- Describes the activities associated with test planning, preparation, and execution
- Describes the generic testing methodology to be adapted for use on the Project
- Provides an overview and the objectives of each testing type
- Provides a timeline for all testing phases
- Describes the generic entry and exit criteria for each testing type
- Identifies the outputs that will be produced by each testing type
- Describes the activities associated with managing testing
- Describes the specifications of the facility requirements and test configurations that will be implemented to support phases of the testing
- Provides a timeline for preparing detailed test procedures and conducting the testing.
- Identifies a plan for tracking, correcting, and retesting any deviations.
- Identifies the overall environment testing plan that will provide for site installation testing to verify the infrastructure installed for the Project.

The following figure summarizes the relationship and dependency of the testing deliverables identified in the Test Plan and produced during the two major testing stages of test planning and test execution. In addition, the detailed Test Plan created for each test phase includes a schedule or timeline of each activity outlined in the figure.

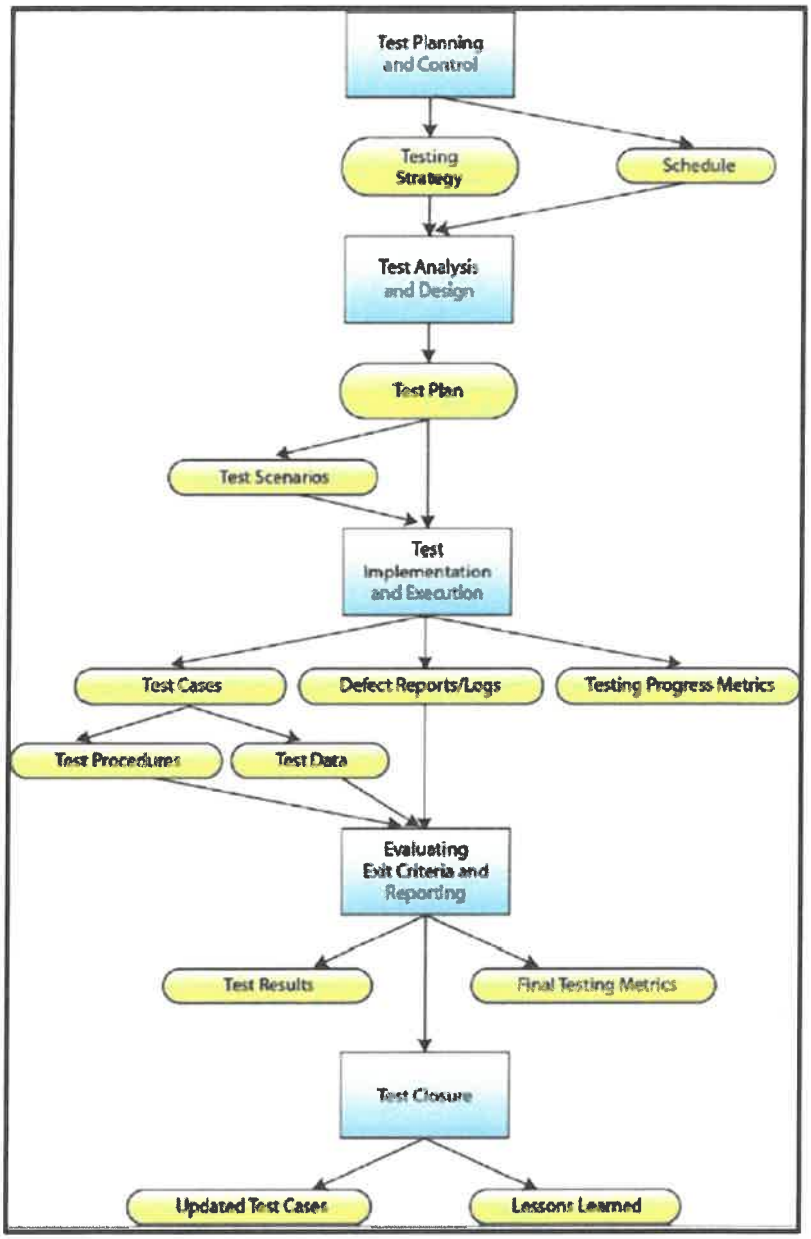


Figure 96: Test Plan

Measurable acceptance criteria will need to be clearly established before testing begins. In collaboration with the Agency, a determination must be made as to what number and level of acceptable defects are allowed before proceeding from one test type to the next to establish definitive acceptance criteria. Entry and exit criteria will be further detailed within the individual test specifications. An example of exit criteria for the Final Acceptance Test phase might include:

- All Final Acceptance test scripts have been executed
- A documented plan for all outstanding issues has been agreed with business stakeholders
- No severity 1, 2 or customer impacting 3 defects that require resolution within the release timescales remain outstanding

The i3 Verticals Project Manager and WVDOA staff confirm that the test phase exit criteria have been met. A milestone entry should be set for this activity on the Program schedule. The results of the execution of each test case will be recorded as the test case is completed. This approach allows for accurate and timely progress reporting, thus providing the testing lead with the ability to determine the status of the testing effort at any time during the day. The testing lead will analyze this information to determine progress against the testing schedule. The test results will be communicated daily.

A complete overview of testing is produced in a test summary report. This report includes an overview of the approach, tools, test cases, activities, results, signed checklists and any outstanding defects.

Summary of the final outcome of test execution for each testing type includes:

- Number of test cases planned, executed and status (pass/fail)
- Number and priority of any open discrepancy
- A plan for fixing and retesting each discrepancy
- A recommendation on the readiness of the system for the next testing type or project phase

A recommendation is made based on the Test Summary Report and assessing the outstanding status of testing based on the healthiness of the application.

i3 Verticals also conducts security testing for the overall application platform and also while applying patches. Security at i3 Verticals would analyze for security vulnerabilities as per the patch release note and relevant corrections would be implemented as recommended by software product vendor. During the project implementation i3 Verticals would co-ordinate with WVDOA management team to prepare a security test report after patch updates with information relating to test plan and changes to security roles and authorizations, security violations and security mechanisms.

After initial security testing, the i3 Verticals Team will perform security testing when one of the following conditions occurs:

- Changes are made to the physical hosting environment
- Upgrades are made to the operating system
- Patches are applied to the operating system
- Patches are applied to the application software
- There are major or minor application releases
- After a security breach has been identified

i3 Verticals conducts benchmark/performance testing to confirm satisfaction of nonfunctional RESPONSE and throughput requirements in a simulated test environment. Performance testing is designed to verify that the developed programs and system work as required at expected usage levels. The objective is to verify that the product is structurally sound and will function correctly at peak operation. The techniques employed are designed to validate that the application system's infrastructure is sound and reliable.

Performance testing is conducted to evaluate the compliance of a program component or system with specified performance requirements or service levels. These may include subsets related to stress, volume, reliability, and load. The resulting consistent and repeatable tests identify bottlenecks in resource use, transaction RESPONSE times, and overall system performance.

i3 Verticals application developers and architects incorporate performance testing into their existing development activities regardless of platform or language type to develop code that meets performance requirements.

Developers conduct performance testing at the unit and component integration test levels to verify that the application performance requirements have been met.

At or near the completion of functional testing, performance testing of the application and infrastructure is required to test the performance of the application and infrastructure in a production-like environment and to verify that the system meets documented service-level agreement (SLA) requirements such as for performance RESPONSE time.

Performance test acceptance criteria is identified and agreed on as part of the performance test plan.

The i3 Verticals Team has extensive experience in Disaster Recovery and Resilience testing and implementation of resilience solutions across enterprise customers. We understand that continuous availability of business-critical systems is influenced by factors outside the remit of hardware and software issues in the form of natural disasters, manual errors, etc. Business continuity/ Disaster recovery tests are fundamental to the well-being of an organization's BCP. Clearly, they are intended to ensure that the continuity plans work as intended during unforeseen or difficult circumstances. As part of these tests the key focus has been to validate:

- Impact of a failure on the active setup and configuration
- Queuing up of scheduled tasks due to a failure
- Loss of service / vital data during failure
- The Time interval in recovering from a failed state - either by returning to the original state or moving to a failover state

The objective of Functional Testing is to validate that the new system meets the functional requirements. To achieve this objective, i3 Verticals Functional Test Team designs tests that extensively and exhaustively test all of the functionality delivered within a release, including all interface considerations. The functional requirements are mapped against the test cases creating a requirements traceability matrix that validates test coverage.

Functional testing is carried out at the unit level, module level, and system integration levels. In system integration testing, requirements are tested in the context of overall system requirements. Below mentioned high-level approach will be followed to evaluate the functionality of the application:

- Analyze the user and system requirements for the application and identify the high-level operational requirements
- Identify requirements for the application to communicate with other systems and the means of communication
- Review the environment in which the live system runs to identify interoperability or compatibility issues with other systems
- Examine the requirement for testing operating procedures-such as procedures for installation, failover, backup, and recovery-and system documentation-such as administration guides. In addition, i3 Verticals agrees to provide the following under the Test Plan and User Acceptance Testing activities of the Health Regulations Licensure System Project:
    - Provide testing, pre-production ("UAT"), and production environments, providing access to WVDOA staff to testing and training environments

- Develop, deliver, maintain, and execute a Master Test Plan ("MTP") which includes plans for unit, data migration, performance and load testing, integration, and user acceptance testing
- Perform unit, data migration, performance and load testing as well as integration and regression testing for components and services and unit, integration, and system testing for systems; in order to ensure the Solution defects are found and eliminated
- Develop and document User Acceptance test cases with the support of WVDOA Subject Matter Experts (SMEs)
- Approve User Acceptance Testing (UAT) test cases
- Supplement UAT test cases provided by i3 Verticals with additional documented test cases
- Requires that all unit, integration, performance and load tests for a release be completed without defect prior to start of UAT for that release, unless otherwise approved by WVDOA
- Create and implement a Security Assessment Plan (SAP) that provides for security testing as well as evaluation
- Perform threat and vulnerabilities analyses and subsequent testing/evaluation of the 'as-built' system, component, and/or service
- Perform penetration testing to include black box testing simulating adversary actions and with automated code reviews

Collaborate with WVDOA to determine defects severity and closing of any defects (must be agreed to by the WVDOA)i3 Verticals uses an adapted agile methodology. In general, the adapted agile methodology will deliver an updated build (code) depending on the frequency discussed and agreed. Builds will involve the team working through the full development life cycle including planning, requirements, design, development, unit and system testing, and acceptance testing.

At the time of solution implementation, user stories are identified based on requirements, the user stories are prioritized, Sprint duration is identified, and a release plan is established with the customer. However, the i3 Verticals Team is amiable to adopt any other Agile methodology based on the customer's suggestions and preferences. Detail orientation is very important in an educator licensing system implementation, and we accomplish this by leveraging:

- A detailed task level plan with relevance to WVDOA system requirements (function and module wise)
- Early recognition of data conversion and interfaces
- Rules Engine
- POC early on in the project
- Artifacts and deliverables from our previous Licensing Framework implementations

We cannot emphasize more on the last point, for any vendor to be successful, it is critical to have reusable assets in the form of templates and deliverables that are enterprise licensing project specific.

4.2.1.22 Vendor should be able to integrate with the State's Single Sign-On Solution.

Our platform fully supports integration with the State of West Virginia's Single Sign-On (SSO) environment, ensuring a seamless, secure, and unified authentication experience for both agency users and public constituents.

Standards-Based SSO Integration

The solution is built to integrate with any modern SSO provider using industry-standard authentication protocols, including:

- SAML 2.0
- OAuth 2.0
- OpenID Connect (OIDC)
- JSON Web Tokens (JWT)

These standards ensure compatibility with the State's enterprise identity management systems, whether they use Azure AD, Okta, Ping, ADFS, or a custom identity provider.

Unified Login Experience for Agency Users

Agency users will enjoy a secure, streamlined login experience:

- Single set of credentials across all integrated state systems
- Automatic authentication without additional passwords
- Support for **Multi-Factor Authentication (MFA)** enforced at the State level
- Ability to honor State-defined password policies and identity governance rules
- Seamless navigation between the One Stop platform and other State services

This reduces login-related support tickets and strengthens security.

Public User SSO Integration (If Provided by the State)

If the State extends its identity provider to constituents, the system can:

- Authenticate public users through the State's identity portal
- Link existing or new public accounts to SSO identities
- Support social identity integrations if enabled by the State (optional)
- Provide a self-service registration and onboarding experience aligned with SSO requirements

This creates a unified digital identity experience for all citizens using government services.

Role Mapping and Account Provisioning

SSO integration includes automated user provisioning capabilities:

- **Role mapping** from the State's identity provider to platform permissions
- Support for **SCIM**-based provisioning (if available)
- Creation, modification, and deactivation of user accounts based on identity provider rules
- Enforcement of least-privilege access using RBAC and agency-defined roles

This ensures accounts remain accurate, synchronized, and secure.

Security and Compliance

SSO integration enhances overall security through:

- Centralized identity management
- Enforced MFA and conditional access
- Password policy alignment with State IT standards
- Reduced risk of account compromise
- Full audit logging of authentication events

All authentication-related communication is encrypted and adheres to State cybersecurity requirements.

Flexible Configuration and Future Compatibility

The platform is designed to adapt as the State evolves its identity strategy:

- Supports hybrid identity environments (cloud + on-prem)
- Capable of integrating with multiple identity providers simultaneously
- Allows phased rollout of SSO across agencies and user groups
- Preserves local authentication options only where permitted by policy

This future-proofs the solution for expansion to additional State departments and services.

Benefits for the WV One Stop Program

- Enhanced security through centralized identity controls
- Simplified access for agency users and constituents
- Reduced administrative burden for account management
- Increased compliance with State IT and cybersecurity policies
- Consistent user experience across State systems

4.2.1.23 Vendor's pricing page should provide a total and complete implementation and build out cost, and should identify any milestone payment expectations. Vendor's pricing page should also provide proposed annual licensing costs, hosting costs, maintenance costs, and other cost breakdowns.

i3 Verticals acknowledges this requirement. A complete and detailed cost proposal including full implementation and build-out costs, milestone payment expectations, annual licensing fees, hosting costs, maintenance and support costs, and all other associated breakdowns is provided in the accompanying **Cost Sheet/Pricing Page** as requested.

All costs are itemized to ensure full transparency and alignment with the State's expectations.

4.2.1.24 Vendor should guarantee that all work on this project will be performed in the United States. Use of technology to communicate with countries banned by the Federal Government is prohibited.

i3 Verticals acknowledge and fully complies with this requirement. All work associated with this project including development, configuration, support, maintenance, hosting, data handling, and project management will be performed **exclusively within the United States**.

No project activities, services, communication, or technical operations will be conducted from, routed through, or supported by any country prohibited or restricted by the Federal Government.

I3 Verticals is committed to ensuring full adherence to federal security, privacy, and compliance mandates throughout the duration of the project.

4.2.1.25 Vendor should provide constituents access to a digital wallet for payment. refund, and license/permit management.

Our solution includes a **fully integrated digital wallet** designed to enhance convenience for constituents by centralizing payments, refunds, and license/permit information in one secure, easy-to-use location within the public dashboard.

Comprehensive Digital Wallet Capabilities

1. Unified Payment Management

The digital wallet allows constituents to securely store and manage payment-related information, including:

- Saved payment methods (credit/debit cards, ACH, and other State-approved options)
- One-time and recurring payments
- Partial payments where permitted
- Secure tokenization to avoid storing raw card data
- Payment history and downloadable receipts

This simplifies transactions and reduces repeated data entry.

2. Refund Management

The wallet provides constituents with clear visibility into refund-related activities:

- Automated display of refund status for canceled applications, overpayments, or adjusted fees
- Notifications when a refund is issued or processed
- Secure routing of refunds back to the original payment method or alternative approved methods
- A transaction-level breakdown for audit and transparency

This reduces public inquiries and ensures financial clarity.

3. License and Permit Management

The digital wallet serves as a centralized hub for license and permit information, offering:

- Digital display of active licenses and permits
- QR-coded digital credentials for verification by inspectors or third parties
- Easy access to renewal and amendment options
- Storage of historical licenses and expired credentials for reference
- "Add to Wallet" options compatible with mobile wallets (where applicable and approved by the State)

Users can instantly access their credentials from any device.

4. Application and Fee Transparency

The wallet provides interactive tools that allow constituents to:

- View outstanding balances or required payments
- Track pending payments connected to applications
- Access fee schedules and breakdowns
- Receive alerts for upcoming or overdue payments

This ensures clarity and supports timely completion of the permitting process.

Secure and Compliant Digital Wallet Design

Security Features

The digital wallet adheres to strict security standards, including:

- Encrypted storage and payment tokenization
- PCI-compliant payment integrations through State-approved processors
- Multi-factor authentication for account access
- RBAC ensuring only authorized users view sensitive financial information
- Secure session management to prevent unauthorized use

Privacy and Compliance

The wallet follows all State data privacy requirements, including:

- No storage of raw payment card information
- Audit logs for all wallet-related interactions
- Compliance with retention rules for financial data
- Encryption of all financial transactions in transit and at rest

User-Friendly and Accessible Interface

The digital wallet is designed for usability and accessibility:

- WCAG 2.1 AA–compliant interface
- Mobile-first design optimized for smartphones
- Clear labels, intuitive navigation, and easy-to-understand summaries
- Support for screen readers and keyboard navigation
- Guided prompts for payments, refunds, and renewals

Constituents benefit from a modern, intuitive digital financial experience.

Integration With Workflow and Agency Systems

The wallet integrates seamlessly with the permitting platform:

- Automatically updates when an application moves between workflow stages
- Syncs with agency review actions that trigger fee changes or refunds
- Connects to the system's notification center for real-time alerts
- Supports multi-agency fee structures and remittances

This ensures financial processes stay aligned with system workflows.

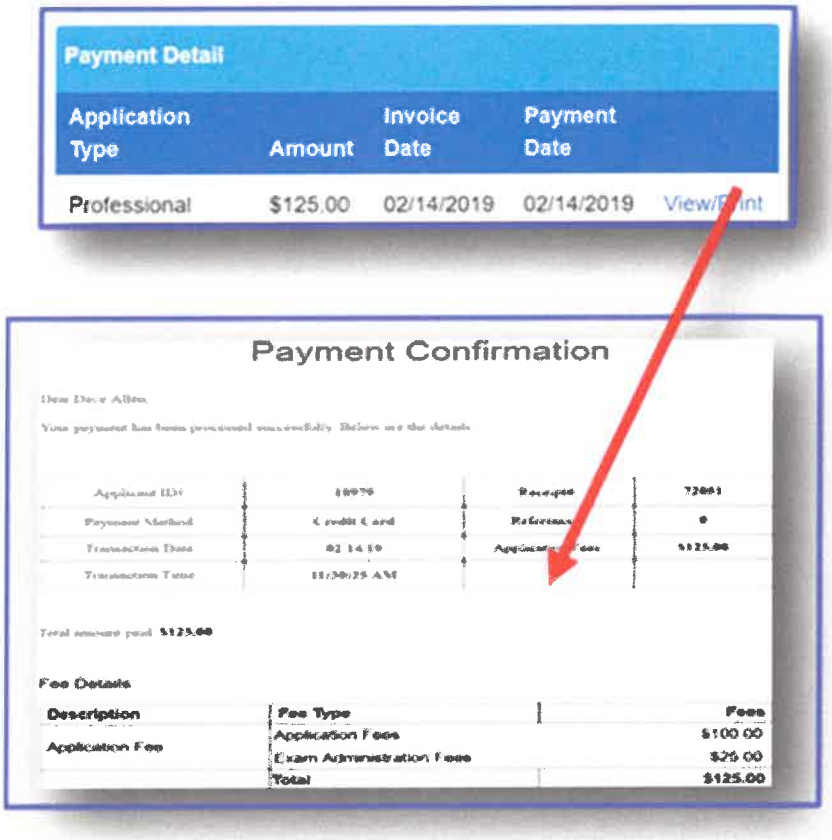
Benefits for the State of West Virginia

- Reduced help desk calls related to payments or license access
- Faster applicant completion rates
- More transparent financial interactions

- Lower administrative overhead for agencies
- Enhanced user experience for constituents

All financial transactions can take place within the system in real-time utilizing the secure interface.

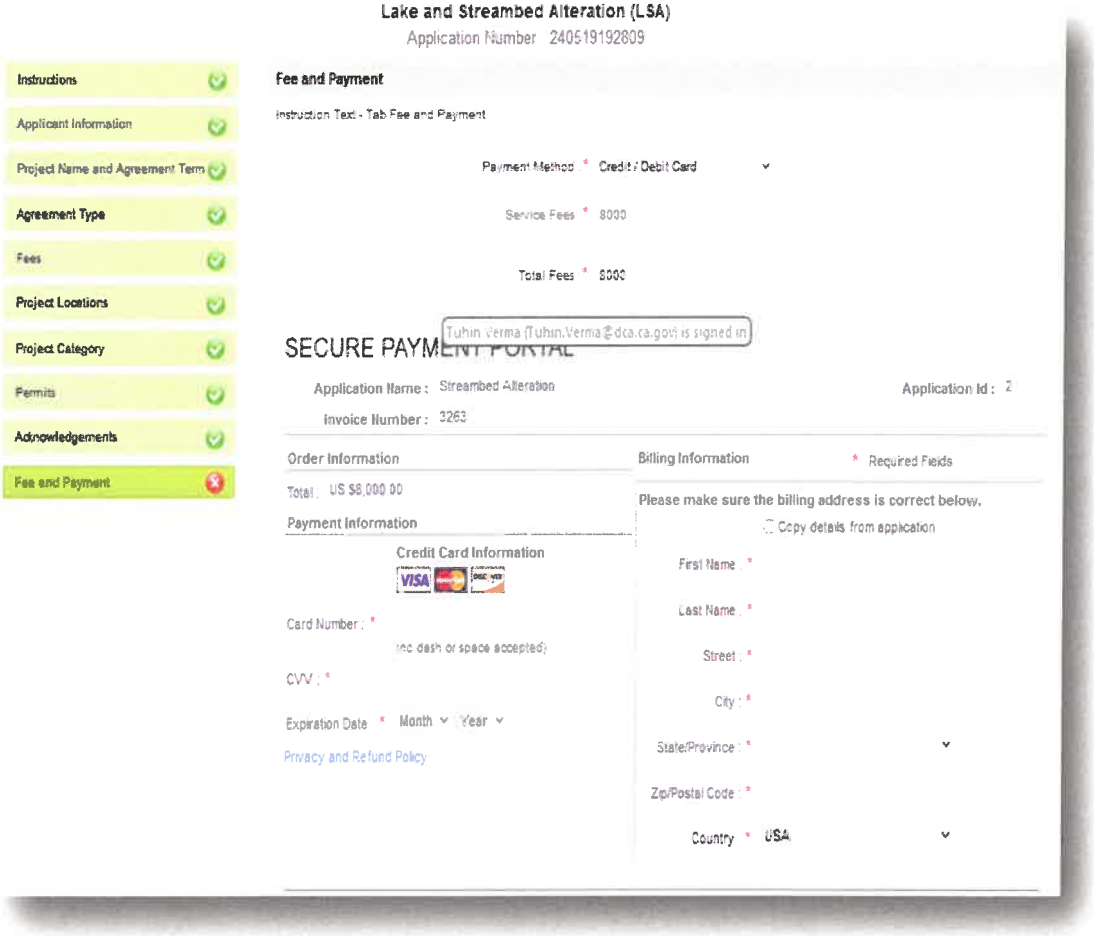
As financial transactions (such as an Applicant applying for a license/permit a licensee paying to renew their license) take place in the licensing system, the associated transaction is available in reports, queries, etc. The system can split any payment over multiple forms of payment (i.e., different credit cards). Upon payment success, in addition to the system automatically emailing a confirmation and payment receipt, the online portal allows Applicants and Licensees to view and access receipts.



Payment details and Payment Configuration

i3 Verticals' system allows for online payments using an API (Application Program Interface). We have successfully interfaced with numerous merchant services, as determined by our client's requirements – many specified by the State or agency's financial institution. There can also be alternate options and workflows: applications entered by the Applicant typically allow for payment by debit/credit card or eCheck/ACH, while those applications entered via the Back Office by West Virginia Office of Technology staff accept payment by check, money order or cashier's check, etc.

Below is an example of an online payment section of an application. Payment methods can be selected, and the form can pre-populate the applicable fees associated with the selected application type.

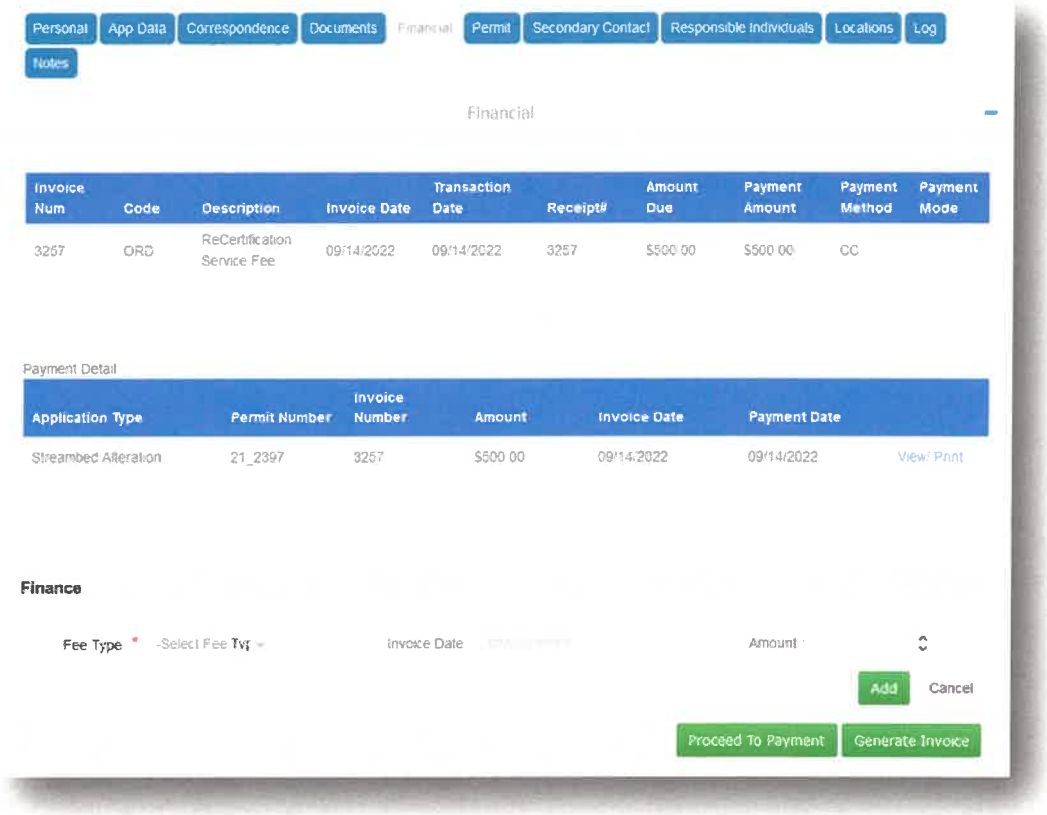


Fee and Payment

The i3 Verticals Licensing Framework's Financial Management subsystem supports tracking activities associated with the control and accounting of funds, including the generation of fees, dues, fines, penalties, invoicing, payments, and reporting. All financial processing and reporting functions reside within this logical subsystem. It encompasses the processing of funds through electronic commerce (that is, credit card processing over the Internet) and point-of-sale (POS) transactions (for example, credit card, cash, check, debit card, and account processing through the POS functions).

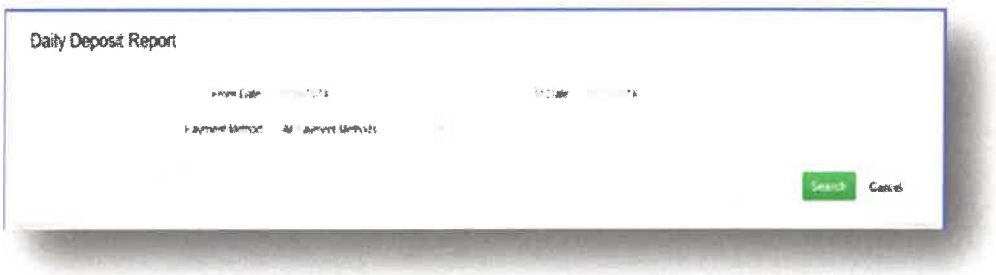
The system also provides the ability to maintain information about fees, fines and taxes including the type of tax or fee, effective dates, ending dates, account number, distribution amounts (including local levels), distribution percentages, and remittance information. The system also can configure fee types, including adding, modifying, and deleting fee types.

All financial transactions which can take place within the system occur in real time. That is, as a financial transaction (such as a Licensee paying to renew their license) takes place in the licensing system, the associated transaction is available in reports, queries, etc. For example, in addition to the system automatically emailing a confirmation and payment receipt, the Customer online portal allows for viewing and access to payment confirmations. Confirmations and correspondence are also stored in the system for ease of access by West Virginia Office of Technology staff, *as shown in the figure below.*



Payment Details Confirmation

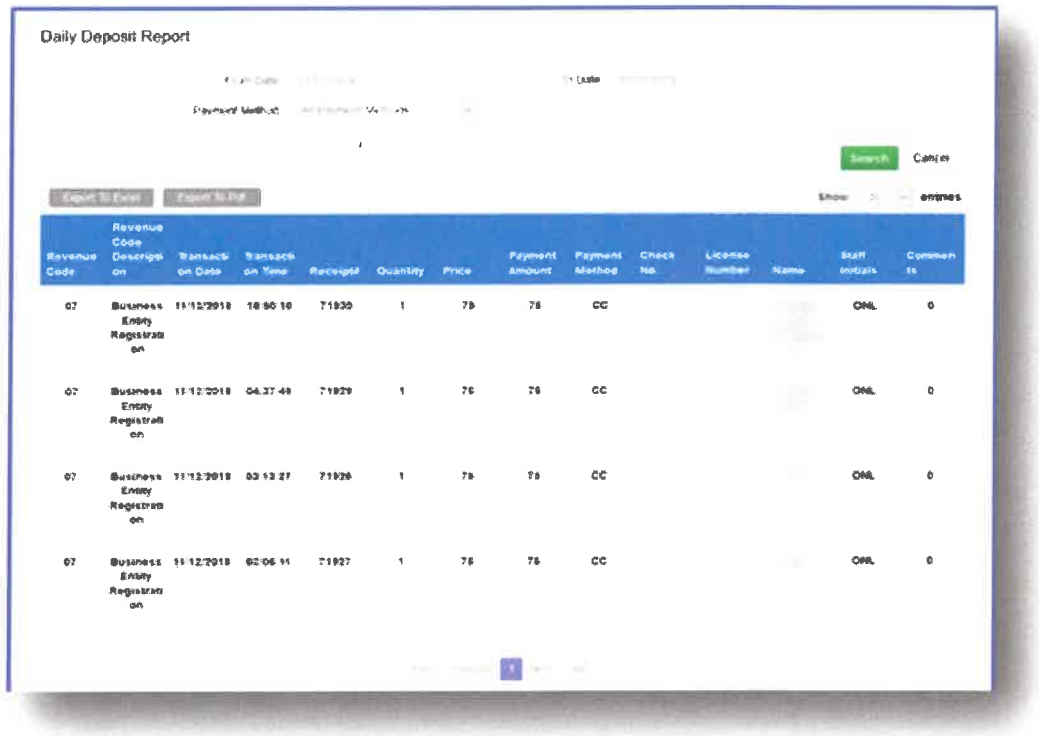
Financial management functions and processes allow for daily, weekly, monthly, and yearly reporting at various levels. In addition, it encompasses the reporting characteristics required to support the ongoing monitoring, audit, and management of the various units. For instance, in the new system, there can be a built-in report called the Daily Deposit Report. When selected from the Reports menu, as shown in the figure below, this report first prompts for a From Date and then for a To Date—it will select only transactions that occurred during that window of time. The report lastly prompts for the Payment Method:



Daily Deposit Report

When the report is run, it will list all transactions that occurred during the defined time, even if that transaction took place just seconds before hitting the 'Search' button. For example, in the following figure, we selected a date range (11/1/2018 through 11/21/2018) and selected All Payment Methods to display.

The results of that search are shown at the bottom of the page in that figure. Additionally, the figure shows that the information may be exported to either Excel or a PDF.



Daily Deposit Report Results

4.2.2. Mandatory Project Requirements –

The following mandatory requirements relate to the goals and objectives and must be met by i3 Verticals as a part of its submitted proposal. Vendor shall describe how it will comply with the mandatory requirements and include any areas where its proposed solution exceeds the mandatory requirement. Failure to comply with mandatory requirements will lead to disqualification. but the approach/methodology that i3 Verticals uses to comply, and areas where the mandatory requirements are exceeded, will be included in technical scores where appropriate. The mandatory project requirements are listed below.

i3 Verticals acknowledge and fully comply with all Mandatory Project Requirements outlined

in Section 4.2.2. Our proposed solution meets each requirement and, in several areas, exceeds

the State's expectations through enhanced functionality, expanded configurability, strengthened

security controls, and advanced user experience features.

Detailed explanations of our compliance and where we surpass the mandatory requirements

are provided within the corresponding sections of this proposal.

4.2.2.1 Vendors must provide a solution for the development and creation of a one-stop shop permitting portal.

Please refer to the Comprehensive details—including screenshots, workflow examples, and supporting explanations provided in Section 4.2: Project Goals and Mandatory Requirements.

i3 Verticals solutions provide a flexible framework which will include public facing web portals, a business intelligence ad-hoc query tool, a meta-data dictionary and a database engine. By combining these components in a service-orientated architecture, we provide a comprehensive platform spanning the lifecycle of all business processes, including custom workflows, multi- level security, data delivery, full audit and logging, and reports. The solution is not subject to volume constraints based on the number of users, whether applicant/licensee, back-office staff, public via online verification or other stakeholders.

The framework utilizes unique components that can be easily modified and implemented independently:

- Customer-One of the most important aspects of the framework is Customer-centricity. The Customer (individual, business, location and/or other entities) is one of the most important central entities and integrates with all other entities within the environment. One of the key underlying principles of the framework calls for a single representation of the Customer within the entire system thus eliminating errors arising from duplicate data entry.
- Functional-Underneath the Customer conceptual layer is the functional layer consisting of various functional blocks that perform specific business functions such as License Issuance and Maintenance, Relationship between entities, Application Process, Complaints, Cash, Inspections, and Administration management. These blocks also utilize specific interfaces to external systems or third-party systems.
- Common Interface-Common Interfaces are shared among the Common Functional Components and provide services such as:
    - Workflow for process execution and management
    - Correspondence generation and Document management
    - Security infrastructure that is used by the functional blocks

Coupling the framework and our proven implementation approach enables our solution to meet WVDOA's requirements. Our Licensing and Regulatory solution will include the following subsystems, and any additional subsystems identified during the discovery phase of a new system implementation: Customer Management, Privilege Management, Applicant/ Licensee/ LEA Services, Enforcement Management, Financial Management, and Support System Components.

Customer Management

Customer Management is the core subsystem of our platform. This approach enables WVDOA to maintain a profile with details of the customer and license applications. All transactions revolve around the customer and provide the common link among permits, inspections, payments, and other

functions. A customer can be an individual, company or business, and the system allows maintaining customer demographics, multiple addresses, contact information, customer profile for the online portal, customer identity information, customer account, and other related information. The platform also provides robust search capabilities. Customer Management handles customer information, including demographics, customer relationships, history, correspondence, problems, and accounts. Our solution is managed at the user level by the creation of unique customer profiles. This customer profile is a central engine to support all services to customers including name changes, address changes, credentials, correspondence, exam, education information, account management, and other related information.

Privilege Management

The concept of a generic Privilege Management subsystem is enabled by the analytical view that any service or product that is offered provides a privilege to the customer. This contains power of developing generic routines to grant, track, suspend, reinstate, and renew privileges can be developed and deployed across the range of products and services offered by WVDOA. When an event triggers a suspension of an application (perhaps for failure to meet requirement(s)), the same software is activated triggering the suspension of the application. If the applicant's education for example is not recorded, the system will not issue a license until complete. The parameters of the two transactions are, of course, different, but i3 Verticals generic privilege management routine will parallel current WVDOA requirements.

Application/Licensee Services

The License Services subsystem provides all capabilities related to licenses, certifications and issuance. These functions include:

- Issuing new licenses, certifications, endorsements, etc.
- Maintenance and tracking of requirements
- Interfacing with other systems as required
- Application Processes

The Licensee subsystem is designed with flexibility as a key element. Applying modifications is a simple change to a configuration setting via the Administration Menu. Changes in the fee structure can be made to parameter-driven tables instead of changing the application code. As part of our Licensing and Regulatory Platform, this subsystem also allows the workflow management for issuance of any product to the customer, which allows the WVDOA to manage the process in accordance with its needs. Workflow management allows WVDOA to review all information at a central location before issuing a permit. It also provides additional functions such as cancellation of previous applications, checks for status, and a customer-centric credentials issuance process.

Enforcement Management

i3 Verticals enforcement module allows for scheduling and performing inspections and other enforcement / compliance activities, such as conducting investigations, audits, surveys, managing outcomes, etc. For example, an inspection record is created and associated with the related

location, permit and/or application. Every inspection (or case, etc.) is assigned a number based on the agency's schema. Inspections can be assigned to the inspector(s) using a

workflow process. Inspections can then be conducted using their laptop or mobile device in which the inspector completes the agency's inspection form(s) electronically in which data, photos, notes, signatures, and more are collected in a uniform manner as required. Any correspondence related to the inspection is generated directly using the workflow automatically and correspondence is recorded. Specific requirements related to Enforcement Management will be discussed during the Discovery Phase and implemented.

Financial (Cash) Management

Financial Management handles the management and calculation of fees, fines, and taxes, and interfaces with the WVDOA Financial system to account for monetary transactions. Financial Management supports the business requirement of tracking activities associated with the accounting of funds. This is provided through a set of online functions and processes, including the management of funds collected from WVDOA office, business partners, and self-service channels. All financial processing and reporting functions reside within this logical system. It includes processing of funds through electronic commerce (that is, credit card processing over the Internet) and point-of-sale (POS) transactions. This subsystem provides associated system management functions and processes allowing daily weekly, monthly, and yearly reporting at various levels. The system also maintains information about fees, fines and taxes including type of tax or fee, effective dates, ending dates, account number, distribution amounts (including local levels), distribution percentages, and remittance information. The system configures fee types, including adding, modifying, and deleting fee types. The system provides for fines to be levied and collected.

Support System Components

The i3 Verticals platform has core sets of support system components under the functional and user interface layer of the application. These components drive the entire business layer of the application and verify that the data is consistent throughout the system. Support System Components include:

- Workflow Management
- Deficiency Management
- Document and Image Management
- Correspondence Management
- Fee Management
- Auditing
- Security Services
- Integration Engine
- Reporting Services
- Web Based Transactions/Mobile App

Workflow Management

Our flexible workflow module is customized to meet WVDOA transaction workflow requirements. Workflow may vary based on permit application type, regulatory processes, etc. and will need to be discussed and finalized with WVDOA during the Discovery phase of the project. The module consists of two subsystems:

- Workflow Setup-Used for setting up the workflows in our system
- Workflow Execution-The business rules and routines to allow execution of workflow in transactions based on setup criteria.

Highlights of our solution's workflow capabilities include the following:

- Integration with roles, groups, and tasks that can be defined using our workflow screens
  - Defining of activities and transactions with appropriate approval steps
  - Integration with imaging and images associated with activities that will be routed using workflow
  - Support of manual routing, allowing supervisors to change and monitor assignments
  - Reprioritization support of activities in work queues by authorized users
  - Provision of features such as suspend/resume/cancel

Deficiency Management

Deficiency Management is responsible for capturing pre-requisites (e.g., mandatory information and documents to process a permit application) and managing these through the application life cycle. Deficiency Management manages mandatory data or documents that depend on a transaction type in the system. The system passes the transaction data to the deficiency component, and the deficiency manager identifies the deficient data based on predetermined business rules. It can suspend the transaction and produce correspondence for the customer. The system automatically tracks deficiencies for each transaction and can notify customers of those deficiencies for the customer to respond.

Document and Image Management

i3 Verticals Document and Image Management subsystem is responsible for managing the life cycle of various scanned images or electronic documents. The system also supports integration with third-party content management systems. Highlights of Document and Image Management include the following:

- Identification of supporting documents for each transaction
- Document acquisition and capture using scan technology
- Indexing of documents to attach to a record or set of records
- Ability to export documents from the system
- Provision of privilege-based security to protect documents from unauthorized access
- Provision of signature enabled capture and automatic signature capture using templates.

Correspondence Management

The customer communication process is varied and can include postal mail, e-mail and online portal methods. This correspondence is system-generated in response to an event such as a permit nearing expiration. All correspondence is based on a set of standard templates that are defined and maintained in the system. Each WVDOA transaction has a set of standard templates that are applicable to it.

Fee Management

Fee Management consists of calculating fee calculations for each transaction. Fee management functionality is implemented based on a common rules engine that is used in other components. The Fee Management framework consists of: Fee Rule Eligibility (identifies which fee derivation rules are applicable based on the parameters supplied as part of the transaction), and Fee Derivation Rule (derives the exact fees required for the transaction by a percentage-fee-based rule or a fixed-fee-based rule).

Auditing

The framework employs auditing through the concept of "activity management." A business function carried out within the system is an activity. The system is configured to log each activity being carried out. This information is stored in the database and is retrieved to analyze or identify patterns for fraud prevention. As part of the business function audit, the system logs the following data points: Logged-in user, IP Address where the user is logged in, Activity date and time, Activity type, and Permit Number.

Security Services

Solution's Security Services provide authentication and authorization services for inbound requests from users and external applications. It exposes application programming interfaces (APIs) and objects to be interfaced from the core layers such as the user interface, navigation, and business services layers.

Our framework uses role-based authorization across the application to allow access to different types of resources. These resources are granular and can be configured at the field, form, or process level. The design authorization is based on roles and resources. Resources can be coarse-grained resources, i.e. a complete function, or fine-grained objects such as a specific data field that contains sensitive data.

The system also manages the concept of sensitive information. Information is identified during the discovery phase and is stored in the database as encrypted data. Sensitive information is carried through the application layers in an encrypted manner and is decrypted only for a user with the appropriate roles. Each viewing event regarding a user's sensitive information is logged into the auditing. Our system also implements the concept of overriding access control based on a high authorization. The supervisor override can be based on a

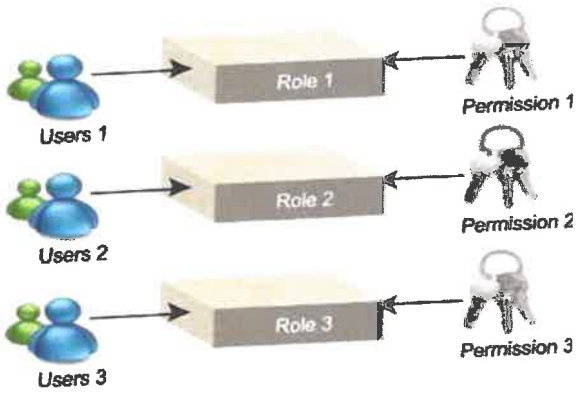


Figure 1: User Role Based Security

combination of username and Each control, operation, and menu option within is a resource that can have security permissions assigned to it. Each resource is uniquely identified and associated with a set of access rights in the authorization store. These rights are associated with user roles.

The framework uses role-based authorization to correlate users and groups with the permissions that they require to do their jobs. When a user or group is added to a role, the user or group automatically inherits the associated security permissions. These could be permissions to perform actions or to access various resources. The groups are used to determine user roles. In the figure below, Users-Roles Relationship shows the relationship between roles and permissions in role-based authorization.

Implementing role-based authorizations can take a variety of forms, including:

- Simple role-based authorization: Allows access to resources or services on a single system.
- Multi-system role-based authorization: Allows access to resources or services on multiple systems.

Auditing

The framework employs auditing through the concept of "activity management." A business function carried out within the system is an activity. The system is configured to log each activity being carried out. This information is stored in the database and is retrieved to analyze or identify patterns for fraud prevention. As part of the business function audit, the system logs the following data points: Logged-in user, IP Address where the user is logged in, Activity date and time, Activity type, and Permit Number.

Security Services

Solution's Security Services provide authentication and authorization services for inbound requests from users and external applications. It exposes application programming interfaces (APIs) and objects to be interfaced from the core layers such as the user interface, navigation, and business services layers.

Our framework uses role-based authorization across the application to allow access to different types of resources. These resources are granular and can be configured at the field, form, or process level. The design authorization is based on roles and resources. Resources can be coarse-grained resources, i.e. a complete function, or fine-grained objects such as a specific data field that contains sensitive data.

The system also manages the concept of sensitive information. Information is identified during the discovery phase and is stored in the database as encrypted data. Sensitive information is carried through the application layers in an encrypted manner and is decrypted only for a user with the appropriate roles. Each viewing event regarding a user's sensitive information is logged into the auditing. Our system also implements the concept of overriding access control based on a high authorization. The supervisor override can be based on a

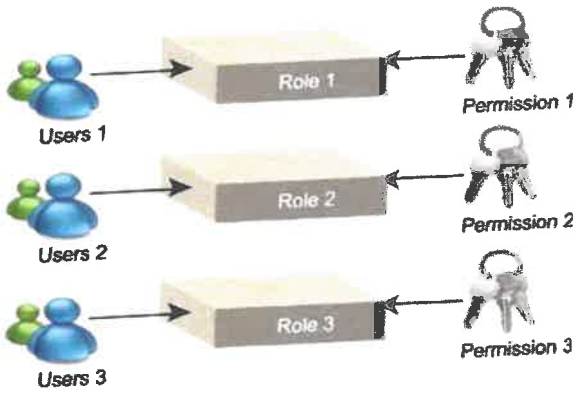


Figure 1: User Role Based Security

combination of username and Each control, operation, and menu option within is a resource that can have security permissions assigned to it. Each resource is uniquely identified and associated with a set of access rights in the authorization store. These rights are associated with user roles.

The framework uses role-based authorization to correlate users and groups with the permissions that they require to do their jobs. When a user or group is added to a role, the user or group automatically inherits the associated security permissions. These could be permissions to perform actions or to access various resources. The groups are used to determine user roles. In the figure below, Users-Roles Relationship shows the relationship between roles and permissions in role-based authorization.

Implementing role-based authorizations can take a variety of forms, including:

- Simple role-based authorization: Allows access to resources or services on a single system.
- Multi-system role-based authorization: Allows access to resources or services on multiple systems.

- Multi-system, action-based or operation-based authorization: Allows individuals in certain roles to access resources or services on multiple systems, based on the action or operation of the role.

Integration Engine

The Integration Engine subsystem provides services to implement inbound and outbound interfaces using both synchronous and asynchronous types of connections. The integration services layer exposes core business services to the external world through a Web services and file transfer gateway. This gateway can support inbound calls over Web services and interface to the business service components or exposes the business service components as Web services to the outside world through security provided by the infrastructure services layer. The integration services layer consists of interfaces for external systems (either within the State or external entities).

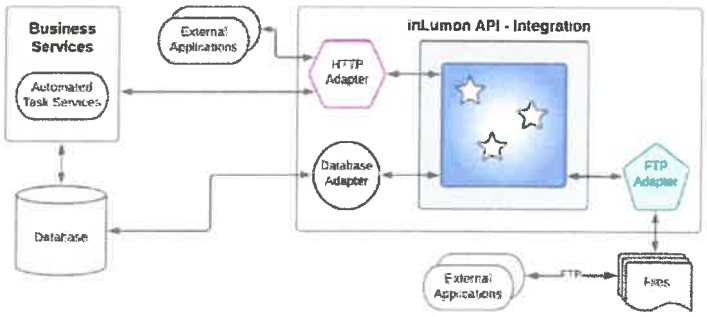


Figure 2: Integration Engine

The integration layer provides interfaces to the various systems. The interface is flexible enough to provide the following characteristics for interfaces: external or internal interfaces to KDA, inbound or outbound data exchange, synchronous or asynchronous communication, batch transfer of data or one-off exchange of data records on an as needed basis, message security (encryptions, non-repudiation, etc.), multiple record formats, and multiple protocols.

Reporting Services

Our Reporting Services subsystem enables the generation and distribution of reports from either the operational database or the reporting database. Reporting Services generates forms, correspondence, and other documents in printable format for distribution to various end users. The operational reports provide a more tactical view of the business operations, which runs against the operational data source or the reporting database depending on the type and nature of the report being generated. The same architecture generates business documents such as forms (blank or with data), correspondence, and instructions. Reports and document generation can be in an online ad-hoc manner and in batch mode.

Web Based Transactions and Mobile App

Customers perform online transactions after they have been authenticated. Any business transaction over the web requiring fee collection is not considered complete unless a fee is successfully collected. Customers receive a confirmation number at the end of the transaction, used for future correspondence. All customer information is exchanged over secure web connections. The web channel interfaces with the database in real time and uses the same underlying system components. Reuse of common functionality allows new web channel transactions to be added in the future. Web channels maintain an audit-trail for all transactions. The web channel allows members, businesses, and partners to perform transactions identified

during the discovery phase via the Internet through secure portals. The architecture also allows for the flexibility to add new services and transactions easily as business needs change.

4.2.2.2 Vendors' solution must outline a structured, transparent, and collaborative methodology that ensures timely delivery, stakeholder alignment, and quality assurance throughout the implementation lifecycle.

Our implementation approach is built on a **proven, structured, and fully transparent methodology** designed to ensure timely delivery, strong stakeholder alignment, and rigorous quality assurance throughout the entire lifecycle of the project. This methodology is adaptable to multi-agency environments and is optimized to support the goals of the West Virginia One Stop Permitting Program.

1. Structured and Phased Implementation Approach

We employ a clear, phase-based delivery framework that provides predictable progress and measurable milestones:

1. **Initiation & Project Planning**
   - Establish governance, communication plans, and project charter
   - Identify agency stakeholders, roles, and responsibilities
   - Develop a detailed project schedule
2. **Discovery & Requirements Validation**
   - Conduct collaborative workshops
   - Validate current-state processes and map future-state workflows
   - Confirm all statutory, policy, and technical requirements
3. **Configuration & Build**
   - Configure forms, workflows, licensing/permitting rules, and integrations
   - Build agency-specific modules using low-code/no-code tools
   - Establish data models and reporting structures
4. **Testing & Quality Assurance**
   - Unit, integration, user acceptance, accessibility, and security testing
   - Defect tracking, remediation, and regression testing
   - Validate performance and load readiness
5. **Training, Knowledge Transfer & Change Management**
   - Train-the-Trainer sessions for agency SMEs
   - On-demand learning and role-based materials
   - End-user communication and readiness preparation
6. **Go-Live & Transition**
   - Phased deployment approach to reduce risk
   - Daily war-room support during stabilization
   - Transition to long-term maintenance and support

This structured methodology ensures every stage is clearly defined and aligned with State expectations.

2. Transparent Processes and Continuous Communication

Transparency is foundational to our delivery model. We maintain visibility through:

- **Weekly status meetings** and dashboards
- **Real-time access** to project plans, risks, and issues
- **Detailed documentation** of decisions, configurations, and processes
- **Shared collaboration workspaces** for documents, change requests, and testing artifacts
- **Open escalation pathways** for quick resolution of issues

This ensures agencies always know project status, progress, risks, and upcoming milestones.

3. Collaborative, Multi-Agency Engagement

We utilize a collaborative model that actively involves all participating agencies:

- **Joint workshops** to ensure shared understanding of requirements
- **Multi-agency governance committees** to guide key decisions
- **Agency-specific configuration sessions** where needed
- **Feedback cycles** at the end of each iteration or sprint
- **Hands-on involvement** of agency SMEs throughout the build and testing stages

This ensures the solution is aligned with operational needs and supports expansion to additional agencies in the future.

4. Quality Assurance at Every Stage

Quality is embedded throughout the implementation lifecycle:

- **Formal QA plans** covering functional, security, performance, and accessibility testing
- **Automated test scripts** for reusable, consistent validation
- **WCAG 2.1 accessibility testing** for all public-facing components
- **Security scans and hardening steps** integrated into the build process
- **User acceptance testing (UAT)** with structured feedback cycles
- **Post-deployment validation** to ensure stability and performance

These measures provide a dependable, high-quality solution that meets State standards.

5. Timely Delivery with Predictable Milestones

Our methodology is built around **clearly defined deliverables**, including:

- Milestone-based configuration progress
- Detailed requirements validation sign-offs
- Sprint reviews and demonstrations
- Testing readiness checkpoints
- Readiness assessments prior to go-live

Each milestone is measurable, tracked, and reviewed collaboratively with State project leadership.

6. Continuous Improvement and Post-Go-Live Optimization

After deployment, we continue to support optimization through:

- Stabilization period support
- Enhancement backlog management
- Monthly health checks
- Continuous user feedback loops
- Improvements aligned with new leadership, operational needs, or statutory changes

This allows the system to evolve while maintaining alignment with the State's long-term vision.

Summary

Our structured, transparent, and collaborative methodology ensures:

- Timely and predictable delivery
- Strong alignment with agency stakeholders
- High-quality implementation through rigorous QA
- A scalable model supporting future expansion

This approach ensures the successful implementation and long-term sustainability of the West Virginia One Stop Permitting Program.

4.2.2.3 Vendor must agree to and meet all data security requirements identified by the Office of Technology, for the entirety of the project, including initial meetings, information gathering, development, and other preliminary stages.

i3 Verticals acknowledges and fully agrees to comply with **all data security requirements established by the West Virginia Office of Technology (WVOT)** for the duration of the project. This commitment applies to **every phase** of the engagement, including initial planning meetings, requirements gathering, design, development, configuration, testing, deployment, training, and ongoing maintenance.

Full Compliance Across All Project Stages

We will ensure that:

- All project activities strictly follow WVOT's security policies, standards, and guidelines
- All personnel understand and adhere to applicable confidentiality, privacy, and cybersecurity requirements
- All systems, environments, and tools used during the project—development, testing, staging, and production—comply with WVOT's technical and security controls
- Data handling, storage, access, transmission, and disposal follow State-approved procedures
- Secure communication channels are always used during collaboration, documentation transfer, and stakeholder engagement
- Vendor staff use only approved, secure devices and networks when interacting with State systems or data

This ensures 360-degree compliance throughout the project lifecycle.

Security Controls and Verification

To support the State's security posture, we will:

- Implement strong access controls, MFA, and least-privilege permissions
- Use encrypted storage and encrypted data-in-transit protocols
- Undergo any required State security reviews, architecture assessments, or vulnerability scans
- Provide requested documentation, diagrams, and evidence of compliance
- Respond promptly to any security findings or remediation requests
- Participate in security and architectural meetings with WVOT as required

We will work collaboratively with WVOT to ensure all controls remain current and effective.

Secure Development and Operational Practices

Our development and operations follow security best practices aligned with:

- NIST 800-53
- CIS Benchmarks
- Secure SDLC practices
- CWE, OWASP, and secure coding standards
- Continuous vulnerability scanning and patching
- Independently conducted penetration testing (as required)

These practices ensure security is embedded from the earliest planning stages through deployment and ongoing maintenance.

Commitment to Ongoing Compliance

We further commit that:

- No work will be conducted outside approved U.S.-based environments (per earlier requirement)
- No sensitive information will be shared with any party not authorized by the State
- Any system enhancements or changes will undergo required security validations
- We will notify and coordinate with WVOT for any relevant updates, architecture changes, or integrations

This ensures sustained compliance throughout the project lifecycle.

Summary

I3 Verticals fully agrees to meet and maintain all data security requirements set by the West Virginia Office of Technology, from project initiation through final acceptance and ongoing support. Security will remain a foundational priority at every stage of the engagement.

4.2.2.4 Vendor's proposed solution must meet FedRAMP requirements.

i3 Verticals acknowledges and fully complies with the requirement that the proposed solution must meet **FedRAMP security standards**. Our solution is architected to operate within **FedRAMP-authorized cloud environments**, ensuring that all infrastructure, services, and security controls meet or exceed the **FedRAMP Moderate baseline**.

FedRAMP-Aligned Cloud Hosting

Our hosting model utilizes cloud services that are:

- **FedRAMP Authorized** at the Moderate impact level
- Designed to support government workloads requiring enhanced protection
- Continuously monitored under the FedRAMP framework
- Managed using FedRAMP-required processes for patching, vulnerability management, and security documentation

This ensures the platform operates within a fully compliant federal security boundary.

FedRAMP Control Alignment

The solution inherits the FedRAMP controls of the authorized cloud and implements additional application-level controls, including:

- Access control (AC)
- Identification and authentication (IA)
- Audit and accountability (AU)
- System and communications protection (SC)
- Incident response (IR)
- Contingency planning and disaster recovery (CP)
- Configuration management (CM)

These controls are built into the application's architecture, operational practices, and security posture.

Continuous Monitoring and Compliance

Our approach ensures:

- Continuous security monitoring aligned with FedRAMP requirements
- Regular reporting and vulnerability remediation
- Integration with FedRAMP scanning tools and processes
- Use of secure, compliant services for encryption, logging, and access control

  This maintains ongoing compliance and protects State data at all times.

Summary

i3 Verticals confirms that the proposed hosting environment and platform architecture **meet FedRAMP requirements** and are fully capable of supporting a FedRAMP Moderate–aligned deployment for the West Virginia One Stop Permitting solution.

4.2.2.5 Vendor must ensure all state Data is encrypted at rest and during transit. Encryption must meet FIPS 140-3 standard.

i3 Verticals acknowledges and fully complies with the requirement that **all State of West Virginia data must be encrypted both at rest and in transit**, using encryption methods that meet or exceed the **FIPS 140-3** standard.

Encryption at Rest (FIPS 140-3 Compliant)

All data stored within the system—including databases, file storage, logs, backups, and any temporary or intermediate storage—is encrypted using **FIPS 140-3 validated cryptographic modules**.
Our approach includes:

- **AES-256 encryption** for all stored data
- Encrypted storage volumes and encrypted database fields for sensitive information
- Secure key management using FIPS-validated key vaults
- Encryption of all logs containing sensitive or operational data
- Encrypted backups, snapshots, and archives

This ensures full protection of State data across all storage layers.

Encryption in Transit (FIPS 140-3 Compliant)

All communication—whether between users and the system, internal components, or third-party integrations—is encrypted using **TLS 1.2+** with FIPS 140-3 validated cipher suites.

This includes:

- Web traffic from public and agency users
- API calls between system components
- Data exchanged during integrations with State systems
- Administrative sessions
- Data transferred during imports/exports and ETL processes

  Every data transaction is protected to federal cryptographic standards.

Key Management and Secure Cryptographic Operations

To ensure compliance and strong security:

- Cryptographic keys are stored in secure, FIPS-validated key management systems
- Key rotation policies follow State and federal security guidelines
- Keys are never exposed to application code or end users
- Access to cryptographic functions is role-restricted and fully audited

These practices ensure consistent adherence to FIPS 140-3 requirements throughout the system.

Compliance Assurance

i3 Verticals commits to:

- Maintaining FIPS-validated encryption across all environments (development, QA, staging, and production)
- Providing documentation demonstrating encryption configurations
- Participating in any encryption or security validation reviews required by the State
- Ensuring new features or integrations remain compliant with FIPS 140-3 standards

Security and encryption remain foundational elements of our implementation and operational practices.

Summary

i3 Verticals guarantees that **all State data is encrypted at rest and in transit**, utilizing **FIPS 140-3 compliant encryption methods** throughout the entire solution, ensuring maximum protection for sensitive information and alignment with State and federal security mandates.

4.2.2.6 Vendor is responsible for ensuring any subcontractors utilized in this project are identified and reported to the WV Office of Technology and that such subcontractors (if applicable) always maintain compliance with the State's data security requirements. The Contractor may not assign, transfer, or subcontract any portion of the contract without the State's prior written consent.

i3 Verticals acknowledges and accepts this requirement. No subcontractors will be used for this project; all work will be performed directly by i3 Verticals's U.S.based team. If subcontracting were ever to become necessary, i3 Verticals would first obtain the State's prior written consent and ensure all subcontractors are fully identified to the WV Office of Technology and remain in continuous compliance with all State data security requirements.

4.2.2.7 Vendor's security controls must be in accordance with the NIST 800-53 standard. Vendor must provide evidence of this upon request

i3 Verticals acknowledges and fully complies with this requirement. Our security controls are aligned with the **NIST 800-53** framework, including controls related to access management, auditing, system integrity, configuration management, incident response, and data protection.

We will provide all requested evidence, documentation, and verification of NIST 800-53–aligned controls to the State upon request and will maintain this compliance throughout the duration of the project.

4.2.2.8 Vendor must demonstrate how the solution implements a proactive, transparent, and standards-based security program that ensures system integrity and compliance with state cybersecurity expectations. Solution must provide security vulnerability scanning and routine reports of such testing of the system to the Office of Technology at routine intervals and upon request.

i3 Verticals takes data security very seriously. Our solution, support and hosting practices ensure secure data storage (encryption in transit and at rest) and access in compliance with State standards and requirements. i3 Verticals platform has penetration testing and vulnerability tool integrated in the deployment pipeline and the scans are scheduled on frequent regular basis, i3 Verticals meet all West Virginia security standards and requirements and applicable Federal laws and regulations and industry best practices using FedRAMP NIST 800-53 compliance and TX-RAMP compliance. Additionally, we support multi-factor authentication and many other security features to provide robust security. We are a security first company.

Continuous Monitoring

Proactive approach to cybersecurity

More effective risk management

Early threat detection and containment

Continuous compliance with security frameworks

Enhanced visibility into IT environment

Improved incident response

Informed risk management decisions

i3 Verticals' solution is supported by a **comprehensive, proactive, and standards-based security program** designed to ensure continuous system integrity, strong cybersecurity protections, and full alignment with State of West Virginia cybersecurity requirements. Security is embedded into every layer of the platform—application, infrastructure, data, and operations—and is continuously monitored, tested, and improved.

Proactive, Standards-Based Security Framework

Our security program follows nationally recognized standards and best practices, including:

- **NIST 800-53** security control families
- **CIS Benchmarks** for hardened configurations
- **FedRAMP-aligned** cloud security controls
- **OWASP** secure development and testing guidelines
- **FIPS 140-3** encryption for data at rest and in transit

This ensures the system adheres to the same level of rigor expected in federal and state government environments.

Key Components of the Security Program

1. Continuous Monitoring and Threat Detection

We implement 24/7 monitoring of system performance, security events, and anomalous behavior, including:

- Automated alerting for suspicious activity
- Real-time event logging and correlation
- Monitoring of authentication patterns, privilege escalations, and unusual data access

These measures ensure rapid identification and mitigation of potential threats.

2. Vulnerability Scanning and Reporting

The solution includes recurring vulnerability management to maintain strong security hygiene:

- **Automated weekly or monthly vulnerability scans**, depending on system layer
- Application, infrastructure, and network-level scanning
- Routine reporting of scan results to the **Office of Technology**
- Rapid remediation cycles based on severity levels
- Tracking and documentation of remediation actions

Upon request, detailed scan reports, remediation logs, and security artifacts will be provided to WVOT.

3. Penetration Testing & Secure Development Practices

We conduct:

- Periodic penetration tests by qualified security analysts
- Code-level scans using SAST and DAST tools
- Secure coding practices aligned with OWASP and NIST
- Security reviews incorporated into CI/CD pipelines

This ensures vulnerabilities are identified early and resolved before reaching production.

4. Transparent Security Governance & Reporting

Our program ensures complete transparency with the State:

- Regular security status updates
- Immediate notification of security incidents per State policy
- Access to audit logs, vulnerability reports, and compliance artifacts
- Participation in WVOT security reviews, architecture evaluations, and compliance checkpoints

This builds trust and ensures alignment with West Virginia's cybersecurity expectations.

5. Strong Controls for System Integrity

The solution safeguards system integrity through:

- Strict role-based access control (RBAC)
- MFA enforcement for administrative roles
- Immutable audit trails of all actions
- Configuration and change management controls
- Continuous patching and software updates
- Encryption of all sensitive data

These measures prevent unauthorized changes and ensure accountability.

Summary

i3 Verticals provides a robust, proactive, and transparent security program that:

- Aligns fully with NIST 800-53 and CIS Benchmarks
- Ensures continuous protection, monitoring, and improvement
- Delivers routine vulnerability scans and reports to the Office of Technology
- Provides full transparency into system security posture
- Meets or exceeds the State's cybersecurity expectations

i3 Verticals will provide all required evidence, reports, and documentation upon request and throughout the project lifecycle.

4.2.2.9 Vendor must commit to a clearly defined time period for addressing critical vulnerabilities, aligned with industry standards and state cybersecurity expectations.

I3 Verticals acknowledges and fully complies with this requirement. We commit to a **clearly defined, industry-standard vulnerability remediation timeline** to ensure rapid protection of State systems and data. Our vulnerability response process aligns with federal, state, and industry cybersecurity expectations.

Critical Vulnerabilities – Immediate Response Commitment

For any vulnerability rated **Critical** (CVSS score 9.0–10), i3 Verticals commits to:

- **Immediate assessment within 24 hours** of detection
- **Mitigation or remediation within 72 hours** (3 business days) whenever technically feasible
- Deployment of emergency patches or configuration changes as required
- Continuous communication with the State until full resolution is achieved

This timeline follows best practices used across government, NIST recommendations, and modern cybersecurity response standards.

High, Medium, and Low Vulnerabilities

In addition to the critical vulnerability response window, i3 Verticals follows a structured remediation timeline:

- **High Severity:** Remediate within **10 business days**
- **Medium Severity:** Remediate within **30 business days**

- **Low Severity:** Remediate within **60–90 business days**, depending on impact and complexity

All identified vulnerabilities are tracked through formal remediation logs and reviewed with State security teams upon request.

Transparency and Reporting

i3 Verticals will:

- Provide full visibility into remediation actions
- Document all vulnerabilities, classifications, and fixes
- Supply reports to the Office of Technology at routine intervals or upon request
- Communicate immediately if a critical vulnerability requires temporary mitigation prior to full remediation

This ensures the State is continuously informed of security posture and actions taken.

Summary

i3 Verticals commits to **rapid, industry-aligned vulnerability remediation**, including addressing **critical vulnerabilities within 72 hours**, and will maintain full transparency and compliance with State cybersecurity expectations throughout the project.

4.2.2.10 I3 Verticals must implement a resilient, secure, and verifiable strategy that ensures business continuity and data integrity in alignment with the State's expectations and the Service Level Agreement (SLA) and implement and maintain a comprehensive backup and disaster recovery plan.

i3 Verticals fully complies with this requirement. Our solution incorporates a **resilient, secure, and verifiable business continuity and disaster recovery (BC/DR) strategy** designed to protect system availability, maintain data integrity, and ensure uninterrupted operations in alignment with the State's expectations and the defined Service Level Agreement (SLA).

i3 Verticals commits to ensuring the various threats and vulnerabilities to which business today is exposed are addressed. These include:

- Catastrophic events such as floods, earthquakes, or acts of terrorism,
- Accidents or sabotage,
- Outages due to an application error, hardware or network failure.

Disasters are usually unplanned and sometimes they never occur at all. The key is to be prepared and responsive in the event of a catastrophe, so that the organization survives; its losses are minimized; it remains viable, and it can be "business as usual," minimizing the effects of downtime. The following figure illustrates the i3 Verticals recommended Disaster/Recovery approach:

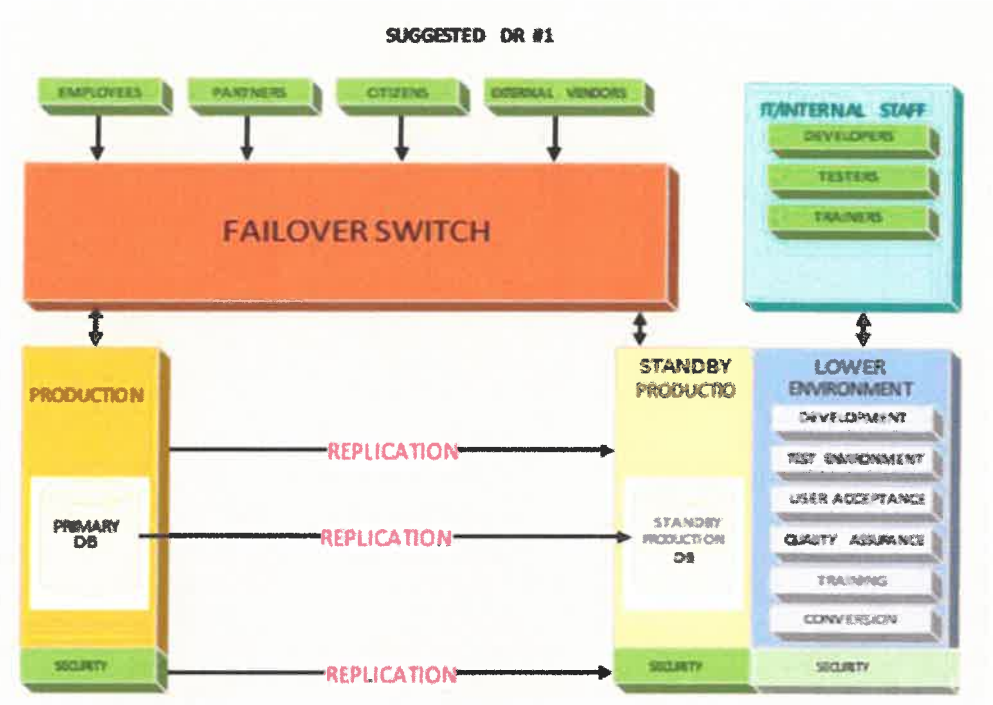


Figure 97: Disaster Recovery Plan

A solution for Business Continuity and Disaster Recovery should be designed to ensure minimal impact to the State business in the event of a disaster, where "disaster" is defined as the "loss of a physical facility", "loss of technology", or "loss of staff."

i3 Verticals approach to establishing a DR plan is structured and results-oriented and allows for check- pointing at every stage within each phase to ensure that the deliverables are produced on time and meet the project requirements. See figure below which illustrates i3 Verticals Disaster Recovery Approach.

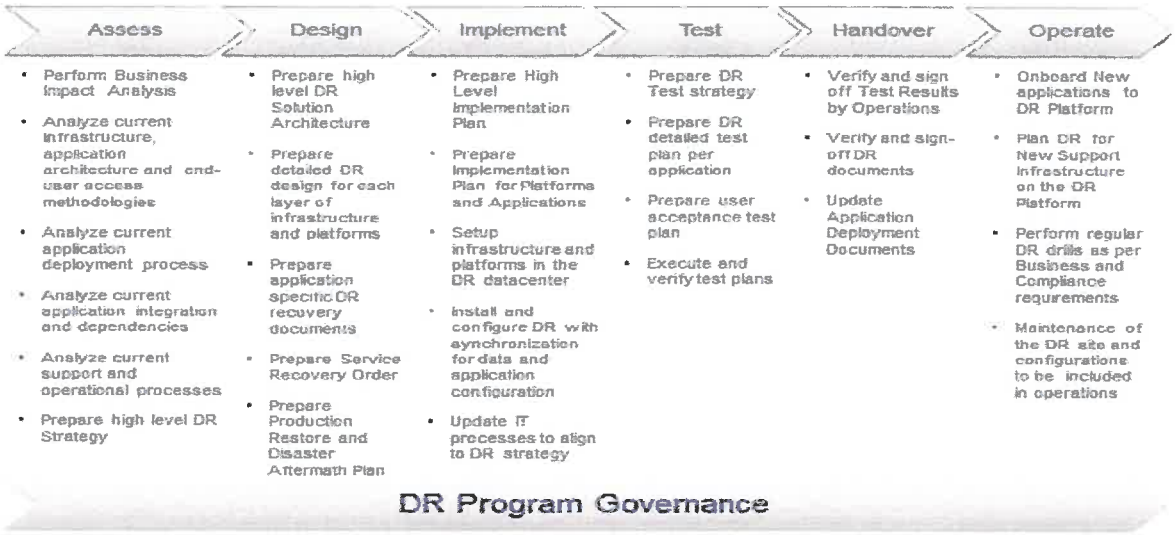


Figure 98: Disaster Recovery Plan

Risk Assessment:

This section provides an illustrative overview of a threat landscape, the vulnerabilities to these threats and the steps that can be taken to mitigate the risks associated with these threats. The risk assessment sets priorities for the threats in the environment. For the purpose of the Risk Assessment, the threats listed below can be considered.

IT Threats	General Threats
Hardware Failure	Power Failure
Software Failure	Utility Failure
Virus Attack	Earthquake
Network Penetration	Snow and Ice Storms
Denial of Service	Sabotage, Vandalism and Terrorism
Vendor Support Failure	Hurricane and Windstorms
Communication failure	Pandemic
	General strike/civil unrest

For each of the above threats, a rating will be made based on the following:

- Probability: The team evaluates the inherent vulnerabilities in the environment

and the existing mitigation to reduce the probability of any threat occurrence.

- Impact: This is a function of the technology enablers or facilities or resources that may be affected due to occurrence of the threat.

This Risk Assessment results in prioritization of the threats depending on the overall exposure. This is used as the basis for further planning (e.g. threats with high probability and high impact need more emphasis compared to low probability and high impact). The Risk Assessment is qualitative in nature. Metrics used for rating probability and impacts are High, Medium and Low. In the absence of past site review documents, this assessment can be arrived at based on the following information:

- Public Data and inputs from the WVDOA team
- i3 Verticals experience with similar clients

An illustrative event impact vs. its probability plot is provided in the following figure.

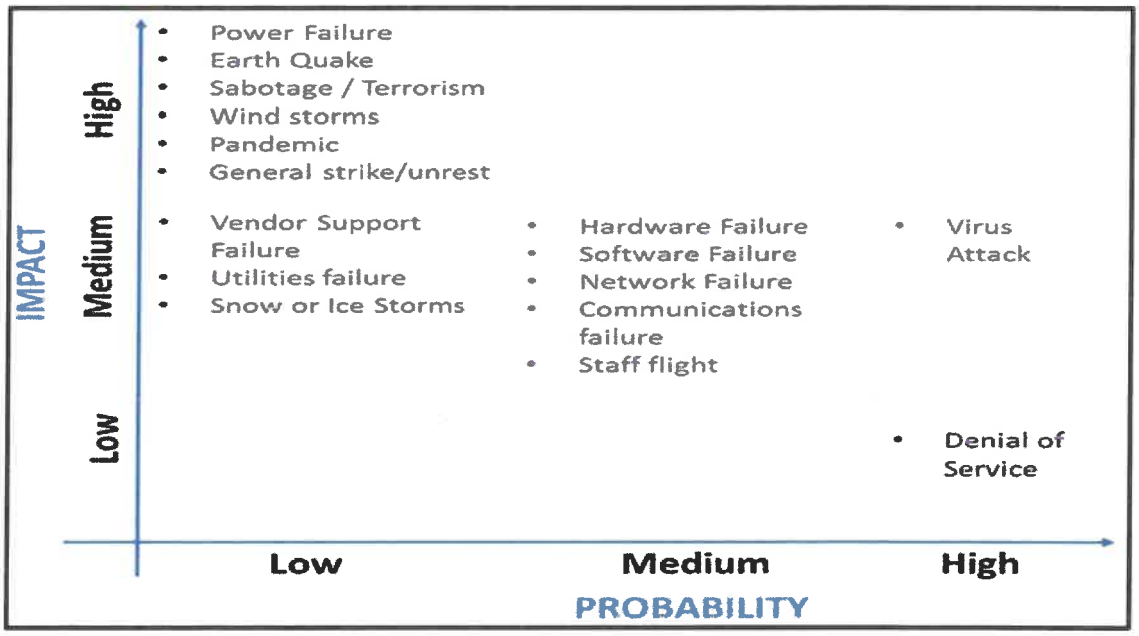


Figure 99: Disaster Impact Vs. Probability

BC/DR Plan

The BC/DR plan for the program is based on the initial risk assessment. It comprises a BC/DR organization and governance track, identification of appropriate facility locations to comply with WVDOA requirements, DR architecture, backup and archival plan and staff retention plan to ensure minimal business, evaluation and continuous improvement plan and testing frequency.

An illustrative high-level plan for BC/DR is summarized in following table:

Type of Disaster	Procedures	
	BCP	**DR**
Loss of facility due to natural disasters or infrastructure failure	• Establishment of a backup center • Infrastructure redundancy at the backup center • Data redundancy • Identification of critical processes and key	• Communication to all stakeholders • Invoking the DR process Movement of key personnel to the backup location • Communication of loss of service to all customers, partners and stakeholders • Restoration of critical services from backup location • Recovery of base location facility
	personnel who have to restore operations	• Re-establishment of services from base location • Restoration of BAU through additional support personnel • Communication of service restoration to customers, partners and stakeholders • Documentation of lessons learned and incorporation into BCMS plan
Loss of technology	• Establishing redundant infrastructure • Backup and archival of business data • Identification of critical processes and key personnel who have to restore operations	• Communication to all stakeholders • Invoking the DR process • Communication of loss of service to all customers, partners and stakeholders Restoration of critical services using redundant infrastructure • Recovery of full technology infrastructure • Re-establishment of services • Restoration of BAU through additional support personnel, if required • Communication of service restoration to customers, partners and stakeholders • Documentation of lessons learned and incorporation into BCMS plan

Type of Disaster		Procedures
Loss of staff	• Identification of critical processes and key personnel • Identification of backup personnel • Knowledge redundancy	• Communication to all stakeholders • Invoking the DR process • Communication of loss of service to all customers, partners and stakeholders • Restoration of critical services using backup personnel at backup data center, if required • Re-establishment of services • Communication of service restoration to customers, partners and stakeholders • Documentation of lessons learned and incorporation into BCMS plan

Location of Facilities

i3 Verticals will provide hosting services from multiple locations ensuring that the loss of any single facility does not impact business continuity. During normal operations, data from the primary facility is replicated to the DR facility.

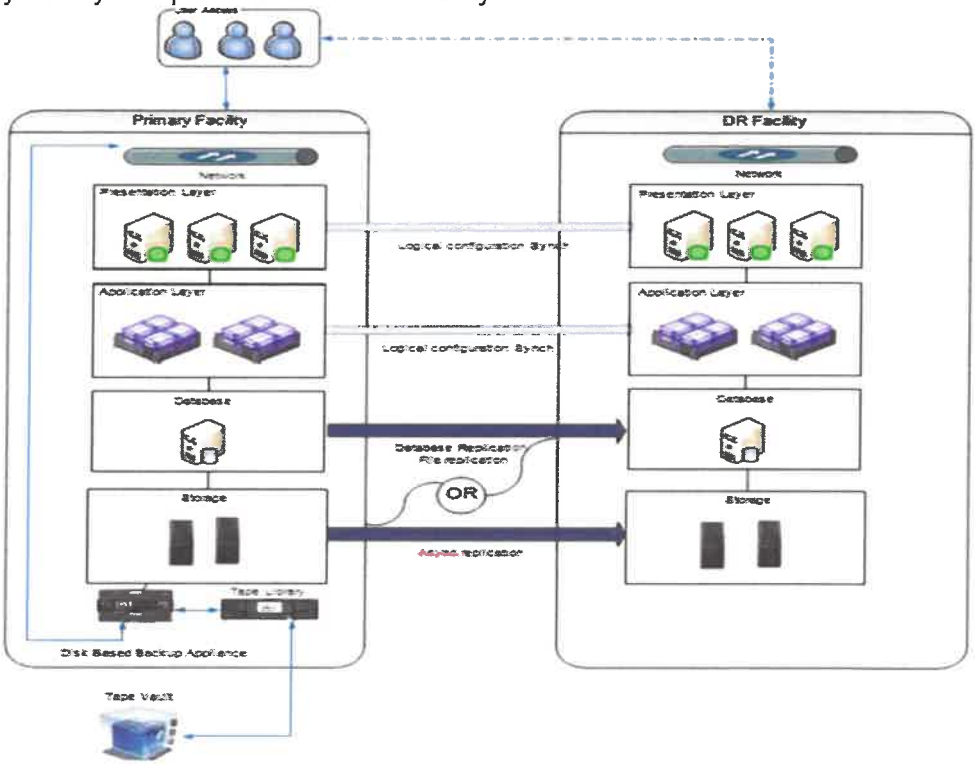


Figure 100: Failover Diagram

Backups and Archiving

Beyond data replication from the primary site to the DR, the solution includes backup and archiving. Backups are peRFQrmed daily of all production data. Data is stored on dedicated (i.e. physically distinct from all other) disk storage and retained for a month. Restores, when needed, are therefore simple and fast.

Restore required from t time ago	Restore granularity
1 day < t s; 1 month	1 day

Restore required from t time ago	Restore granularity
1 month < t s; 1 year	1 week
t > 1 year	1 month

Staff Knowledge Retention

Loss of staff due to attrition is a standard risk for any IT/ITES organization. Most organizations plan for such a risk by keeping a certain percentage of their workforce under-utilized, so that they can be quickly deployed in the event of staff turnover. However, fair and transparent HR policies with high Performance work ethics help prevent the risk to a certain extent. i3 Verticals has such policies. They have been well established and refined over the last several years to ensure our workforce is highly retained.

Knowledge retention and dissemination across the organization is another key aspect in mitigating staff turnover impacts. WVDOA business and IT knowledge will be documented on an ongoing basis and disseminated across the workforce to reduce people's dependency and facilitate replacement of staff within a short span. Audio/video recordings of systems and process information, computer-based training, up-to-date process documentation, frequent knowledge sharing through sessions, seminars, cross training and rotation of staff across applications or processes, demonstrate some of the mechanisms for used by i3 Verticals for knowledge dissemination.

i3 Verticals also teams with accredited, local staffing agencies to source resources at short notice. The recruitment and onboarding process is optimized, without compromising on the quality of staff and services to clients. Roles and responsibilities of the BC/DR team are detailed in the table below:

Role	Responsibility	
	During regular operations	During an event
Program Manager	• Ultimate responsibility for BCP/DR • Review and approve BCMS plan • Periodically review the plan and suggest improvements	• Authorize external communications
Implementation Lead	• Responsible for the DR plan creation and compliance • Ensure dissemination of the plan across the program • Conduct BCP/DR tests • Ensure implementation of corrective • and preventive actions from DR tests	• Declare a disaster and invoke the DR plan • Guide the team in responding to the disaster and monitor progress • Update management on DR progress • Ensure that all response and recovery • actions are documented • Ensures that all production services have been restored • Conduct post-disaster assessment and establish corrective and preventive controls as necessary

Role	Responsibility	
	During regular operations	During an event
Technical team member	• Representative for respective function or technology within the program • Ensure implementation of corrective/preventive measures	• Handle responsibilities as per the plan • Document response and recovery actions • Participate in post-disaster assessment
Security and infrastructure lead	• Help the Implementation lead with the establishment of the plan • Identify continuous improvement opportunities in terms of response and recovery planning based on best practices	• Ensure that the security-related controls are not compromised
Project Manager	• Help the Implementation lead with the establishment of the plan • Identify continuous improvement opportunities in terms of response and recovery planning based on best practices	• Ensure that all actors operate as a unified team

DR Testing Frequency

i3 Verticals recommends customers perform full disaster recovery testing by switching over to the DR data center once every six months, and between switchovers, conduct mock DR drills. The team should publish the results of the test with remediation plans to correct all findings, outcomes, and remediations, if any.

Customer Support

Support Level	Function	Methodology
Tier 0	Self-help and user-retrieved information	Users retrieve support information from help documentation, training material. Microsoft Teams group comprising of client and i3 Verticals can also be used for asking questions.
Tier 1	Basic help desk resolution and service desk delivery	Support for basic customer issues such as solving usage problems and fulfilling service desk requests that need IT involvement. If no solution is available, tier 1 personnel escalate incidents to a higher tier.
Tier 2	In-depth technical support	Experienced and knowledgeable technicians assess issues and provide solutions for problems that cannot be handled by tier 1. If no solution is available, tier 2 support escalates the incident to tier 3.

Support Level	Function	Methodology
Tier 3	Expert i3 Verticals platform/system and service support	Access to the highest technical resources available for problem resolution or new feature creation. Tier 3 technicians attempt to duplicate problems and define root causes, using product designs, code, or specifications. Once a cause is identified, in consultation with the client decides whether to create a new fix, depending on the cause of the problem. New fixes are documented for use by Tier 1 and Tier 2 personnel.
Tier 4	Outside support for problems not supported by the organization	Contracted support for items provided by but not directly serviced by the organization. Problems or requests are forwarded to tier 4 support and monitored by the organization for implementation.

i3 Verticals Standard Licensing Agreement

The i3 Verticals Service Level Agreement (SLA), Support Plan Guide, Terms and Conditions detail the parameters of the Support Plans i3 Verticals offers and what the WVDOA should expect in terms of product and support services.

Support Services

- As per the needs and requirements of our clients support service is provided
- The off-site support is carried on through remote login, telephone, e-mail, messenger, letters, etc.
- To ease the implementation process, training sessions are provided

i3 Verticals Support Desk Hours

The i3 Verticals Support Desk operates from 7:00 AM to 6:00 PM Local Time, Monday through Friday except for federal holidays. For urgent issues (P1 and P2 severity), i3 Verticals provides 24 * 7 support. Customers may use the i3 Verticals Support Desk as a single point of contact for all support inquiries regarding i3 Verticals products. The i3 Verticals Support Desk provides diagnostic support including analysis of the issue, problem solving and resolution.

Support Options

Customer's Named Support Contacts have access to the following options:

- i3 Verticals Support Portal - This allows Customers to log and track incident requests and for certain products, new feature requests, 24 hours a day, 365 days a year. The portal can only be accessed by i3 Verticals Customers with valid User IDs and passwords.
- Email - support@i3verticals.com Every email is assigned a ticket number.
- Telephone - Toll free 800-246-0541.

Reporting Support Incidents

Support Incident: A support incident is defined as a single, reproduceable issue displaying specific symptoms relating to one specific feature, function, action, or facet of the product, or one aspect of its operation or Performance. Each Support Incident is a problem that i3 Verticals cannot divide into separate, subordinate issues. If a problem can be broken down into subordinate issues, i3 Verticals will consider each a separate incident. i3 Verticals may expand the definition of a Support Incident to include accompanying occurrences or events that arise because of or are dependent on it.

What is not a Support Incident?

1. A problem with consulting deliverables not covered under contract
2. Post implementation changes not covered under contract and scope
3. Request for functionality outside the scope
4. A problem caused by a customer's unsupported alteration of an i3 Verticals product

Incident Resolution: Once the i3 Verticals Support Desk reviews an incident, i3 Verticals in discussion with the customer will define resolution of the incident as accomplishing any one of the following:

- Provides a reasonable solution to the incident
- Provides a reasonable Workaround to the incident until the issue is resolved
- Determines the incident is related to an action that does not follow a published guideline or specification
- Determines the incident is an enhancement request

Support Ticket Creation: Upon receiving the support call or email, the i3 Verticals Support Desk will log an incident and provide an incident number to the Customer. This number signifies that the issue has been received, logged and will be assigned to the appropriate work group.

- Support Ticket Prioritization: i3 Verticals will prioritize Support tickets based on:
- The severity of the issue
- The urgency of the issue
- The effort involved in resolution

i3 Verticals will work with WVDOA to determine the appropriate Severity and priority.

Support Ticket Severity and Response Times: The table below describes the severity

i3 Verticals will associate with each support ticket. The table also lists the targeted initial response

time for each level of severity.

Severity	Description	Targeted Initial Response Time
P1	• System crash, major system portion unusable and no reasonable workaround within application, irretrievable data loss • Requires immediate resolution and should be fixed in the next release or patch	30 to 60 mins 24 * 7

Severity	Description	Targeted Initial Response Time
P2	• Some portions of the system do not work as intended/planned, resulting in noticeable deficiency or difficulty with allowing system use	60 to 120 mins 24 * 7
P3	• Application is usable with functional restrictions and impacted operations • Workarounds should be provided and plan for next available patch release is created	4 to 6 hours Local Business Hours
P4	• Superficial defect and minor imperfection bug do not impede system functionality • No impact on Performance or usability and does not impede functionality • Should be reviewed for a future release	8 to12hours Local Business Hours

Customer Notification: For all Severity levels, i3 Verticals will update the Customer on the Support Ticket status as agreed upon at the time i3 Verticals contacts the Customer with the initial response. i3 Verticals will always attempt to resolve the incident on the first contact, but at times, additional contacts may be necessary.

Customer Escalation: The i3 Verticals Support Desk is the single point of contact for all support issues. Please contact the i3 Verticals Support Desk to escalate a Support Ticket. Additionally, Customers may contact their Account Manager for any questions about support procedures, escalation, or any other business needs.

Additional Support-Related Policies

Planned System Outages: i3 Verticals will work with the WVDOA to schedule any planned outages for maintenance. i3 Verticals will notify Customers one week prior to the scheduled maintenance window with the details.

Unplanned System Outages: In the course of resolving support incidents and software bugs, it may become necessary to temporarily bring services offline, or to block users' access. The support team will work closely with WVDOA to schedule these outages to minimize any interruption of service.

Business Continuity Plan: i3 Verticals maintains a Business Continuity Plan to ensure the continuity of its critical business functions.

Service Level Review: i3 Verticals will review and/or renew SLA at least once per year or as required. WVDOA may request a review of SLA at any time by contacting their i3 Verticals Account Manager.

A key performance indicator is a metric that tracks critical performance variables over time. Key performance indicators are created in the Key Performance Manager application. For key performance indicators, the following actions are performed:

- Value defined to be calculated (response time, resolution time, and so on)
- Selection of a calculation type (percentage or decimal)
- Time defined to be calculated (day, week, month, and so on)
- Thresholds that define the red, yellow, and green limits on the key performance indicator display

Depending on the service, the following metrics are monitored and measured:

- Service availability - The length of time the service is available for use
- Error rates - Error counts or percentages in significant deliverables. This category can include production failures such as incomplete backups and restores, coding errors/rework, and missed deadlines
- Technical quality - Technical quality is measured that analyze variables such as program size and coding defects

Planned Outages

Planned outages should be scheduled for a minimum of 72 hours in advance to avoid a reduction in service or interruption. Significant reductions in service or interruptions of function will normally be scheduled at times other than normal work hours (nights or early morning, weekends, holidays, or other times when the usage is minimal) to minimize the impact of the outage. Prior to the planned outage, notification of all affected contacts is the responsibility of the person planning the work.

The person responsible (planner) will write a description of the planned outage to include the scope of work, as well as proposed start and stop dates/times. Additionally, the service reduction or degree of interrupted function will be stated clearly. Included will be a separate worst-case statement detailing effects anticipated if the work does not progress as planned. The outage notification will be emailed.

Unplanned Outages

Should an unplanned outage be required, the person responsible will notify the client and contacts on the Outage list and follow up with a written description of the outage as described above.

For either planned or unplanned outages, if there is any increase in the scope or duration of the work, or increase in the severity of the effects, the person responsible will notify the approver as soon as practical and will inform Outage contacts so an update can be sent.

4.2.2.11 Vendor's solution must be able to be migrated into one of the State's existing cloud tenants after full development.

i3 Verticals acknowledges and fully complies with this requirement. Our solution is architected using modern, modular, and cloud-native principles that allow it to be **seamlessly migrated** into one of the State's existing cloud tenants—such as Azure, AWS, or Google Cloud—after full development and acceptance.

Migration-Ready Architecture

Our platform is designed to be:

- **Cloud-agnostic**, supporting deployment in any State-approved tenant
- Built using **containerized services, standard APIs, and infrastructure-as-code**, which simplifies redeployment

- Structured so application, database, storage, and integration components can be relocated without redesign
- Compatible with State-managed identity, networking, and security policies

This ensures smooth transfer of hosting responsibilities while preserving full functionality.

State-Aligned Deployment Model

Upon completion of development and testing:

- The full solution—including application code, configuration, data schema, integration components, and infrastructure templates—can be transferred to the State's cloud environment.
- We will collaborate with the State to align with its internal architecture, networking, firewall, access control, and monitoring requirements.
- We will provide support and documentation required for successful migration, including environment setup, deployment instructions, and operational runbooks.

Security and Compliance During Migration

The migration process will:

- Maintain **encryption at rest and in transit**
- Follow **FIPS 140-3**, **NIST 800-53**, and State cybersecurity guidelines
- Preserve all audit logs, access controls, and data integrity protections
- Ensure no operational or security gaps occur during transition

Ongoing Vendor Support

Following migration, i3 Verticals will:

- Provide knowledge transfer, training, and technical documentation
- Support State teams during cutover and stabilization
- Assist with configuration changes needed to run in the State's environment
- Ensure compatibility with State monitoring, backup, and disaster recovery tools

This ensures long-term sustainability under State management.

Summary

I3 Verticals confirms that the solution is **fully capable of being migrated** into the State's existing cloud tenants after development and that we will provide all necessary support, documentation, and collaboration to ensure a smooth, secure, and compliant transition.

4.2.2.12 Vendor must make the project management interface available and accessible to the State's implementation team at no additional cost

I3 Verticals acknowledges and fully complies with this requirement. We will provide the State's implementation team with full access to our project management interface— including dashboards, schedules, task tracking, issue logs, documentation repositories, and collaboration tools **at no additional cost** for the duration of the project.

This access ensures complete transparency, real-time visibility into project progress, and seamless collaboration between Vendor and State teams throughout the entire implementation lifecycle.

4.2.2.13 Vendor's solution must provide a real-time data exchange.

i3 Verticals acknowledges and fully complies with this requirement. Our solution is built on an **integration-first, API-driven architecture** that supports **real-time data exchange** with State systems, third-party applications, and internal modules.

The platform enables:

- Real-time RESTful APIs for push/pull data synchronization
- Event-driven messaging to immediately propagate updates across connected systems
- Webhooks and notifications triggered instantly upon data changes
- Bidirectional data sharing with State authorized platforms
- Secure, encrypted data exchange meeting State and federal security requirements

This ensures that information such as application updates, payments, inspection results, status changes, and workflow events is available **immediately** across all integrated systems, supporting accurate decision-making and seamless multi-agency operations.

4.2.2.14 Vendor's solution must be ADA compliant and meet the updated federal requirements.

i3 Verticals acknowledges and fully complies with this requirement. Our solution is designed and maintained to be **fully ADA compliant** and meets all current **federal accessibility standards**, including:

- **WCAG 2.1 and 2.2 AA**
- **Section 508 of the Rehabilitation Act**
- **ADA Title II requirements for digital services**

Public-facing and internal system components undergo accessibility review throughout the development lifecycle. This includes keyboard-only navigation, screen reader compatibility, high-contrast modes, proper ARIA labeling, captioned media, responsive design, and plain-language guidance.

i3 Verticals will continue to ensure full accessibility compliance as federal standards evolve and will provide evidence or documentation upon request.

4.2.2.15 Vendor must provide 3-tier outage reporting.

I3 Verticals acknowledges and fully complies with this requirement. Our solution includes a **three-tier outage reporting framework** that ensures timely communication, transparency, and coordinated response during any system disruption.

i3 Verticals will provide:

- **Tier 1 – Immediate Alerts:** Rapid notification to designated State contacts for critical or system-wide outages.
- **Tier 2 – Status Updates:** Continuous updates on investigation, remediation progress, estimated recovery times, and impact assessment.
- **Tier 3 – Post-Incident Reporting:** A formal outage summary that includes root-cause analysis, corrective actions, and prevention measures.

This structured approach ensures consistent, reliable communication and full visibility for the State throughout the incident lifecycle.

4.2.2.16 Vendor must provide the State's team with access to a sandbox and production environment early on in the development stage.

i3 Verticals acknowledges and fully complies with this requirement. Our implementation approach provides the State's project team with **early, continuous, and role-appropriate access** to both a **sandbox environment** and the **production environment** to support transparency, collaboration, and proactive validation throughout the development lifecycle.

Early Provisioning of the Sandbox Environment

We will provision a dedicated **sandbox environment** shortly after project initiation. This environment will be:

- **Isolated**, secure, and fully configurable
- **Updated regularly** to reflect the latest configuration work
- Accessible to State project team members, SMEs, and reviewers
- Equipped with test data to simulate real-world scenarios
- Used for demonstrations, prototype reviews, and user walkthroughs

Purpose of the Sandbox Environment

The sandbox will allow the State to:

- Observe system configuration from the earliest phases
- Validate workflows, forms, dashboards, and rules as they are built
- Test integrations, logic, and application behavior
- Provide feedback early reducing rework and accelerating alignment
- Participate in iterative sprint reviews, UAT preparation, and training
- Experiment with features without risk to development or production

This ensures a truly collaborative, hands-on implementation process.

Early Provisioning of the Production Environment

We will also provision the **production environment early in the project**, prior to go-live. This environment will initially operate in a secured pre-production state.

Purpose of Early Production Access

Early production access enables:

- Infrastructure readiness and configuration
- Security assessment and validation by the Office of Technology
- Integration endpoint verification
- Load testing, performance tuning, and DR readiness
- Early establishment of hosting, monitoring, and backup processes
- Pre-go-live administrative setup (roles, permissions, user provisioning)

This proactive approach ensures smooth transition from development to launch.

Role-Based Access Controls for State Users

The State will receive access to each environment based on role and need:

- Project leadership: visibility into both environments
- Subject matter experts: access to sandbox for validation
- Security and IT teams: access for penetration testing, DR validation, and scanning
- Trainers: access for curriculum development and Train-the-Trainer preparation
- Administrative users: early access to configure, verify, and refine role permissions

All access is controlled using RBAC, MFA, and audit logging, in compliance with State security policies.

Environment Lifecycle and Update Cadence

- Sandbox environment will be refreshed periodically with updated configurations and test data
- Production environment will be established early and locked down until final deployment
- Both environments will follow secure change management processes
- All updates will be documented and communicated in advance

This ensures consistency and transparency as the system evolves.

Benefits to the State of Early Environment Access

The State gains multiple strategic advantages:

- Increased transparency into work-in-progress
- Early detection of misalignment or configuration issues
- Ability to provide feedback early and often
- Accelerated training readiness through hands-on practice
- Streamlined UAT, since users are already familiar with the system

- Reduced implementation risk through continuous validation
- Better preparedness for go-live thanks to earlier familiarity with both environments

This approach strengthens collaboration and improves overall project outcomes.

Summary

i3 Verticals will provide the State with **early, secure, and continuous access** to both sandbox and production environments. This ensures full transparency, enables iterative validation, supports rapid feedback cycles, enhances training readiness, and aligns fully with the State's expectations for a collaborative and successful One Stop implementation.

4.2.2.17 Vendor must provide a disentanglement plan to the State within 6 months of contract award and maintain compliance with the requirements of ATTACHMENT A.

i3 Verticals acknowledges and fully complies with this requirement. We will develop and deliver a comprehensive Disentanglement Plan to the State within six (6) months of contract award, ensuring the State retains full operational continuity and ownership of all system components should transition or contract separation ever be required.

Comprehensive Disentanglement Plan

The Disentanglement Plan will outline a **structured, secure, and well-documented transition approach** that enables the State to assume full control of the system or transition services to another provider with minimal disruption. The plan will include:

1. System Architecture and Component Documentation

- Documentation of application architecture, integrations, APIs, data models, workflows, and security configurations
- Deployment diagrams, network layouts, and environment specifications
- Versioning details and configuration management artifacts

2. Data Migration and Transfer Procedures

- Complete data export procedures in open, non-proprietary formats
- Database schemas, data dictionaries
- Secure transfer protocols aligned with encryption and State cybersecurity requirements
- Verification and reconciliation steps to ensure data integrity

3. Knowledge Transfer and Operational Runbooks

- Administrative and operational runbooks for the State or new vendor
- User management, system monitoring, and maintenance playbooks
- Security procedures, including RBAC, logging, and vulnerability processes
- Integration specifications and authentication procedures

4. Transition Governance and Timeline

- Roles and responsibilities for i3 Verticals and the State during disentanglement
- Transition milestones, communication protocols, and approval checkpoints
- Resource commitments and support expectations during transition

5. Continuity of Operations

- Procedures to ensure uninterrupted access to the system during transition
- Contingency plans for partial handover or phased migration
- Verification steps to ensure no degradation of service or data loss

Alignment With Attachment A Requirements

The Disentanglement Plan will fully comply with **ATTACHMENT A** and will include:

- Required artifacts, documentation standards, and formats
- Compliance with data retention, destruction, and security obligations
- Adherence to performance, communication, and transition expectations outlined in the attachment
- Verification, acceptance, and audit procedures as required by the State

We will maintain ongoing compliance with Attachment A throughout the contract term and update the plan as needed based on State direction or system changes.

Summary

i3 Verticals commits to providing a complete, secure, and State-aligned **Disentanglement Plan within six months of contract award**, and to maintaining full compliance with all requirements defined in **ATTACHMENT A**. This ensures the State can seamlessly retain system continuity and control at any point during or after the engagement.

4.2.2.18 Vendor's solution must include and provide ongoing support and maintenance of the proposed solution for the duration of this contract including updates, bug fixes, etc.

i3 Verticals acknowledges and fully complies with this requirement. Our solution includes a comprehensive, long-term **support and maintenance program** that ensures the platform remains secure, stable, up to date, and fully aligned with the State's operational needs throughout the duration of the contract.

Comprehensive Ongoing Support and Maintenance

Our support model includes all elements necessary to maintain continuous high-quality service:

1. Application and Platform Maintenance

We provide:

- Routine updates to system components
- Performance tuning and optimization
- Enhancements to improve usability, efficiency, and compliance
- Monitoring and resolution of system alerts and performance anomalies

All updates follow controlled change-management processes, tested prior to deployment.

2. Bug Fixes and Issue Resolution

I3 Verticals provides full lifecycle support for identifying and resolving defects:

- **Priority-based triage** aligned with severity and impact
- Rapid resolution timelines for high and critical issues
- Hotfixes for urgent production defects
- Fully documented remediation and regression testing
- Root-cause analysis for recurring issues

This ensures uninterrupted functionality and continuous system reliability.

3. Security Updates and Compliance

We deliver:

- Regular security patching for application and infrastructure components
- Updates aligned with emerging threats and State cybersecurity expectations
- Continuous vulnerability scanning and mitigation
- Maintenance of compliance with NIST 800-53, FIPS 140-3, FedRAMP-aligned hosting, and ADA/WCAG requirements

Security is treated as an ongoing priority and integrated into maintenance operations.

4. Feature Enhancements and Platform Improvements

Throughout the contract term, we provide:

- Access to platform upgrades and new features
- Improvements driven by State feedback, user experience enhancements, and evolving needs
- Modernization updates aligned with industry best practices
- Enhancements required by legislative or regulatory changes

This ensures the platform continues to grow with the State's needs.

5. Help Desk and Support Services

I3 Verticals provides:

- Tier 1–3 support for agencies
- Defined SLAs for response and resolution
- U.S.-based support staff
- Multi-channel support (email, help desk portal, phone, and chat where applicable)
- Detailed ticket tracking and reporting for full transparency

Users receive timely assistance and proactive communication.

6. Environment, Infrastructure, and Hosting Maintenance

We support:

- Maintenance of hosting environments (sandbox, test, staging, and production)
- System monitoring, uptime management, and alerting
- Backup and disaster recovery maintenance
- Logging, analytics, and system health checks

This ensures high availability and operational continuity.

Summary

I3 Verticals will provide **full ongoing support and maintenance** for the duration of the contract, including:

- Updates
- Bug fixes
- Enhancements
- Security patches
- Performance and stability improvements
- Comprehensive help desk and operational support

This commitment ensures the solution remains dependable, secure, and continuously aligned with the State's requirements.

4.3. Qualifications and Experience:

Vendor should provide information and documentation regarding its qualifications and experience in providing services or solving problems similar to those requested in this RFP. Information and documentation should include, but is not limited to, copies of any staff certifications or degrees applicable to this project, proposed staffing plans, descriptions of past projects completed (descriptions should include the location of the project, project manager name and contact information, type of project, and what the project goals and objectives where and how they were met.), references for prior projects, and any other information that vendor deems relevant to the items identified as desirable or mandatory below.

4.3.1. Qualification and Experience Information: Vendor should describe in its proposal how it meets the desirable qualification and experience requirements listed below.

4.3.1.1. Vendors should highlight a Proven track record designing, deploying, or supporting permitting platforms for state or local agencies.

Our team brings decades of combined experience implementing enterprise-scale licensing, permitting, and inspection platforms for state and local agencies. We have successfully delivered systems that support:

- **End-to-end permitting workflows** for applications, renewals, amendments, and conditional approvals
- **Complex regulatory programs** that require fee calculations, background checks, education/CE tracking, investigations, and enforcement
- **Mobile inspections**, field data collection, and offline-capable modules
- **High-volume transaction processing** supporting thousands to millions of applicants
- **Multi-agency/multi-board governance models**, allowing agencies to operate independently while sharing a unified statewide platform

Our experience includes:

- Licensing and enforcement systems for medical, professional, trade, and occupational boards
- Multi-program permitting systems for environmental, building, and public safety agencies
- Government-to-public self-service portals
- Government-to-government collaboration, workflows, and compliance systems

We have continuously supported these systems post-deployment with ongoing maintenance, enhancements, and modernization efforts, demonstrating long-term viability and stability.

i3 Verticals is uniquely qualified to meet West Virginia's One Stop Permitting Program (WVOSPP) goals, scope of work and requirements having successfully implemented browser-based licensing systems in Nevada, California, Oregon, Wyoming, Nebraska, Louisiana, Alaska, Kentucky, North Carolina, Delaware, Maryland, Alabama, New Mexico, South Dakota, & Arizona. In addition, i3 Verticals has implemented other state-level software systems in over 30 states and four Canadian provinces. All these projects were completed within budget.

Our expertise and extensive experience with licensing, permitting, and enforcement systems across multiple public agencies, successful implementation track record of implementing Licensing Systems, coupled with our elegant and state-of-the-art Licensing Platform qualifies us to execute this engagement successfully.

In 2019, the Louisiana Board of Medical Examiners awarded a contract to i3 Verticals for implementing 65+ license types on the i3 Verticals platform. The system for LAMED was deployed within 12 months and included data migration.

In 2020, i3 Verticals began a similar project with the State of California, Department of Consumer Affairs to implement a licensure system on our licensing platform for Cohort 1. This new system was deployed in production successfully. The implementation had multiple interfaces and data migration tasks as part of the project. In 2022, i3 Verticals was awarded another contract to bring additional boards to the i3 Verticals platform after the success of Cohort 1.

i3 Verticals proposes to utilize our flexible solution and technical depth to configure, customize and implement the Licensing and Enforcement system for the West Virginia Department of

Administration, Office of the Cabinet Secretary. We consider our proposed experience implementing the Licensing and Enforcement system unique, coupled with our insights and functional understanding of the i3 Verticals Licensing Framework, your overall success increases dramatically, and our experienced staff are here to help define realistic, achievable timelines for the project, allowing i3 Verticals to become the West Virginia Department of Administration, Office of the Cabinet Secretary long-term partner.

i3 Verticals delivers technology that enables our client's business to thrive as opposed to simply looking for technological solutions that fit. We believe our experience and industry knowledge make a difference as i3 Verticals is focused on your business first and assesses the implications of the technology we design, develop, and implement.

i3 Verticals successful licensure system implementations for other state regulatory agencies have provided significant improvements to their customer service, user satisfaction (internal and external), and efficient workflows.

Our partial list of state licensing and public sector clients includes:

Client	*Project*
Delaware Department of Education	Implementation of the Educator Licensing System. The system was successfully implemented and is currently in Maintenance and Operations.
Maryland Department of Education	Implementation of the Educator Certification System. The system was successfully implemented and is currently in Maintenance and Operations.
Nebraska Department of Education	Implementation of Educator Certification System. The system was successfully implemented and is currently in Maintenance and Operations.
California Department of Consumer Affairs (DCA)	Implementation of Cohort 1 (BMC1) was completed successfully and is currently in Maintenance and Operations. Implementation of Cohort 2 (BMC2) two Product Increments are completed and in production and a third Product Increment in progress.

Client	Project
Kentucky Department of Agriculture – Industrial Hemp Program	Implementation of Hemp Licensing completed successfully and currently in Maintenance and Operations.
Louisiana State Board of Medical Examiners	Implementation of Licensing and Enforcement System for all Allied Health Boards (65+ license types) completed successfully and currently in Maintenance and Operations.
Nevada Board of Pharmacy	Replacement of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.
Oregon Board of Professional Engineers and Land Surveyors	Implementation of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.
Wyoming Real Estate Commission	Implementation of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.

4.3.1.2. Vendors should present experience integrating with legacy systems, portals, and third-party tools using APIs, middleware, and secure data exchange protocols.

Our platform is built on an **integration-first architecture**, designed from the ground up to coexist with existing state systems and external partners. Our team has extensive experience integrating with:

Legacy Systems

We regularly integrate with older mainframe, client/server, and custom-developed systems using:

- Secure REST APIs
- SOAP-based services when legacy platforms require them
- Encrypted SFTP file transfers
- ETL pipelines and scheduled data exchanges
- Middleware when required by the state

We understand how to modernize while minimizing risk and disruption.

Portals and Websites

We integrate with state-operated portals or landing pages through:

- Single Sign-On (SSO)
- Deep-link routing into specific pages of the licensing/permitting workflow
- Shared branding, theming, navigation, and content pages
- Embedded components using iFrames or federated UI modules

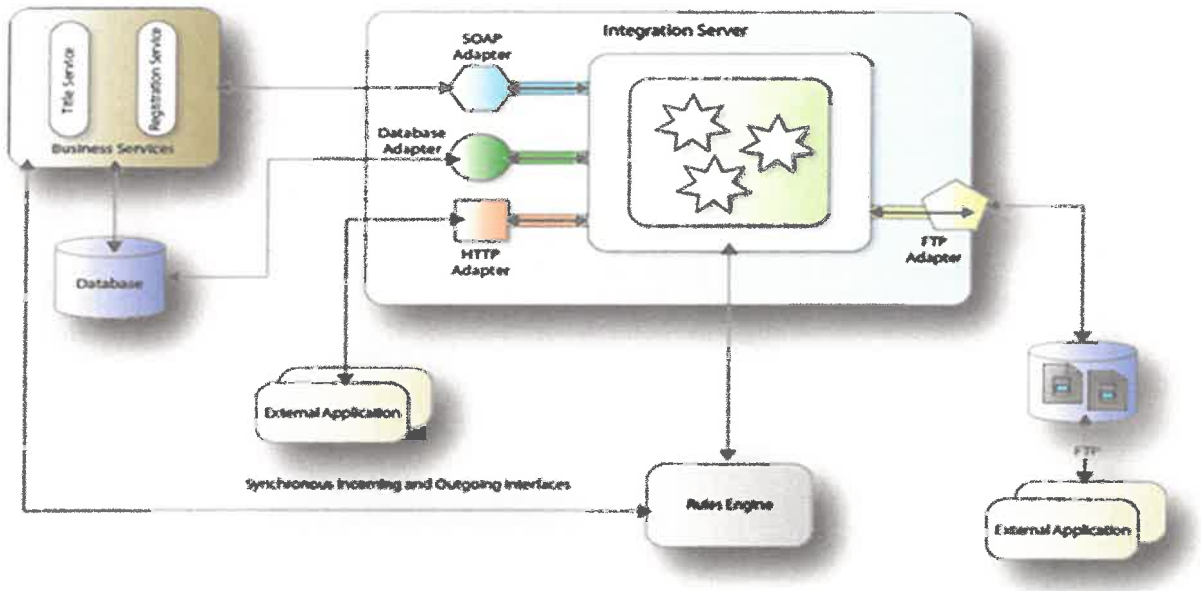
Third-Party Tools

Our team has integrated with:

- Payment processors
- SMS/email communication gateways
- GIS/ESRI mapping services
- Identity verification and background check providers
- CE/training providers
- Financial systems and ERPs
- Document management systems such as SharePoint or Google Drive

We follow secure data exchange practices such as OAuth2.0, mutual TLS, JSON Web Tokens, and standard API gateway patterns to ensure seamless interoperability.

The Integration Engine subsystem provides services to implement inbound and outbound interfaces using both synchronous and asynchronous types of connections. The integration services layer exposes core business or data services to the external world through a Web services and file transfer gateway. This gateway can support inbound calls over Web services and interface to the business or data service components or exposes the business service or data components as Web services to the outside world through security provided by the infrastructure services layer. The integration services layer consists of interfaces for external systems (either within the State or external entities*), as shown in the following figure below.*



Integration Service layer

The integration layer provides interfaces to the various systems using hypertext transfer protocol (HTTPS), secure file transfer protocol (SFTP), simple object access protocol (SOAP),

REST, database adaptors, and database replication. The interface subsystem is flexible enough to provide the following characteristics for interfaces:

- Handle external or internal interfaces
- Handle inbound or outbound data exchanges
- Allow synchronous or asynchronous communication
- Allow batch transfer of data on regular frequency or one-off exchange of data records on an as-needed basis
- Support message security (encryptions, non-repudiation, etc.)
- Handle multiple record formats
- Handle multiple protocols

4.3.1.3. Vendors should describe Familiarity with scalable, secure cloud platforms (e.g., Azure, AWS, Google Cloud) and disaster recovery best practices.

Our platform can be deployed in leading cloud environments including **Azure**, **AWS**, or **Google Cloud**, and is architected for:

Scalability

- Automatic scaling based on user load
- Distributed application tiers for high performance
- Ability to support multiple agencies with role-separated data
- Event-driven architecture that supports high-volume processing

Security

- Encrypted network traffic with TLS 1.2+
- Encrypted data storage using industry-standard ciphers
- Hardened firewalls and security groups
- Zero-trust access patterns
- Continuous monitoring and alerting

Disaster Recovery (DR) & Business Continuity

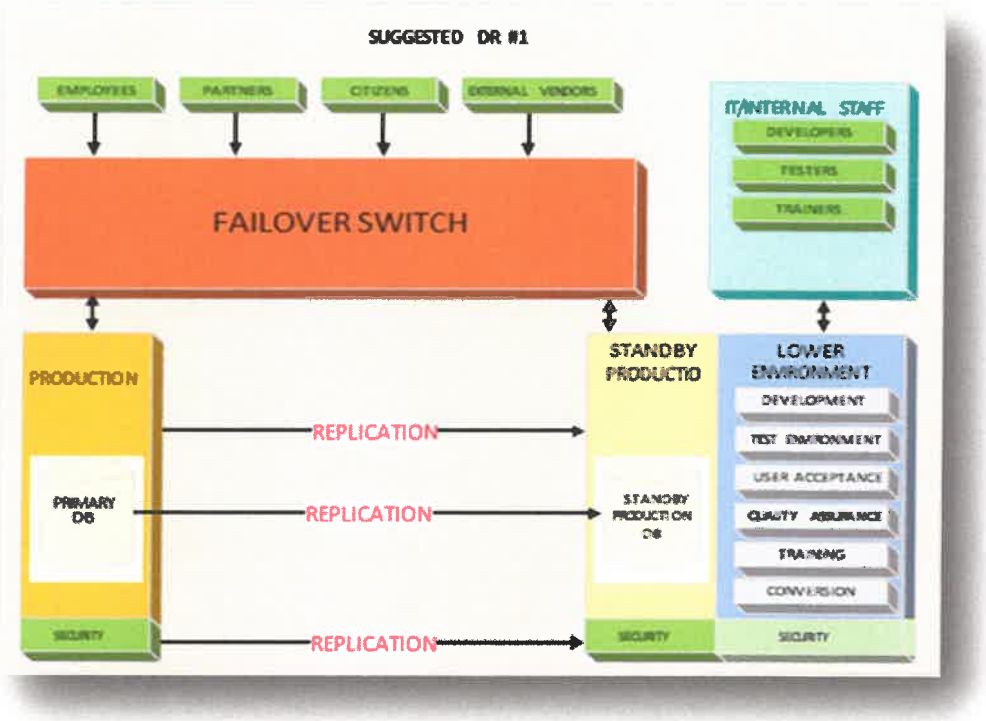
We implement:

- Multi-region disaster recovery
- Continuous data replication
- Nightly backups retained per retention policy
- Load-balanced redundant application servers
- Fully documented DR plans with RTO/RPO targets
- Annual DR simulation exercises

Agencies receive full transparency into uptime, performance, and recovery capabilities.

Disasters are usually unplanned and sometimes they never occur at all. The key is to be prepared and responsive in the event of a catastrophe so that the organization survives, its losses are minimized, it remains viable, and it can be "business as usual," minimizing the effects of downtime.

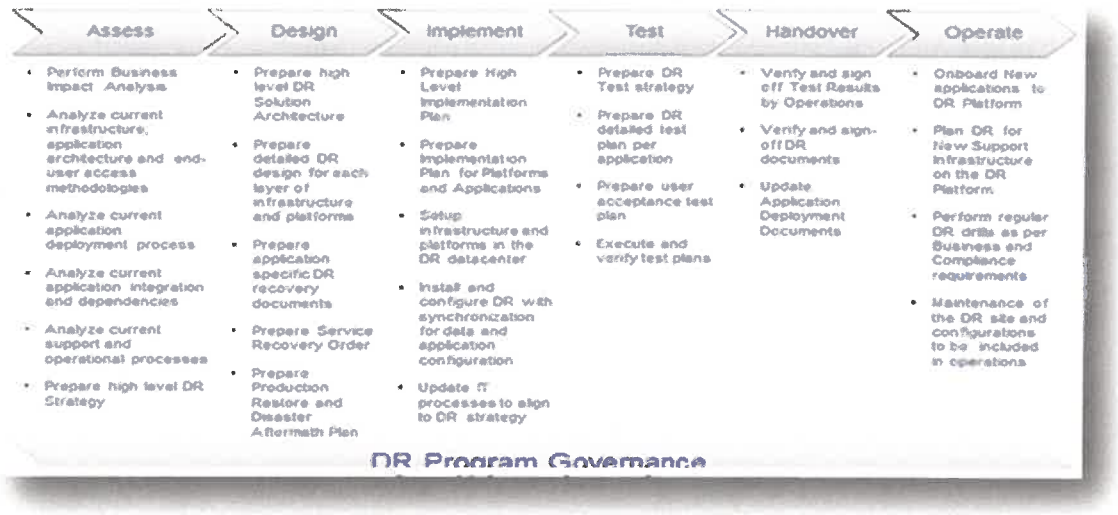
The following figure illustrates the i3 Verticals-recommended Disaster/Recovery approach:



Disaster Recovery Plan

A solution for Business Continuity and Disaster Recovery should be designed to ensure minimal impact on the State business in the event of a disaster, where "disaster" is defined to be the "loss of a physical facility", "loss of technology", or "loss of staff."
i3 Verticals approach to establishing a DR plan is structured and results-oriented, and it allows for check-pointing at every stage to ensure that the deliverables are produced on time and meet the project requirements.

See the figure below which illustrates i3 Verticals' Disaster Recovery Approach.



Disaster Recover Governance Program

4.3.1.4. Vendors should explain their experience managing sensitive data with encryption, access controls, and audit trails.

Our platform is designed for environments requiring secure handling of sensitive regulatory data. Key elements include:

Encryption

- **AES-256 encryption at rest** for databases and file stores
- **TLS 1.2/1.3 encryption in transit**
- Encryption of cache stores, message queues, and backups

Access Controls

- Role-based access control (RBAC) with customizable roles
- Field-level permissions for sensitive data such as SSNs, background check results, and financial data
- Multi-factor authentication (MFA) for administrative users
- Principle of least privilege across all system components

Audit Trails

- Immutable system logs for every action
- User session logging
- Form-level change history
- Document access and modification logs
- Administrative override tracking

These capabilities support compliance with state regulations, public records laws, and audit readiness.

i3 Verticals is a security-first organizations with rigorous policies and procedures in place to ensure industry leading security posture and practices. First, i3 Verticals is a TX-RAMP level 2 certified organization. i3 Verticals chose TX-RAMP because of its widely accepted reciprocity in other State-RAMP programs and broad adoption as a control governance standard. TX-RAMP aligns with NIST 800-53 Rev. 5 control criteria, which is the baseline which i3 Verticals builds its System Security Plans for all of our implementations. Furthermore, i3 Verticals operates to a Written Information Security Program (WISP) that utilizes five (5) layers of policies, procedures, processes, standards, and work instructions that provide a holistic approach to information security.
To ensure robust security, manual procedures and controls are implemented across various domains. These include:

- **Risk Assessment and Management:** Conducting thorough risk assessments to identify potential security risks and vulnerabilities within the system. This involves manual evaluation of assets, threats, and vulnerabilities to determine the impact of potential incidents.
- **Access Control:** Enforcing strict access controls through manual oversight to ensure that only authorized personnel have access to sensitive data and system resources. This includes implementing role-based access control (RBAC) and conducting regular access reviews.
- **Security Awareness Training:** Providing regular security awareness training to employees to educate them about security policies, procedures, and best practices. This manual training helps employees understand their roles and responsibilities in maintaining system security.
- **Incident Response Planning:** Developing and implementing an incident response plan to effectively respond to security incidents. This includes manual procedures for detecting, reporting, assessing, and responding to security breaches in a timely manner.
- **Regular Security Audits and Reviews:** Conducting regular security audits and reviews to assess the effectiveness of security controls and identify areas for improvement. These audits are often manual and help ensure compliance with standards like ISO 27001.
- **Documentation and Compliance:** Maintaining thorough documentation of security policies, procedures, and controls to demonstrate compliance with standards such as ISO 27001. This documentation is manually updated and made available for audit purposes.
- **Vendor Risk Management:** Conducting manual assessments of third-party vendors or suppliers to ensure their security practices meet required standards. This involves implementing vendor risk management processes to mitigate potential risks.

- **Penetration Testing:** All systems are regularly tested for vulnerabilities by a third-party penetration testing organization certified to perform ethical hacking and vulnerability detection.

4.3.1.5. Vendors should highlight experience in training in NIST, CIS, FedRAMP, and state-specific security standards, including vulnerability scanning and incident response.

i3 Verticals takes data security very seriously. Our solution, support, and hosting practices ensure secure data storage (encryption in transit and at rest) and access in compliance with State standards and requirements. The i3 Verticals Licensing platform has penetration testing and vulnerability tool integrated in the deployment pipeline and the scans are scheduled on frequent regular basis, i3 Verticals meets all State security standards and requirements, State laws and regulations, and applicable Federal laws and regulations, and industry best practices using FedRAMP NIST 800-53 compliance and StateRAMP compliance. Additionally, we support multi-factor authentication and many other security features to provide robust security. We are a security-first company.

We adhere to recognized government cybersecurity requirements, including:

NIST 800-53 Framework

Controls across categories such as:

- Access control
- Audit and accountability
- Identification and authentication
- Systems and information integrity
- Risk assessment
- Contingency planning

CIS Benchmarks

Server, database, and application hardening practices including:

- Log management
- Port restrictions
- Password policies
- Secure configuration baselines

FedRAMP-Ready Components

When deployed in FedRAMP-authorized cloud environments, our system benefits from:

- FedRAMP Moderate controls
- Hardened government cloud infrastructure
- Continuous monitoring requirements

Operational Security Practices

We perform:

- Ongoing vulnerability scanning
- Penetration testing
- Security patching and hardening
- Continuous monitoring
- Incident response with defined SLAs
- Threat detection using SIEM tools

This ensures strong defense-in-depth protections against evolving cyber threats.

4.3.1.6. Vendors should explain their Ability to tailor project management approach to agency needs, with tools like Jira, Smartsheet, or Microsoft Project for example.

Each State agency has its own governance structure, approval processes, and staffing models. We tailor our project methodology to the environment, including:

Agile

When agencies prefer iterative progress, we use:

- Short sprints
- Frequent demos
- Backlog grooming
- Rapid feedback loops

Hybrid Agile/Waterfall

Ideal for government oversight or multi-agency coordination. This includes:

- Upfront requirements
- Sprint-based configuration
- Milestone-based approvals
- Monthly release cycles

Traditional Waterfall

Used when agency constraints require strict phase-based documentation.

Project Management Tools

- **Jira** for sprint management, user stories, acceptance criteria, and defect tracking
- **Smartsheet** for milestones, resource allocation, and collaborative tracking
- **Microsoft Project** for Gantt charts, critical path, and schedule management
- **Confluence/SharePoint** for documentation, versioning, and governance packages

Our flexibility ensures alignment with agency oversight bodies, PMOs, and state procurement guidelines.

4.3.1.7. Vendors should show a history of successful "train-the-trainer" programs and on-demand training portals for public and internal users.

i3 Verticals has developed and executed training for various customers similar to West Virginia Office of Technology. We cater to different training requirements including business products, and application processing. Our training experience is effective and specializes in the following area:

- Computer Based (CBT) and Web-based training (WBTs) for system users
- Instructor-led training (ILTs) for users of the system
- Train-the-Trainer (TTT) training for trainers
- Technical team training (developers and support)
- Systems Administration Training
- Context sensitive online application help modules embedded within the application
- Helpdesk and application support training

As a standard practice, i3 Verticals provides a variety of training materials to effectively transfer knowledge of the concepts and functionalities related to the new system to West Virginia Office of Technology staff, as well as for end users. The following types of training materials will be developed for learning and reference:

- User Manual
- Quick Reference Guide
- Online Help Documents

i3 Verticals also provides other tools and training opportunities to ensure clients have the information and ability to apply knowledge of the new system. In addition to documentation, i3 Verticals produces self-study help videos that provide audio and visual materials for training on specific functions, system utilities, and user-centric topics.

i3 Verticals educates and enables customers to adapt their systems without custom programming. This puts the power and control into the hands of our clients without the need to rely on i3 Verticals programmers to make updates and changes. We provide training for user level staff in the new system as well as training for Administrators.

We have developed comprehensive training programs that successfully empower agency staff to become internal experts. This includes:

Train-the-Trainer Approach

- Identify agency SMEs for each program or workflow
- Provide specialized administrator training
- Deliver detailed curriculum with hands-on practice
- Support SMEs as they train end-users
- Provide supplemental coaching during initial rollout

On-Demand Learning Resources

Our training libraries typically include:

- Video tutorials

- Interactive walkthroughs
- Printable user manuals
- Quick-reference job aids
- Workflow-specific guides
- Knowledge base articles
- Online help embedded within the system

This approach supports long-term sustainability, reduces ongoing training costs, and prepares agencies for future expansion.

4.3.1.8. Vendors should demonstrate familiarity with uptime guarantees, RTO/RPO metrics, and service-level reporting.

i3 Verticals support enterprise-grade operational SLAs, including:

Availability

- 99.9% or higher uptime
- Fault-tolerant multi-node architecture
- Redundant application, database, and storage layers
- **Azure Backups**—provides independent and isolated backups to guard against unintended destruction of the data on primary systems. Backups are stored in a Recovery Services vault with built-in management of recovery points. As part of the backup process, a snapshot is taken and data is transferred to the Recovery Services vault with no impact on production workloads. Backups can be restored to new disc volumes, or they can be used to provision an entirely new VM.
- **Azure Site Recovery Services**— Site Recovery is a native disaster recovery as a service (DRaaS) which is implemented and configured by i3 Verticals for all production (and some non-production) workloads. Site Recovery replicates workloads running on virtual machines from a primary site to a secondary location. When an outage occurs, services can be failed over to a secondary location. When the primary location is running again, a failback is performed.
- Replication— Disaster Recovery Replication is currently configured from the primary Region (US GOV-Arizona, or Texas) to a secondary region (US GOV-Virginia)

RTO/RPO

- **Recovery Point Objective** (RPO) duration for replication (the time it takes for data to be replicated from the primary region to the secondary) **RPO is ≤ 5 minutes.**
- **Recovery Time Objective (**RTO) Maximum duration for a disaster recovery to take place. This will represent the probable downtime window in the event of a DR event. **RTO is ≤ 2 hours**.

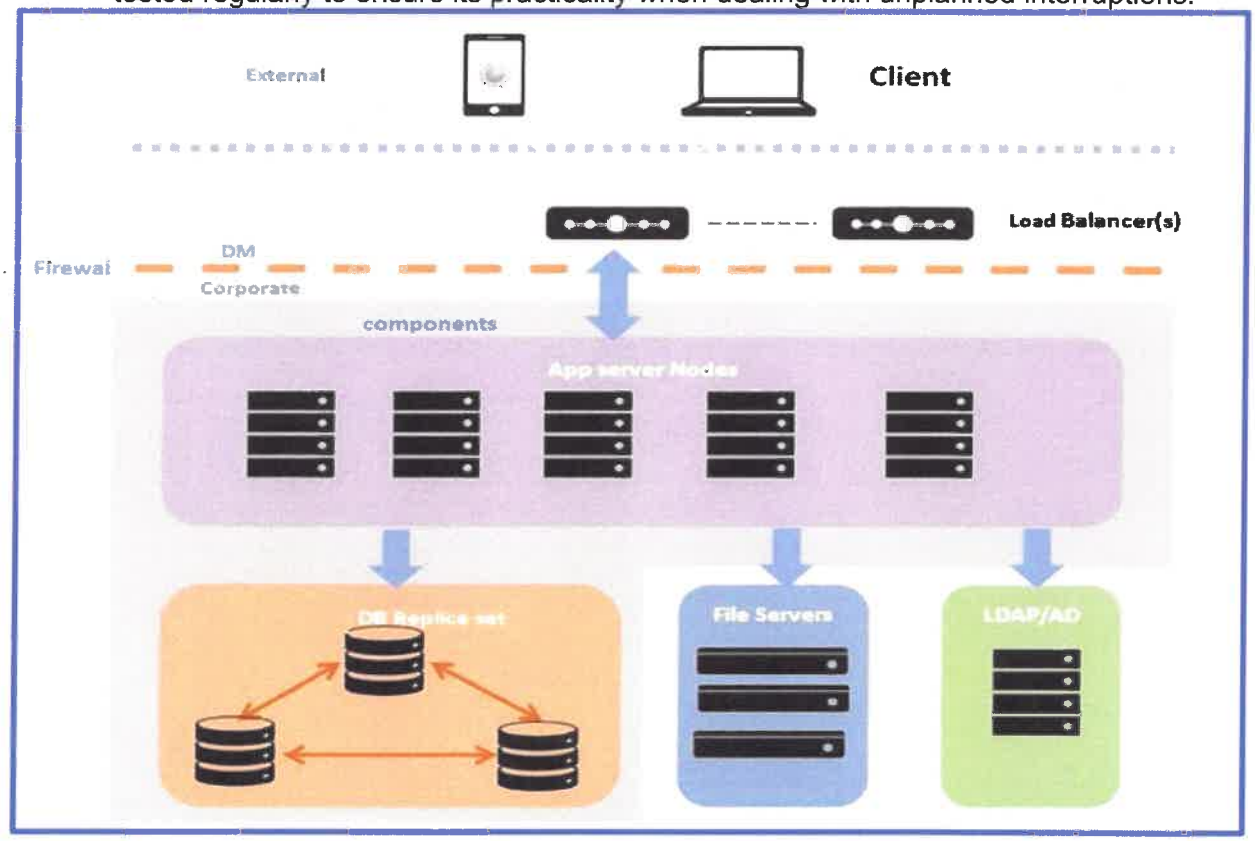
Monitoring & Reporting

- Real-time uptime dashboards
- Performance monitoring
- Error & exception alerting
- Monthly & quarterly SLA reports
- Ticketing metrics (response and resolution times)
- Security patch and change management logs

These capabilities guarantee operational transparency and reliability expected in statewide permitting systems.

i3 Verticals Licensing and Regulatory Platform Is architected for scalability and performance to support current and future customer business needs. High availability is the fundamental feature of building software solutions in a cloud environment. The proposed architecture and hosting services are designed to meet the desired levels of security, scalability, performance and availability by guaranteeing computer environments have a desirable level of operational continuity.

- Data Backups, Recovery and Replication: Valuable data is never stored without proper backups, replication or the ability to recreate the data.
- Clustering: Clustering provides instant failover application services in the event of a fault. An application service falls back to a secondary server if the main server goes offline.
- Network Load Balancing: When server failure instances are detected, they are seamlessly replaced when the traffic is automatically redistributed to servers that are still running.
- Fail over Solutions: The architecture consists of a set of loosely coupled servers which have failover capabilities. In fail over scenarios, tasks are automatically offloaded to a standby system component so that the process remains as seamless as possible to the end user.
- Plan for failure: System gathers data through continuous monitoring of operational workload that is then used to isolate problems and analyze trends. The recovery plan is tested regularly to ensure its practicality when dealing with unplanned interruptions.



Whether it is the hosting environment or system performance, there are troubleshooting tools available to monitor and address production errors and issues. i3 Verticals will rely on availability monitoring as provided by Microsoft Azure. At the present time, Azure provides the following monitoring agents where data is collected.

- Event Logs
- Event Tracing for Windows (ETW) events
- Performance
- File based logs
- IIS logs
- .NET app logs
- Crash dumps
- Agent diagnostics logs

Furthermore, i3 Verticals conducts benchmark/performance testing to confirm satisfaction of nonfunctional and throughput requirements in a simulated test environment. Performance testing is designed to verify that the developed programs and system work as required at expected usage levels. The objective is to verify that the product is structurally sound and will function correctly at peak operation. The techniques employed are designed to validate that the application system's infrastructure is sound and reliable. Performance testing is conducted to evaluate the compliance of a program component or system with specified performance requirements or service levels. These may include subsets related to stress, volume, reliability, and load. The resulting consistent and repeatable tests identify bottlenecks in resource use, transaction RESPONSE times, and overall system performance.

i3 Verticals programmers incorporate performance testing into their existing development activities regardless of platform or language type to develop code that meets performance requirements. Programmers conduct performance testing at the unit and component integration test levels to verify that the application performance requirements have been met.

i3 Verticals ongoing support services that details the parameters of the support i3 Verticals offers and what WVOT should expect in terms of product and support services.

i3 Verticals enjoys working with and supporting our clients to design, develop, test and implement new functions and features that help them work more efficiently and improve their licensing systems.

WVOT solution is adapted from the i3 Verticals base software system that is highly client configurable, table driven, and rules based. We take pride in how the usability, configuration and development of our solution continually improves and is influenced by the latest software standards, technological improvements, and customer input/feedback.

Our clients can optimize their regulatory activities by making changes to the system, such as business rules, correspondence templates, reports, screens and more, via the user interface without custom development or programming to accommodate. i3 Verticals licensing platform enables our clients' "super-user(s)" to easily adapt their system by implementing small (& large) changes to their system without custom development, additional programming, time, or costs. Users typically become very proficient in the use and configuration of the application due to the inherent intuitive nature of the software solution throughout the implementation process.

In order to keep the system up and running smoothly, i3 Verticals plans to minimize system outages, in order to keep software availability high, by adhering to an agreed upon schedule for planned system updates. When emergency releases are required, i3 Verticals will work with WVOT to determine the schedule for the emergency release, with the intent to minimize the impact to the client and cause minimal impact to system availability.

Maintenance and Operations

- i3 Verticals will maintain the software solution configurations/customizations/interfaces in the cloud environment through the life of the contract.

- i3 Verticals will provide the required correction of Deficiencies as defined in the SLA requirements.
- i3 Verticals will monitor and manage the Solution to meet the contract SLA throughout the duration of this contract and will report the SLA metrics in the Monthly M&O Report.
- i3 Verticals will perform the necessary work defined and estimated in the WOA to address all impacts associated with product upgrades of the software solution as performed by the State-engaged software provider.
- i3 Verticals will provide a Monthly M&O Report that, at a minimum, documents the M&O activities completed in the previous month, including all knowledge transfer or system support activities
- i3 Verticals document in a Maintenance and Operations Plan (M&O Plan) the activities and processes that will be used to support the responsibilities in maintaining the software solution and deploying additional functionality
- i3 Verticals will document in the M&O Plan i3 Verticals approach to monitoring, managing, measuring, and reporting the SLA throughout the duration of this contract.
- i3 Verticals review the impact that the software provider's product upgrades of the Platform will have on configurations, customizations, and interfaces. Such impact and associated work needing to be performed by i3 Verticals will be included in the WOA. i3 Verticals will propose resolutions to any impacts and implement fixes to prevent any disruption to business operations because of the software provider's product upgrades.
- i3 Verticals will provide correction of Deficiencies per the SLA.
- i3 Verticals will correct all configuration, customization, and interface Deficiencies relating to all Severity Levels (as defined in the SLA) which are known to i3 Verticals or reported by WVOT to the Contractor.

4.3.1.9. Vendors should explain experience working with multi-agency teams, gathering requirements, and managing change.

i3 Verticals team has deep experience managing multi-agency modernization initiatives, ensuring each agency's needs are addressed while building a unified statewide solution. Our approach includes:

Requirements Gathering

- Cross-agency discovery workshops
- Program-specific interviews and process mapping
- Current-state vs. future-state workflow modeling
- Analysis of agency statutes, rules, and operational mandates
- Unified data standards and configuration templates

Multi-Agency Governance

- Steering committees
- Configuration review boards
- Change advisory boards
- Role-based access and agency-specific configuration layers

Change Management

- Stakeholder readiness assessments
- Communication plans for internal and external audiences
- Phased rollout with controlled onboarding
- Open lab sessions and continuing education
- Post-launch optimization cycles

This ensures adoption, minimizes resistance, and builds long-term sustainability as additional agencies join WV One Stop in the future.

Requirements Gathering Methodology:

- **Discovery Phase Approach**:
  - Individual stakeholder interviews with each participating agency
  - Joint application design (JAD) sessions for collaborative requirements definition
  - Process mapping workshops to document current state
  - User persona development for different user types
  - Use case and user story development
  - Requirements traceability matrix for tracking
- **Requirements Documentation**:
  - Business requirements documents (BRD)
  - Functional requirements specifications (FRS)
  - Technical specifications
  - Use case diagrams and user stories
  - Process flow diagrams
  - Data flow diagrams
  - Interface requirements
- **Requirements Validation**:
  - Requirements review sessions with stakeholders
  - Prototype demonstrations for validation
  - Requirements prioritization (MoSCoW method)
  - Formal sign-off process
  - Change control procedures for requirements evolution

Change Management Framework: Our change management approach follows a proven methodology model and government best practices:

Change Management Strategy Components:

1. **Stakeholder Assessment & Analysis**
   - Identify all impacted stakeholders and user groups
   - Assess change readiness and resistance factors
   - Develop stakeholder engagement strategies
2. **Communication Planning**
   - Regular project updates and newsletters
   - Town hall meetings and Q&A sessions
   - Executive briefings
   - Transparent communication about project progress and challenges
   - Multi-channel communication (email, intranet, meetings)
3. **Training & Support**
   - Training needs assessment by user role
   - Comprehensive training curriculum development
   - Super user identification and development
   - Just-in-time training before go-live
   - Post-implementation support and help desk
4. **Organizational Change Preparation**
   - Change impact assessments for each agency
   - Business process reengineering support
   - Policy and procedure documentation
   - Readiness assessments before go-live
   - Pilot programs or phased rollout strategies
5. **Resistance Management**
   - Early identification of change resistance
   - Tailored strategies for different resistance sources

- Executive sponsorship activation
- Quick wins demonstration
- Feedback channels and issue resolution

Managing Change Throughout Project Lifecycle:

- **Formal Change Control Board**: Representatives from each participating agency
- **Change Request Process**: Documented process for evaluating and approving changes
- **Impact Analysis**: Assessment of schedule, cost, and technical impacts
- **Priority Management**: Collaborative prioritization of competing agency needs
- **Conflict Resolution**: Escalation procedures and facilitation techniques
- **Continuous Feedback Loops**: Regular retrospectives and lessons learned sessions

Governance Structure for Multi-Agency Coordination:

- Executive Steering Committee with agency leadership
- Project Management Office representation
- Technical working groups by functional area
- Regular cross-agency coordination meetings
- Decision-making framework and approval authorities

Organizational Overview

Information Requested	*Response*
Company Name	**i3 Verticals, LLC**
Address	40 Burton Hills Blvd, Suite 415, Nashville, TN 37215
Telephone Number	(800) 203-7981
Website Address	www.i3Verticals.com
Parent Company	-
Subsidiaries or Affiliated Companies	SEC Filings - i3 Verticals
Date Company Founded or Incorporated	2012
Number of years the Company has been providing the Product or Service specified in this RFO	10+ years
Most recent three (3) Fiscal Years' revenue and net income in USD	SEC Filings - i3 Verticals
Company Ownership and Operating Structure *(e.g., public, private, joint venture)*	Public
Office locations in the U.S., and the number of staff in each location	The company is headquartered in Nashville, TN. In addition to Tennessee the company maintains offices across the US. Total number of employees: 1200+

Since 2014, i3 Verticals has delivered flexible licensure and enforcement solutions that enable state regulatory agencies to streamline workflow while maintaining compliance and tracking. i3 Verticals has a long-standing commitment to the state licensing boards, commissions, and regulatory agencies we serve. We surpass client expectations consistently as we believe in integrity and transparency.

i3 Verticals acknowledges that West Virginia Office of Technology is on the threshold of a large licensure system modernization effort and that having a partner with deep knowledge of regulatory processes, technology, and project management while successfully implementing licensing systems will provide tremendous benefits. Our firm and staff are uniquely qualified to meet the West Virginia Office of Technology new Permitting System requirements, having similarly implemented credentialing management systems in a wide variety of related disciplines and professional fields, in 18+ states.

We deliver flexible licensure and enforcement technology that enables state regulatory agencies to streamline workflow while maintaining compliance and tracking. Our experience and industry knowledge make a difference in interpreting and meeting requirements by focusing on agency business first and assessing the long-term implications of the technology we design, develop, and implement. i3 Verticals has a long-standing commitment to the state licensing boards, commissions, and regulatory agencies we serve and has significant, relevant cross-sector knowledge we can bring to the West Virginia Office of Technology to improve services and increase process and personnel efficiencies while reducing costs and risks.

Our expertise and extensive experience with licensing, permitting, and enforcement systems across multiple public agencies, successful implementation track record of implementing Licensing Systems, coupled with our elegant and state-of-the-art Licensing Platform qualify us to execute this engagement successfully.

In 2019, the Louisiana Board of Medical Examiners awarded a contract to i3 Verticals for implementing 65+ license types on the i3 Verticals platform. The system for LAMED was deployed within 12 months and included data migration.

In 2020, i3 Verticals began a similar project with the State of California, Department of Consumer Affairs to implement a licensure system on our licensing platform for Cohort 1. This new system was deployed in production successfully. The implementation had multiple interfaces and data migration tasks as part of the project. In 2022, i3 Verticals was awarded another contract to bring additional boards to the i3 Verticals platform after the success of Cohort 1.

i3 Verticals proposes utilizing our flexible solution and technical depth to configure, customize and implement the Licensing and Enforcement system for the West Virginia Office of Technology. We consider our proposed experience implementing the Licensing and Enforcement system unique, coupled with our insights and functional understanding of the i3 Verticals Licensing Framework, your overall success increases dramatically, and our experienced staff are here to help define realistic, achievable timelines for the project, allowing i3 Verticals to become the West Virginia Office of Technology's long-term partner.

i3 Verticals delivers technology that enables our client's business to thrive as opposed to simply looking for technological solutions that fit. We believe our experience and industry knowledge make a difference as i3 Verticals is focused on your business first and assesses the implications of the technology we design, develop, and implement.

i3 Verticals' successful licensure system implementations for other state regulatory agencies have provided significant improvements to their customer service, user satisfaction (internal and external), and efficient workflows.

Our partial list of state licensing and public sector clients includes:

Client	Project
Delaware Department of Education	Implementation of Educator Licensing System. The system was successfully implemented and is currently in Maintenance and Operations.
Maryland Department of Education	Implementation of Educator Certification System. The system was successfully implemented and is currently in Maintenance and Operations.
Nebraska Department of Education	Implementation of Educator Certification System. The system was successfully implemented and is currently in Maintenance and Operations.
California Department of Consumer Affairs (DCA)	Implementation of Cohort 1 (BMC1) was completed successfully and is currently in Maintenance and Operations. Implementation of Cohort 2 (BMC2) two Product Increments are completed and in production and a third Product Increment in progress.
Kentucky Department of Agriculture – Industrial Hemp Program	Implementation of Hemp Licensing completed successfully and currently in Maintenance and Operations.
Louisiana State Board of Medical Licensing Examiners	Implementation of Licensing and Enforcement System for all Allied Health Boards (65+ license types) completed successfully and currently in Maintenance and Operations.
Nevada Department of Education	Implementation of Educator Licensing System. The system was successfully implemented and is currently in Maintenance and Operations.
Nevada State Board of Professional Engineers and Land Surveyors	Replacement of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.
Oregon Board of Professional Engineers and Land Surveyors	Implementation of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.

Credentialing systems are a critical component of regulatory operations. Information systems can impact the effectiveness and efficiency of government agencies, with that understanding it is vitally important that the West Virginia Office of Technology partner with an experienced vendor that has the capability, capacity, and direct relevant experience implementing licensure systems at an enterprise level.

i3 Verticals is uniquely qualified to meet the West Virginia Office of Technology's multiple project goals, scope of work and requirements, having successfully implemented licensing systems and specifically, state licensing systems in several states including Nevada, California, Oregon, Wyoming, Nebraska, Louisiana, Alaska, Kentucky, North Carolina, Delaware, Maryland, Alabama, New Mexico, South Dakota, & Arizona. These projects were successfully completed within budget and schedule. i3 Verticals possesses a deep understanding and direct staff

Client	Project
Delaware Department of Education	Implementation of Educator Licensing System. The system was successfully implemented and is currently in Maintenance and Operations.
Maryland Department of Education	Implementation of Educator Certification System. The system was successfully implemented and is currently in Maintenance and Operations.
Nebraska Department of Education	Implementation of Educator Certification System. The system was successfully implemented and is currently in Maintenance and Operations.
California Department of Consumer Affairs (DCA)	Implementation of Cohort 1 (BMC1) was completed successfully and is currently in Maintenance and Operations. Implementation of Cohort 2 (BMC2) two Product Increments are completed and in production and a third Product Increment in progress.
Kentucky Department of Agriculture – Industrial Hemp Program	Implementation of Hemp Licensing completed successfully and currently in Maintenance and Operations.
Louisiana State Board of Medical Licensing Examiners	Implementation of Licensing and Enforcement System for all Allied Health Boards (65+ license types) completed successfully and currently in Maintenance and Operations.
Nevada Department of Education	Implementation of Educator Licensing System. The system was successfully implemented and is currently in Maintenance and Operations.
Nevada State Board of Professional Engineers and Land Surveyors	Replacement of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.
Oregon Board of Professional Engineers and Land Surveyors	Implementation of Licensing and Enforcement Database Implementation of Online Application. The system was successfully implemented and is currently in Maintenance and Operations.

Credentialing systems are a critical component of regulatory operations. Information systems can impact the effectiveness and efficiency of government agencies, with that understanding it is vitally important that the West Virginia Office of Technology partner with an experienced vendor that has the capability, capacity, and direct relevant experience implementing licensure systems at an enterprise level.

i3 Verticals is uniquely qualified to meet the West Virginia Office of Technology's multiple project goals, scope of work and requirements, having successfully implemented licensing systems and specifically, state licensing systems in several states including Nevada, California, Oregon, Wyoming, Nebraska, Louisiana, Alaska, Kentucky, North Carolina, Delaware, Maryland, Alabama, New Mexico, South Dakota, & Arizona. These projects were successfully completed within budget and schedule. i3 Verticals possesses a deep understanding and direct staff

experience implementing licensing platforms supporting 45+ government regulatory agencies, state licensing boards, and commissions and over 110+ license types today. i3 Verticals has been responsible for 100% of the licensing implementation till date as a prime vendor.

4.3.2. Mandatory Qualification/Experience Requirements - The following mandatory qualification/experience requirements must be met by i3 Verticals as a part of its submitted proposal. Vendor should describe how it meets the mandatory requirements and include any areas where it exceeds the mandatory requirements. Failure to comply with mandatory requirements will lead to disqualification, but areas where the mandatory requirements are exceeded will be included in technical scores where appropriate. The mandatory qualifications/experience requirements are listed below.

4.3.2.1. Vendor's employees must have security training and Vendor must provide records of such training upon request.

i3 Verticals organization requires all employees—full-time, part-time, contract, and subcontractor personnel with any system or data access—to complete **mandatory security training** as part of onboarding and annually thereafter. Training includes:

- Information Security Awareness
- Data Privacy and Confidentiality
- Phishing and Social Engineering Prevention
- Secure Coding Practices (for development staff)
- Incident Recognition & Escalation
- Password, MFA, device security, and acceptable use policies
- State-specific or customer-specific security policies (when applicable)

Training completion is recorded in a centralized learning management system (LMS) and compliance reports can be provided to the State **upon request**.

- We provide **role-specific cybersecurity modules** for developers, QA analysts, system administrators, and project managers.
- We conduct **quarterly refresher micro-trainings** on emerging threats (ransomware, credential stuffing, MFA attacks).
- Mandatory **annual phishing simulations** help maintain high awareness and reduce vulnerability.
- Background checks are conducted prior to employment and annually (where required).

4.3.2.2. Vendor must highlight training in WCAG 2.1 and Section 508 compliance for public-facing digital services.

Accessibility Training Program: Our organization has institutionalized accessibility training for all team members working on public-facing digital services:

WCAG 2.1 Training:

- **All team members** complete WCAG 2.1 Level AA training
- Training covers all four POUR principles:
  - **P**erceivable: Text alternatives, time-based media, adaptable content, distinguishable content
  - **O**perable: Keyboard accessible, enough time, seizures and physical reactions, navigable, input modalities
  - **U**nderstandable: Readable, predictable, input assistance
  - **R**obust: Compatible with assistive technologies

Section 508 Compliance Training:

- Comprehensive training on Section 508 requirements for:
  - Web-based intranet and internet information and applications
  - Electronic documents
  - Software applications and operating systems
  - Video and multimedia products
  - Telecommunications products
  - Self-contained, closed products
  - Desktop and portable computers

Role-Specific Accessibility Training:

- **Developers**:
  - Semantic HTML implementation
  - ARIA (Accessible Rich Internet Applications) attributes and landmarks
  - Keyboard navigation implementation
  - Focus management
  - Accessible form design
  - Accessible data tables
- **Designers/UX Professionals**:
  - Color contrast requirements (4.5:1 for normal text, 3:1 for large text)
  - Accessible color palettes
  - Focus indicators
  - Accessible typography
  - Visual design for cognitive accessibility
  - Accessible iconography and imagery
- **Content Creators**:
  - Alternative text (alt text) for images

- Accessible document structure (headings hierarchy)
- Accessible PDFs and documents
- Plain language principles
- Captioning and transcripts for multimedia

- **QA/Testers**:
  - Accessibility testing methodologies
  - Screen reader testing (JAWS, NVDA, VoiceOver)
  - Keyboard-only navigation testing
  - Automated accessibility testing tools
  - Color contrast analysis
  - Accessibility audit procedures

Training Documentation:

- Training certificates maintained for all team members
- Specialized accessibility certifications documented
- Training completion tracked in LMS with annual recertification
- Records available for immediate inspection

Advanced Accessibility Training:

- Training exceeds minimum requirements with WCAG 2.2 preparation
- Training on emerging WCAG 3.0 (W3C Accessibility Guidelines) draft standards
- Mobile accessibility best practices (iOS and Android)
- Accessibility for emerging technologies (AI, chatbots, voice interfaces)
- Cognitive accessibility advanced techniques

Assistive Technology Proficiency: Our team maintains hands-on proficiency with multiple assistive technologies:

- Screen readers: JAWS, NVDA, VoiceOver, TalkBack
- Screen magnification: ZoomText, built-in OS magnifiers
- Voice recognition: Dragon NaturallySpeaking
- Alternative input devices: switch controls, eye-tracking
- Browser accessibility extensions and tools

Accessibility Champions Program:

- Dedicated Accessibility Champions on each project team
- Monthly accessibility community of practice meetings

- Ongoing monitoring of accessibility standards evolution
- Internal knowledge sharing and mentorship

Accessibility Testing Lab:

- Dedicated lab with various assistive technologies
- Multiple device types (desktop, tablet, mobile)
- Various operating systems and browsers
- Testing with actual users with disabilities (partnership with [organization])

Comprehensive Accessibility Toolkit:

- Automated testing tools: axe DevTools, WAVE, Lighthouse, Pa11y
- Color contrast analyzers: Colour Contrast Analyser (CCA)
- Screen reader testing protocols
- Keyboard navigation checklists
- Accessibility regression testing in CI/CD pipeline

Documented Accessibility Process:

- Accessibility integrated into every phase of SDLC:
    - **Requirements**: Accessibility user stories and acceptance criteria
    - **Design**: Accessible design system and component library
    - **Development**: Accessibility linting and pre-commit hooks
    - **Testing**: Multi-layered accessibility testing (automated + manual)
    - **Deployment**: Accessibility sign-off required before production release
    - **Maintenance**: Ongoing accessibility monitoring and remediation

Accessibility Audits & Reporting:

- Quarterly accessibility audits using industry-standard VPAT (Voluntary Product Accessibility Template)
- Detailed WCAG 2.1 Level AA compliance reports
- Accessibility conformance statements
- Remediation tracking and priority ranking
- Transparent reporting to stakeholders

User Testing with People with Disabilities:

- Partnership with [disability advocacy organizations]

- Regular usability testing sessions with users with various disabilities:
  - Visual disabilities (blind, low vision, color blindness)
  - Motor disabilities (limited dexterity, keyboard-only users)
  - Auditory disabilities (deaf, hard of hearing)
  - Cognitive disabilities (dyslexia, attention disorders)
- Incorporation of user feedback into design and development

Plain Language Expertise:

- Team training in plain language principles (reading level targets: 8th grade or below for general public)
- Partnership with plain language specialists
- Readability analysis tools integrated into content review process
- Focus on cognitive accessibility beyond technical compliance

Accessibility Documentation & Guidelines:

- Comprehensive internal accessibility style guide
- Reusable accessible component library
- Accessibility decision trees for common scenarios
- Quick reference guides and checklists
- Pattern library with coded examples

Continuous Improvement & Industry Engagement:

- Active participation in accessibility conferences and webinars
- Membership in accessibility professional organizations
- Monitoring of accessibility legal requirements and case law
- Contribution to open-source accessibility projects
- Regular review of accessibility litigation trends

4.3.2.3. Vendor must show Experience aligning solutions with state IT policies, privacy laws, and accessibility mandates.

State IT Policy Alignment: Our organization has extensive experience ensuring solution compliance with state IT policies:

Policy Alignment Process:

1. **Discovery Phase Policy Review:**
   - Comprehensive review of all applicable state IT policies
   - Identification of policy requirements impacting solution design

- Documentation of policy compliance requirements
- Gap analysis between standard approach and state-specific requirements

2. **West Virginia IT Policy Experience:**
   - Previous work with West Virginia state agencies (if applicable)
   - Familiarity with WV Office of Technology policies and standards
   - Understanding of WV IT governance structure and approval processes
   - Experience with WV security requirements and architecture standards

State IT Policy Categories We Routinely Address:

- Information security policies and standards
- Data classification and handling requirements
- Cloud computing and SaaS policies
- Network connectivity and integration standards
- Identity and access management policies
- Disaster recovery and business continuity requirements
- Change management and release procedures
- Data retention and disposal policies
- Acceptable use policies
- Vendor management and third-party risk policies

Privacy Law Compliance: Our solutions are designed with privacy-by-design principles and comply with applicable privacy laws:

Privacy Frameworks & Laws Addressed:

- **State Privacy Laws:**
  - State-specific privacy statutes and regulations
  - State data breach notification laws
  - State public records laws and exemptions
  - West Virginia-specific privacy requirements
- **Federal Privacy Laws:**
  - Privacy Act of 1974 (for federal data)
  - FERPA (Family Educational Rights and Privacy Act) - for education-related data
  - HIPAA (Health Insurance Portability and Accountability Act) - when health data involved
  - CJIS (Criminal Justice Information Services) - for law enforcement data
- **Emerging Privacy Regulations:**
  - Awareness of comprehensive state privacy laws

- Preparation for potential federal privacy legislation
- Data subject rights management (access, deletion, correction, portability)

Privacy Compliance Measures in Our Solutions:

- Privacy Impact Assessments (PIAs) conducted for all projects
- Data minimization - collection only of necessary information
- Purpose limitation - clear definition of data use purposes
- Consent management and documentation
- User privacy controls and preferences
- Clear privacy notices and policies
- Data subject rights fulfillment mechanisms (where applicable)
- Privacy-preserving data analytics techniques
- Data anonymization and pseudonymization where appropriate
- Privacy incident response procedures

Accessibility Mandate Compliance: Our solutions consistently meet or exceed accessibility mandates:

Accessibility Compliance Framework:

- **Federal Requirements:**
  - Section 508 of the Rehabilitation Act
  - Americans with Disabilities Act (ADA) Title II (state/local government)
  - 21st Century Integrated Digital Experience Act (IDEA)
- **State Requirements:**
  - State-specific accessibility laws and policies
  - State web accessibility standards
  - Procurement requirements for accessible technology
- **Technical Standards:**
  - WCAG 2.1 Level AA (mandatory)
  - WCAG 2.2 preparedness (emerging requirement)
  - EN 301 549 (European standard, increasingly referenced in US)

Accessibility Compliance Documentation:

- Accessibility Conformance Reports (VPAT/ACR format)
- Detailed WCAG 2.1 Level AA compliance matrices
- Regular accessibility testing reports
- Accessibility remediation plans and tracking

- Accessibility statements for public-facing applications

Future-Proofing Compliance:

- Architectural designs anticipate regulatory changes
- Modular approach allows policy-compliant features to be updated independently
- Regular compliance roadmap reviews with clients
- Monitoring of legislative trends and proposed regulations
- Compliance evolution planning (3-5 year horizon)

4.3.2.4. Vendor must demonstrate experience with Vulnerability scanning and reporting, Disaster recovery planning and drills, Encryption standards (e.g., AES-256), Role-based access control (RBAC).

i3Verticals is a security-first organizations with rigorous policies and procedures in place to ensure industry leading security posture and practices. Frist, i3 Verticals is a TX-RAMP level 2 certified organization. i3 Verticals chose TX-RAMP because of its widely accepted reciprocity in other State-RAMP programs and broad adoption as a control governance standard. TX-RAMP aligns with NIST 800-53 Rev. 5 control criteria, which is the baseline which i3 Verticals builds its System Security Plans for all of our implementations. Furthermore, i3 Verticals operates to a Written Information Security Program (WISP) that utilizes five (5) layers of policies, procedures, processes, standards, and work instructions that provide a holistic approach to information security.
To ensure robust security, manual procedures and controls are implemented across various domains. These include:

- **Risk Assessment and Management:** Conducting thorough risk assessments to identify potential security risks and vulnerabilities within the system. This involves manual evaluation of assets, threats, and vulnerabilities to determine the impact of potential incidents.
- **Access Control:** Enforcing strict access controls through manual oversight to ensure that only authorized personnel have access to sensitive data and system resources. This includes implementing role-based access control (RBAC) and conducting regular access reviews.
- **Security Awareness Training:** Providing regular security awareness training to employees to educate them about security policies, procedures, and best practices. This manual training helps employees understand their roles and responsibilities in maintaining system security.
- **Incident Response Planning:** Developing and implementing an incident response plan to effectively respond to security incidents. This includes manual procedures for detecting, reporting, assessing, and responding to security breaches in a timely manner.
- **Regular Security Audits and Reviews:** Conducting regular security audits and reviews to assess the effectiveness of security controls and identify areas for improvement. These audits are often manual and help ensure compliance with standards like ISO 27001.
- **Documentation and Compliance:** Maintaining thorough documentation of security policies, procedures, and controls to demonstrate compliance with standards such as ISO 27001. This documentation is manually updated and made available for audit purposes.

- **Vendor Risk Management:** Conducting manual assessments of third-party vendors or suppliers to ensure their security practices meet required standards. This involves implementing vendor risk management processes to mitigate potential risks.
- **Penetration Testing:** All systems are regularly tested for vulnerabilities by a third-party penetration testing organization certified to perform ethical hacking and vulnerability detection.
- Continuous monitoring using SIEM tools (e.g., Azure Security Center, AWS GuardDuty).
- Integration of vulnerability management into CI/CD pipelines for faster remediation.
- MFA enforcement for administrative and privileged accounts across environments.
- Ability to generate forensic-ready audit reports for investigations.
- Support for conditional access policies and IP whitelisting for heightened protection

Vulnerability Scanning & Reporting
- Automated **weekly vulnerability scans** for application and infrastructure layers
- Monthly consolidated vulnerability reports with remediation tracking
- Third-party penetration testing
- Secure code review and SAST/DAST scanning for each major release

Disaster Recovery (DR)
- Documented **Disaster Recovery Plan** aligned with State requirements
- Systems deployed with **geo-redundancy**, continuous data replication, and automated failover mechanisms
- Regular DR drills and tabletop exercises
- Recovery Time Objective (RTO) and Recovery Point Objective (RPO) metrics aligned to mission-critical expectations

Encryption Standards
- **AES-256 encryption at rest** for databases, files, and sensitive documents
- **TLS 1.2/1.3 encryption in transit** for all communication channels
- Encrypted logs, audit trails, session tokens, and secure cookies
- Secure storage of secrets, keys, and tokens in managed vaults

Role-Based Access Control (RBAC)
- Granular, configurable RBAC with agency-defined permissions
- Field-level and form-level access controls
- Segregation of duties for high-privilege roles
- Administrative controls for real-time adjustments
- Enforcement of least-privilege policies for all accounts

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Proposals
Info Technology

Proc Folder: 1818626			**Reason for Modification:**
Doc Description: One-Stop-Shop Permitting Portal -State of West Virginia			
Proc Type: Central Master Agreement			
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2025-10-24	2025-11-20 13:30	CRFP 0201 SEC2600000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:
Vendor Name : Eduloka Limited
Address : 40 Burton Hills Blvd
Street :
City : Nashville
State : TN **Country :** USA **Zip :** 37215
Principal Contact : Tuhin Verma
Vendor Contact Phone: 775-240-6317 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Tara Lyle
(304) 558-2544
tara.l.lyle@wv.gov

Vendor Signature X Paul Maple **FEIN#** 45-3361278 **DATE** 11/18/2025

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

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.

(Printed Name and Title) Tuhin Verma CTO

(Address) 9645 Gateway Dr, Suite A, Reno NV 89521

(Phone Number) / (Fax Number) 775-240-6317 / 800-246-0541

(email address) tverma@i3verticals.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes a binding offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract 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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; 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; 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.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Edulokа Limited dba inLumon

(Company)

Paul Maple

(Signature of Authorized Representative)

Paul Maple, General Counsel & Secretary

(Printed Name and Title of Authorized Representative) (Date)

806-203-7981

(Phone Number) (Fax Number)

pmaple@i3verticals.com

(Email Address)

Subcontractor List Submission (Information Technology)

Bidder's Name: inLumon

☒ Check this box if no subcontractors will be provided access to State data, State information, or access to the State Network during the performance of this Contract.

Subcontractor Name	Work to be performed/Access to be granted	Additional Information for CIO Evaluation

Attach additional pages if necessary

Example:

Proposal 1 Cost is $1,000,000
Proposal 2 Cost is $1,100,000
Points Allocated to Cost Proposal is 30

Proposal 1: Step 1 – $1,000,000 / $1,000,000 = Cost Score Percentage of 1 (100%)
Step 2 – 1 X 30 = Total Cost Score of 30

Proposal 2: Step 1– $1,000,000 / $1,100,000 = Cost Score Percentage of 0.909091 (90.9091%)
Step 2 – 0.909091 X 30 = Total Cost Score of 27.27273

6.8. Availability of Information: Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Eduloka Limited dba inLumon
(Company)

Paul Maple, General Consel + Secretary
(Representative Name, Title)

Paul Maple

806-203-7981
(Contact Phone/Fax Number)

11/14/2025
(Date)