

The State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB)

Request for Proposal (RFP) RFP 6249 Z1 Licensure Information System (LIS) VOL 2 – Technical Approach

June 15, 2020

Point of Contact:



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## **Executive Introduction**

**Overview:** Before moving forward to Attachment 2 & 3, we would like to share the following introduction to Tyler (AKA MicroPact). While we have worked with the State for more than a decade providing the CAVU solution, we recognize that not every reader from the State will be familiar with that history. We would like to summarize what we propose to bring to the State with our new ETK Regulatory solution.

### **Executive Summary:**

We are excited for the opportunity to propose Tyler's Professional Licensing and Regulatory platform ETK Regulatory for the State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB) for a Licensure Information System, and look forward transitioning the State to our next generation solution.



**FIGURE 1 SOLUTION BENEFITS** 

At Tyler, we often talk a lot about our past performance in the licensing and enforcement space. Mostly we focus on:

- Tyler is the *largest provider of licensing and enforcement solutions* in the industry
- Tyler has *successfully implemented many large enterprise projects*; so you can feel confident we know what we're doing; and
- Tyler has been a leader in this space for almost 30 years; so you know that we are *committed to this market and to your success*.

Sometimes these bullets come across like a sales message and do not always capture the true importance of what it really means. The truth is that large enterprise licensing projects are challenging. The risk in selecting the right vendor is real and it is important to look at past performance as an indicator of future success.

For decades, Tyler has been at the forefront of the regulatory marketplace, with our clients, building and implementing regulatory solutions. Our customers are the lifeblood of our business and are the reason we are able to continuously build and develop new and innovative solutions for the marketplace. Our success in the regulatory market and in state government says a lot about Tyler as a company. We believe that failure is not an option.

The State's licensing function is mission-critical, and requires the right combination of dedicated personnel, efficient processes, and modern systems and tools. As you begin to evaluate the responses, and the vendors, please consider:

Tyler's ETK Regulatory solution when implemented will provide a complete enterprise, integrated software solution that is robust, flexible, and configurable. The first step will include migration of rules, system configuration, and transactional data into the new system using automated migration utilities. As a result, the COTS Requirements Confirmation interviews are more appropriately a validation of the existing business rules, as opposed to starting from the very beginning.

Our implementation strategy, once confirmed with the State, will include a roll out plan that releases functionality in phases.

#### Our solution features:

- A combination of the out-of-the-box features of a COTS industry leading licensing and enforcement solution combined and interconnected with an extensible case management/business process management platform built on a modern, open, configurable and flexible architecture
- The ability to make the State more selfsufficient and to adapt and extend the solution as department requirements evolve and in response to changes in law and policy
- A solution that reflects the *leading business processes* of multiple State licensing agencies
- A platform built for integration, offering business services provided through both the core Tyler application and through a flexible, open set of web services available for use in customer-facing portals.

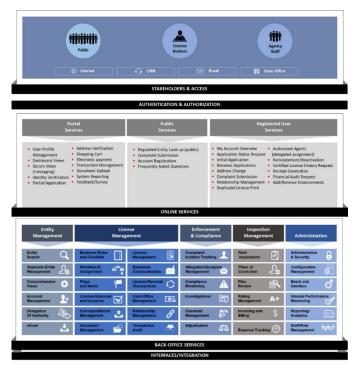


FIGURE 2: SOLUTION ARCHITECTURE COMPONENT DIAGRAM

Our approach proactively mitigates risks,

manages the timely resolution of issues, and positions the State to achieve its stated goals and be well positioned for continuous improvement. Our focus will:

• **Establish Enterprise Standards:** We start with a task to establish enterprise standards, discuss board structure, security roles, permissions, status codes, etc. This is an opportunity to establish a framework for project success.

- Identify Operational/Process Improvements: This is a much-needed opportunity to review current business processes, transactions, workflows, reporting requirements, and explore areas for 'package-enabled' business process improvements. This process usually take time, as it requires discussion, collaboration and negotiation. We will extended to the project timeline accordingly to include this task.
- Focus on Requirements Validation: We start with your business, not the technology. During the initial project phase, we work collaboratively with you in structured workshops to establish a firm base of requirements for the project. We will document your requirements and outcomes in a Requirements Traceability Matrix (RTM). Through this process, we will collaboratively confirm and build to the State specifications.
- Provide Opportunities for Early and Frequent User Involvement: Business users and IT sponsors
  can never be involved too early in the configuration process. An effective plan to engage the
  steering committee and user communities at key points throughout the project lifecycle helps
  increase buy-in to the proposed solution, improve agency processes and can eliminate costly
  rework associated with major changes being identified late in the project cycle.
- Use a Phased Released Implementation: The need for business change should be balanced with
  the requirement to maintain business continuity. We will focused the first release on establishing
  the base functional and technical infrastructure to support the remaining releases and provide
  the most benefit.

While we have diligently reviewed and confirmed our ability to meet your requirements, your needs and desired outcomes are broader than just your requirements. It is important to have a vendor that brings deep Licensing and Registration experience, a market proven solution, and a collaborative approach to the implementation, as well as a broad market view.

#### An Experienced Team

Our team will integrate and partner with yours through every step of the process to deliver the best solution and to enable a smooth transition. Through our past performance in the large enterprise projects and in the broader regulatory arena, we have established a proven engagement approach. We develop and execute plans together. We work to build trust and agreement early so we can manage expectations throughout the life of the project. This collaborative style is critical to the success of large complex engagements.

**Tyler:** Our division of Tyler (formerly called MicroPact) is the provider of the Entellitrak and Entellitrak-Regulatory (ETK Regulatory) case management platform and a wholly owned subsidiary of Tyler Technologies, Inc. (<a href="www.tylertech.com">www.tylertech.com</a>). Our parent company, Tyler Technologies, Inc. (<a href="www.tylertech.com">www.tylertech.com</a>), is the largest company in the United States dedicated to providing software for the

Public Sector including Federal, state and local government. Tyler is a nationally recognized provider of integrated system solutions and professional services to more than 26,000 installations across 11,000 state and local government clients in all 50 states, Canada, Puerto Rico, the United Kingdom and Australia, as well as over 200 U.S. Federal agencies. Tyler understands the importance of supporting our clients' mission-critical systems and maintaining the confidentiality of related justice and public safety information.

Entellitrak is an enterprise case management platform used for over 20-years to provide case management solutions for 300 State, Federal, Local, and Higher Education organizations. Entellitrak has been implemented in 49 states, and our case management solutions are utilized by 97% of Federal agencies with more than 500 employees. The Entellitrak renewal rate is 97%, a testament to customer satisfaction, and 80% of Entellitrak customers have implemented two (2) or more of our case and business process management solutions. Tyler's Entellitrak divisional headquarters is located in Herndon, VA with offices in Denver, CO; Memphis, TN; Mobile, AL; Raleigh, NC; Newnan, GA; Richmond Hill, GA; St. Louis, MO; Toronto, ON; and Manila, Philippines.

Tyler brings the most real, relevant, and reliable experience in the implementation of new systems and the transformation of state-level regulatory agencies. Our Regulatory Portfolio works with a diverse set of regulatory agencies across the country.

## Attachment 2: Business Requirements Traceability Matrix

#### **ATTACHMENT TWO**

### **Business Requirements Traceability Matrix**

### Request for Proposal Number 6249 Z1

Bidder Name: Tyler Technologies Inc.

#### Introduction

The Department of Health and Human Services (DHHS) Public Health Licensure Unit has identified the following major functions and divided the functions into operational tasks. DHHS wants to implement a commercial, off-the-shelf (COTS) licensure software system with as little customization as possible. **Bidders are encouraged to identify when and where any improvements or modifications to the system can improve the workflow.** 

The State realizes that not all of the requirements stated in this specification may be COTS functions or operational tasks. While it is hoped that many of the functions and tasks are available from COTS, the State encourages Bidders to note any modifications necessary to provide the functions required in this specification, and to meet the design needs of the system.

The major considerations for the procurement, implementation, and maintenance of required software and hardware components which are associated with the licensing information system are summarized as follows:

- 1. The system exists to support the functional needs of DHHS.
- 2. The capacity (or expandability) of the system should be adequate to cover the long-range needs of DHHS, up to ten years at 10% annual growth. The system should be capable of processing the current and projected size, volume, and types of licenses.
- 3. The system should offer optimal performance with a minimal expenditure of DHHS personnel resources or funds required for maintenance (e.g., contractor labor).
- 4. The operational features of the software should be advanced in functional considerations and representative of state-of-the-art technical design.
- 5. The State wishes to implement a technically advanced, robust, and proven system not a new and unproven system that could introduce high levels of risk.
- 6. Legislation may change the requirements for currently-regulated license types, or create new regulated license types. The system must be flexible enough for DHHS staff to add new license types and change the requirements for current license types within a short period of time.

It should be noted that some examples and illustrative phrases are provided throughout this specification. Bidders are cautioned that a specific implementation should not be inferred from an example or illustration, but that an appropriate implementation should be proposed.

If there is a conflict between a description in a narrative section of this document and a requirement quoted as a specification, the specification must have precedence.

Bidders should describe in detail how the proposed system meets the conformance specification outlined within each Functional/Business Requirement. It is not sufficient for the Bidder to simply state that it intends to meet the requirements of the RFP. The traceability matrix must indicate how the Bidder intends to comply with each requirement and the effort required to achieve that compliance.

The traceability matrix is used to document and track the project requirements from the proposal through testing to verify that the requirements have been met. The Contractor will be responsible for maintaining the contract set of Baseline Requirements. This traceability matrix will form one of the key artifacts required for testing and validation that each requirement has been complied with (i.e., 100% fulfilled).

The bidder must ensure that the original requirement identifier and requirement description are maintained from the traceability matrix.

How to complete the traceability matrix:

Column Description	Bidder Responsibility
Req#	The unique identifier for the requirement as assigned by DHHS, followed by the specific requirement number. This column is dictated by this RFP and must not be modified by the Bidder.
Requirement	The description of the requirement to which the Bidder must respond. This language is specified in the RFP and must not be modified by the Bidder.
(1) Comply	Bidder must insert an "X" if the system complies with the requirement. Describe in the response how the system meets the requirement. If the system does not comply with the requirement, the Bidder must address the following:
	<ol> <li>Capability does not currently exist in the system, but is planned in the near future (within the next few months)</li> <li>Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the Bidder's standard capability</li> <li>Capability requires an extensive integration effort of more than 500 hours</li> </ol>
(a) Core	Bidder must insert an "X" if the requirement is met by existing capabilities of the core system or with minor modifications or configuration to existing functionality.
(b) Custom	Bidder must insert an "X" if the Bidder proposes to custom develop the capability to meet this requirement. Indicate "custom" for those features that require substantial or "from the ground up" development efforts.

(c) 3rd Party	Bidder must insert an "X" if the Bidder proposed to meet this requirement using a 3rd party component or product (e.g., a COTS vendor or other 3rd party). The Bidder must describe the product, including product name, functionality, and benefits in the response.

## **Licensure Software Functional/Business Requirements**

The functional requirements listed below are those that DHHS staff deem essential. Bidders must note if their application meets each specific requirement, and describe how their software will meet each requirement. Bidders should also define and describe any additional functionality available in their software, beyond what is listed in the functional requirements.

Each requirement is identified by the following first three characters:

BID	Bidder Requirements
GEN	General System Requirements
ILA	Initial Licensure and Examination Requirements
RLA	Renewal Licensure Requirements
ACT	Accounting and Fees Requirements
LCV	License Certification/Verification Requirements
COM	Complaints and Investigations Requirements
DIS	Disciplinary Actions Requirements
MOB	Inspection and Mobile Functionality Requirements
RPT	Reporting Requirements
INT	Data Interface Requirements
ONL	Online Transaction and Public Interface Requirements
TRN	System Training Requirements
PHI	Public Health Investigations Requirements

#### **Bidder Requirements**

BID-1 Provide a Draft Project Management Plan.

Response: Please see the attached draft plan at the end of this section in the "Addendum" section.

BID-2 Describe the anticipated data conversion timeline, including the rollout strategy and when full implementation will be achieved.

Response: The data conversion timeline is included in the draft plan at the end of this section.

At a high level, the project information is as follows:

- 1. Start Date: October 1, 2019 (as per RFP).
- 2. Project Duration: 34 months.
- 3. Plan takes into account tasks to implement a total of 368 License Types.
- 4. Project broken down into 5 Phases.
- 5. Phase 1:
  - Includes all custom development identified in the proposal.
  - Implementation of 48 (13%) License Types.
  - Duration: 14 months.
- 6. Phases 2-4:
  - Will begin immediately after completion of Phase 1.
  - Implement 100 (27%) License Types.
  - Duration: 12 months.
- 7. Phase 5:
  - Will begin immediately after completion of Phase 1.
  - Includes development pertaining to mobile.
  - Implement 20 (6%) License Types pertaining to mobile inspections.
  - Duration: 12 months.
- 8. Phases 2-5 will have the same Go-Live date.
- 9. UAT duration (for each Phase): 3 months.
- 10. Warranty duration (for each Phase): 2 months.

Describe how the system automatically expands text boxes based on amount of text entered. Fields of adequate length for data elements and narrative text notes are required, as well as being able to view a significant portion of text notes without scrolling.

BID-3

DHHS is seeking a configurable system that does not have unreasonable data entry limitations and that allows large sections of comments to be seen in their entirety without scrolling. Some examples include inspection and investigation description entry fields, licensee record notes, and name and address fields.

Response:	Response: Comply. Tyler provides this capability as a standard functionality in the Entellitrak solution.						
BID-4	Describe the age, development stage, and robustness of the system, including mobile and synchronization capabilities.						
	Response: The Entellitrak core platform has been in production since 2006. The current development version is 3.30.1. Mobile is a stand-alone module, and synchronization or interfaces are custom built for the opportunity.						
BID-5	Describe the update cycle of the licensure software system, such as how often new versions will be implemented.						
	Response: The Entellitrak core product is typically updated quarterly with major updates and upgrades. Included in the maintenance license is access to the online Connect website, where updates can be downloaded at the State's convenience. Typically our customers opt to upgrade once per year.						
BID-6	Describe any compatible software packages used to create reports, templates, correspondence, etc., and how the software package versions are updated to ensure compatibility with DHHS versions.						
	These capabilities are either inherent to the core capability or packaged in modules that are completely compatible. Any custom configuration will be application level, rather than the core platform level. As a result, there is nothing to impede compatibility with DHHS versions.						
BID-7	Describe the document scanning methodology used, including compatible software packages that interface with the system, and how documents are attached, referenced, and deleted from license records. If the system does not have an integrated scanning/attachment module, describe the proposed electronic documentation system. Describe how the software package versions are updated to ensure compatibility with DHHS versions.						
Response: Tyler also offers the eScan Module of Entellitrak to transfer large quantities of paper forms into Entellitrak. eScan provides a one-step scanning solution for document attachment and management within the Entellitrak workload record. eScan allows workers to scan in faxes or secure email documents, convert them to PDF, and upload them directly into a case file from their workstation. These documents can be downloaded with a simple click of a button. eScan facilitates the import of legacy documents from open cases into the main Entellitrak system, so that all previous cases can be archived and tracked. eScan automatically generates an audit log, sent and saved to the Entellitrak system. The log captures details about the upload including the username, time uploaded, selected case(s), number of documents uploaded, the respective number of pages associated with each document, and the filename of each document uploaded to the selected case.							
BID-8	Provide the hours that live technical support is available, and describe the method(s) by which it is provided, to facilitate quick resolution of problems.						

Email: supp	Response: Tyler offers Tier 2, Tier 3 & Tier 4 Customer support for our ETK Regulatory customers from M – F, 8am to 8pm (ET) Toll free: 1.866.346.9492 I Email: <a href="mailto:support@Tyler.com">support@Tyler.com</a> . We provide 24/7 on-call response for business blocker events/critical level items as well. This support is designed for the State agency users, rather than public users. Additionally, Tyler offers access to Tyler's "OPTICS" ticketing system 24/7/365.					
BID-9	BID-9 Provide a draft Contract Closeout Plan which includes all the items specified in Section II. Terms and Conditions, V. Contract Closeout.					
Response:	Response: Please see the attached draft plan at the end of this section in the "Addendum" section.					
BID-10	BID-10 Provide ALL governmental regulatory entities that are currently using its licensure software system, if any, and provide names and phone numbers of the entities' system administrators.					

Response: Tyler's regulatory solutions have been in use since 1991. Over the course of the last 28 years, as we have upgraded and enhanced our solutions as part of a natural technical evolution, our customers have upgraded with us. In fact our original customers (TN Department of Health and FL Department of Health) continue to use our systems today.

Our newest solution, ETK Regulatory, is built on the Entellitrak platform which means that it offers more flexible configuration options and is extensible to do more than just licensing. The Entellitrak platform has been in operation for 20 years and has been installed in hundreds of agencies.

We are proposing our newest market-leading solution for the Nebraska Department of Health and Human Services. We are currently implementing its newest product, ETK Regulatory product with 4 different state agencies and a Financial Institutions client already in production.

However, our past performance includes many large health organizations and license types, including those listed below. Tyler cannot provide a full client list, due to customer confidentiality, and respectfully provides the following representative sample:

## Florida Agency for Health Care Administration

System Administrator: Phone Number:



#### Summary

This large agency is one of Tyler's longest standing installed clients since implementing our 1<sup>st</sup> generation Informix product in 1996. It has remained current with Tyler upgrading once in 2001 and again in 2010 to our 3<sup>rd</sup> generation Product Suite. This account demonstrates Iron Data's commitment to partner with its customers and continuously enhance COTS functions utilizing current technologies.

State of Illinois Department of Public Health (IDPH)





#### **Summary**

The project was the implementation for the management of the Compassionate Use of Medical Cannabis Pilot Program Act. The purpose of the Act is to protect patients with debilitating medical conditions, as well as their physicians and providers, from arrest and prosecution, criminal and other penalties, and property forfeiture if the patients engage in the medical use of cannabis.

## Florida Department of Health Medical Quality Assurance

- System Project Administrator, System Support Services
Phone Number:



#### **Summary**

The Florida Department of Health, through its Division of Medical Quality Assurance (MQA), determines whether health care practitioners meet minimum licensure requirements. Currently, Florida has over 860,000 licensed health care practitioners. The division, in conjunction with 22 boards and 6 councils, is responsible for regulatory activities of 200-plus license types in more than 40 health care professions and 34 types of facilities. Tyler's regulatory solution was selected as the foundation of the comprehensive, customized and flexible online licensing system that fully supports the Department's application processing, licensing, permitting, Examinations and Testing, and Enforcement, Discipline and Compliance functions.

State of Washington Department of Health (DOH) System Administrator: Phone Number:



#### Summary

The Health Systems Quality Assurance (HSQA) mission is the licensing and regulation of health practitioners, health care facilities and lodging establishments. This includes setting standards for entrance into the profession or for the operation of a health care facility or lodging establishment. Management of consumer complaints and the monitoring of disciplinary compliance plans are also included.

Integration of five legacy systems formed the basis of the project. The migration of these systems, of varying size and format, proved to be a significant goal. Adding to the complexity were federal and state required interfaces, required adherence to numerous, detailed statutes, and working with staff according to a unionized schedule.

Tennessee Department of Health Points of Contact:

| Business Analyst Supervisor
| Health and Social Services Business Domain
| Supporting Department of Health



| Business Analyst Advanced Health and Social Services Business Domain Supporting Department of Health

#### Summary

The Tennessee Department of Health contracted with Tyler to provide a comprehensive regulatory solution to replace their aging mainframe system.

The licensing system manages over 125 professions for 45 regulatory boards within the Department of Health and Environment, and handles licensing and renewal processes, cash office, examinations and testing, continuing education, enforcement, discipline and compliance functions.

BID-11

Describe the methods for developing and maintaining test scenarios, test sets, test cases, and test steps. Testing Methodologies must also address the approach to documenting test procedures and test results.

#### Response:

#### **Testing Techniques, Tools and Best Practices**

Types Of Testing We Perform:

#### System Testing

System Testing is a level of software testing where a complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements.

#### Integration Testing

Integration Testing is a level of software testing where individual units are combined and tested as a group. The purpose of this level of testing is to expose faults in the interaction between integrated units. Test drivers and test stubs are used to assist in Integration Testing.

#### Regression Testing

Regression Testing is defined as a type of software testing to confirm that a recent program or code change has not adversely affected existing features. Regression Testing is nothing but a full or partial selection of already executed test cases which are re-executed to ensure existing functionalities work fine.

#### Acceptance Testing

Acceptance Testing is a level of software testing where a system is tested for acceptability. The purpose of this test is to evaluate the system's compliance with the business requirements and assess whether it is acceptable for delivery.

#### Testing Tools:

Tyler's Quality organization utilizes variety testing tools and techniques to perform functional UI, cross browser, security and Section 508 web accessibility testing.

- We currently use Tricentis qTest for test planning, design, execution and reporting, but we're migrating to Atlassian's Jira Xray solution in fall of 2020.
- For defects and requirements tracking we use Atlassian's Jira and Confluence tools.
- For Section 508 compliance verification we use Wave Chrome toolbar, Jaws screen reader, Web Accessibility Toolbar and Keyboard navigation techniques.
- For security testing we use FireBug and various browser plugins. Our Information Security teams perform detailed scans using Fortify WebInspect and Static Code Analyzer tools.

• For performance testing we use JMeter. Our goal is to continuously learn new tools and techniques and improve the test coverage, efficiency and accuracy of our products and processes.

Tyler's Quality organization has developed multiple test automation solutions to meet variety of projects and product needs. MP-TAP (Tyler Test
Automation Platform) is a reusable, fully customizable low code test automation platform built using Selenium and Cucumber framework and Entellitrak's
public Java APIs and Service Bundles capabilities. Katalon Studio is a zero code test automation tool that uses drag and drop and data driven test
automation techniques.

Software Testing Process:

#### Test design process

- All test cases are created in Tyler's test case management tool, Tricentis qTest Manager.
- The requirements and/or user stories are imported into the qTest Manager tool so that traceability matrices and coverage metrics can be easily provided and managed. The test cases are linked to the requirements or user stories that they cover.
- Detailed test scenarios and test cases are designed by QA Engineers to meet all functional and non-functional story or use case requirements. The test cases are reviewed and approved by Project Managers and Business Analysts to ensure the completeness of test coverage.
- The goal is to have 100% requirement coverage including positive and negative scenarios. This approach includes functional test scenarios, role based security testing, 508 compliance and cross browser coverage. All of these tests form the regression test repository available as the project progresses, to be re-executed as needed.

#### Test execution process

- Test execution is carefully planned and monitored for adherence to acceptance criteria, definition of done and exit criteria of each release phase.
- Tests are executed out of qTest Manager giving real time metrics on testing progress, defects for failed test cases and ensuring quality at each phase. Detailed test reports and Jira dashboards are maintained and shared with the project team for each test cycle.
- During the development phase iterations or sprints, for each story detailed testing is performed to ensure all acceptance criteria and requirements are satisfied. In addition to the functional testing, accessibility, cross platform compatibility, security and performance testing is also done as needed.
   Defects are reported for failed acceptance criteria or test cases.
- Before deployment and delivery, hardening phase is planned. This is when QA Engineers perform end to end detailed regression testing of new stories and existing features to ensure the work product is functional, stable, usable, accessible and scalable.
- Internal and external stakeholders also perform User Acceptance Testing (UAT) during these phase. QA Engineers follow clearly defined Definition of Done (exit criteria) that must be met before exiting a phase and delivering for UAT.
- If there are any defects found during the hardening or UAT phase, depending on the severity or priority, the project team addresses these defects to meet the exit criteria of the release. Lower priority defects may be moved to the project backlog for further triage and prioritization based on stakeholder feedback.

#### **Test Reporting**

All test results are stored in Tyler's qTest repository. Each run is captured in the tool, and re-run, and the tool is configured so that each test phase has distinct results stored. All results can be exported and included in key project reports.

#### **Defects Tracking**

- Defects are created in JIRA defects tracking tool. A defect include steps to reproduce, expected results, actual results, logs, screenshots and test datasets for easy troubleshooting. The requirement or user story are also referenced in Jira bugs.
- Story Level Defects (defects raised for failed acceptance criteria of a story) are addressed in the same iteration to ensure the Definition of Done is met for the iteration.
- Application Level Defects (Unintended side effects caused by stories, failed test cases) are resolved in current or next iteration per their severity and priority.
- UAT defects (defects missed in QA test cycle) are resolved in current or next iteration per their severity and priority.
- QA Engineers monitor and analyze each defect and make sure to close any gaps they might have in the test coverage by adding necessary test cases to the test repository.

BID-12

Describe how the system provides application controls to prevent unauthorized use, maintain system process controls, and log all transactions. In addition, the system shall provide security to limit availability to application functionality, software screens, data records, data elements, and data element values where appropriate.

#### Response:

ETK Regulatory provides a System Administration module (as shown in Figure 16 below) that emphasizes ease of use, which eliminates the need for specialized technical training for system administrators. This module employs familiar MS Windows features such as checkboxes, buttons, and dialog boxes. The module provides the administrator with capabilities such as adding or deleting users, creating or modifying system roles, reactivating closed cases, and generating or monitoring audit logs.

The ETK Regulatory role-based security and access model is configurable to mimic any organizational structure. Because system access is role-based, users see only the data that is pertinent to their domain, enabling them to focus on relevant information and tasks.

Functions that the user is not authorized to execute will be prohibited and not visible. Data (by case type, case instance, or field-level) that the user is not authorized to view or access will be prohibited. For example, a particular role/group may have the ability to view a case but not modify it. Likewise, certain users may not be allowed to view full SSN values. Once a user is established, he or she is assigned to internal organizations, regions, or offices and applicable roles within ETK Regulatory.

System permissions are completely configurable through the GUI CRUD (Create/Read/Update/ Delete) controls. These permissions are assigned to various roles that are also built into the system during configuration. The roles are configured down to the table/object level. Permissions can be read-only for various roles, and any data object or category can be invisible or password-protected. All State employees who use ETK Regulatory will be subject to the same security features.

Roles can be configured on the following:

- Which screens are visible
- Which fields can be modified
- Which reports can be requested
- Session time out
- Data validation criteria

All user accounts and role/group memberships may be remotely managed by any authorized administrator using ETK Regulatory' System Administration module. It is through this System Administration module, that an authorized user can view, add, update or delete a user account or user profile security level. ETK Regulatory employs validation rules warning messages when revising critical data such as user accounts. For example, a staff member cannot delete a user account if there are any clients, referrals, or cases assigned to it.

In addition to security management, the Administrator Console allows local and remote system administrators to manage system-wide settings such as configuration management, help narrative and database lookup tables (e.g. case types, internal organization setup). As the State systems and processes change over time, ETK Regulatory can be configured to adapt to these evolving processes and workflows.

Since configuration is primarily "point-and-click," with "low-code" technical requirements, Tyler can train State administrators to assist in configuration of the ETK



FIGURE 2

Regulatory software over time.

ETK Regulatory employs hierarchical role-based security to maintain program integrity and to prevent unauthorized access, inappropriate disclosure, or compromise of Personally Identifiable Information (PII). The system restricts user access configuration and management based on role and group. In addition to role-based create-read-update-delete (CRUD) permissions, ETK Regulatory supports both Single Sign-On (SSO) and multi-factor authentication for protected logins to the system.

ETK Regulatory authenticates all users upon login ensuring each has valid user credentials. Once authenticated, ETK Regulatory enforces permissions to functions and data, based on the user's role/group memberships and associated permissions. Users may be members of one or more roles/groups as defined by State

Administrators will receive training on post-implementation activities including security administration (including profile set-up and user maintenance procedures), and configuration administration (including lookup table administration), etc.

#### **General System Requirements**

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
GEN- 1	Describe how the system includes intuitive, user-friendly dashboards and work queues for each staff person to process multiple steps within the system. Dashboards should be easy to configure to staff preferences and needs. The system should track and produce timely staff alerts that are configurable by license type, and place them into the work queue of the appropriate staff for processing. The system should include an intuitive way to view and transfer items between staff dashboards or work queues as needed. The system should automatically log communication, documentation, and changes to the records. The system should allow printing and reprinting of documents as needed. Data entry should update the database in real time.  For example: (1) an application is submitted and placed on a data entry queue; (2) after entry, the application would move to an applications pending/checklist queue; (3) after all items are received and checked off, the application would move to a license issuance queue, which would include generating and printing licensure documents such as wall licenses, wallet cards, and certifications. All data is saved real time and can also be configured to save post approval.	X	Х		

#### Response:

ETK Regulatory provides comprehensive and targeted home page view (landing page) for agency staff based on their group membership and role. ETK Regulatory uses Queues and Enhanced Inbox to aggregate relevant information for logged in agency staff. Role based security controls view and access of records shown in these queues. ETK Regulatory also has a robust and configurable Alert Management module which can be set up to drive agency staff work queue. Each application can be individually assigned to another staff member, if needed. ETK Regulatory's transaction system allows automated processing of an application. Upon submission, it shows up on an individual or group's queue as configured in checklists associated with the application. This is all configurable. Once checklist is completed by one or more staff members, approval triggers various steps which eventually produce a license. ETK Regulatory extends application process by allow attachment of rules which can do any specific action(s) pre and post approval.

-	GEN- 2	Describe how the system will allow more than one user to be in the same licensee record at the same time, but allow only one user to make changes within the same part of the record at the same time.	Х	Х	
	_	but allow only one user to make only ges within the same part of the resort at the same time.			

Response: Neither ETK Regulatory nor the ETK platform provide the ability to lock down a record of parts of a record for editing by one user out of the box. The system will take updates from multiple users sequentially with the last user's changes being the changes that are the latest on record. Most applications or licenses are assigned to one user at a time for processing. They are available in the user's queue. They do not appear in other users' queues while they are in the assigned user's queue. It is good practice to not have staff update sensitive records that are not assigned to them, or in their queue.

It would not be our recommendation, but if the agency would like a record locking feature built into the product it could be discussed as a customization of the system.

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
GEN- 3	Describe how the system will update the database as data is entered in real time, and keep a history of the changes made, who made them, and when.	Х	Х		
	nse: All users with the ability to update data in the database must be signed in. ETK Regulatory keeps track o ling on the audit configuration levels required by the agency can track every change made, by whom and whe			all records an	d
GEN- 4	Describe how the system will provide customized views and available functionality by user group or role (role-based security). The system should allow non-relevant or non-public items to be hidden based on the user group or role.	Х	х		
access permis	nse: ETK Regulatory uses the ETK platforms extensive Role Based Access Control Security model to control to. The security model is very granular and can be configured down the field level. The system comes pre-cosions out of the box, during the implementation process Tyler will work with the agency to setup additional roless needs.	nfigured with	a set of s	tandard roles	and
GEN- 5	The system administrator should be able to limit the data elements that are available within a given security level for data searches and reports, so that data will not be released inadvertently. The system administrator should be able to define each data field as either public or restricted, and have restricted information available only to appropriate staff based on roles.	х	х		
	nse: All search and reports generated from search results out of the search screens can be controlled by ETP ) model. This allows administrators to determine who can see what data elements and information by role.	K Regulatory's	s RBAC (F	Role Based A	ccess
	vanced reporting outside of ETK Regulatory's built in Search capability (e.g. 3rd party reporting tools) would r It the database level and control access to data through those views and the database level roles setup again			inistrator to b	uild
GEN- 6	Describe how the system will allow for administrator rights to oversee the systems, including the ability to configure multiple access rights and security levels based on user security profiles, to import/export/update/change data, and to configure and generate reports.	Х	Х		
access the abi	nse: ETK Regulatory uses the ETK platforms extensive Role Based Access Control Security model to control to for execution (e.g. jobs). The security model is very granular and can be configured (through a web user ir ity to run an import job, he will see it on the screen, if he does not he won't. If a user have the ability to chang that allow edits and saves.	nterface) dow	n the field	level. If a use	er has
GEN- 7	Describe how the system will attach documents, videos, photos, correspondence, and other documentation to licensee records by date, item category, security/access level, retention schedule, etc., as identified by staff. Describe how records will be stored and deleted according to the DHHS and State retention schedules.	х		х	

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
docum	nse: ETK Regulatory can capture and store documents, videos, photos and other file attachments in the Doc ent repository can be accessed throughout the system. We are proposing to build a records retention (destruc- le when to purge documents from the system according to a predefined retention schedule.				
GEN- 8	Describe how the system will have the capability for staff to designate the documents and data items that will be made available for online public access as they are entered.	X	Х		
	nse: All documents are stored in ETK Regulatory as document elements or records. Administrators can set u vievel of who can see them. A document record can be flagged by the user as available to the public or priva				iate
GEN- 9	Describe how the system will allow third-party updates to applicant and licensee records.  Some examples include:  1. Allow educational institutions to submit data regarding education on a licensee's record.  2. Allow employers to submit nurse aide employment information, including adding new hires, updating current nurse aide rosters, and adding employment end dates, to update nurse aide applicant and licensee records.  3. Allow employers to enter and update license information for licensed employees.  4. Allow the child care rating system to add/update a rating level to a licensee's record.	Х		X	
	nse: ETK Regulatory road map includes third party authorization. Design includes allowing licensee and/or ag dated by authorized third parties.	ency to defin	e what all	can be expos	ed to
GEN- 10	Describe how the system will facilitate and document electronic and other correspondence, communication, and documentation, and automatically link it to the correct applicant/licensee records, complaints, inspections, disciplinary actions, non-disciplinary actions, etc. The system should save all incoming and outgoing communications within the applicant or licensee record, and provide a log for conversations via email, text, phone, in-person, etc. The system should provide templates for documents, reports, correspondence, etc., and allow staff to revise templates and create new documents and correspondence as needed.	х		×	
	ise: ETK Regulatory road map includes a concept called 'Communication Center'. This will be used to capture and the agency. It will have configuration points to allow linking such communication artifacts to licensee re				tween a
GEN- 11	Describe how the system will have an integrated validation module built into the software to ensure data submitted is accurate and valid. Spellcheck is required. For example, to ensure that text is not entered into date or numeric fields, numeric data into alpha text fields, etc.	Х	х		
	ise: ETK Regulatory is a data driven application which makes sure any and all data entered is valid via built in Des. Spell check is also provided for forms which capture text.	n validations	driven by I	ousiness rule:	s and

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
GEN- 12	Describe how the system will allow staff to set the records retention schedule for documentation at the time of entry/creation, and automatically notify staff when documents are eligible for destruction, based on a specified destruction date. Staff should be able to approve destruction or change the destruction date as needed.	х		х	
	nse: ETK Regulatory does not have a retention policy in place. It is a road map item. This is planned to be co ement to trigger alerts to agency staff members.	nfigurable an	d interface	e with and use	: Alert
GEN- 13	When working with a licensee record, describe how the system will be able to list all of the addresses associated with the license, and provide an option to print a selected address on an envelope or label without creating a mail merge into another document.	Х	Х		
license Regula	nse: ETK Regulatory view of a licensee record is built on top of a well-defined data model. All relevant informate is shown on a single page view. Addresses show in a tab of its own, one record per row in a table. Clicking tory supports creating templates for envelope labels which can be called from licensee addresses to be adde ites take over and generated letter (address label) can be printed on an envelope.	a row shows	address o	letáil view. E1	
GEN- 14	Describe how the system will store images, letterhead, templates, and electronic signatures used on multiple documents in one location.	Х	Х		
electro	nse: ETK Regulatory data model allows agency to store images, letterhead, templates and electronic signatur nic artifacts are treated as a file in ETK Regulatory and can be saved in database or Document Management e documents by a referencing the objects' using unique ID or business key.				on
GEN- 15	Describe how the system will verify all addresses and zip codes as the data is entered, such as validating entries against a USPS Address lookup file, and provide the option to input the recommended address information instead. ZIP+4, the additional 4 digits of the zip code, should be added by the system based on the address chosen.	х	х		
	egulatory has a built in interface that talks to Melissa APIs for address validation and verification. This validati igger. Address recommendations are made and allowed to select from a list. Complete address is shown upo				an
GEN- 16	Describe how the system will allow data searches on each data and text field and on combinations of several data fields. The system should include partial name and "sounds like" search parameters. A minimum of 15 search results should show on a screen at the same time with no scrolling required to view them, with additional results available by scrolling.	х		х	
objects	nse: ETK Regulatory natively supports searching on each data and text field. A combination could also be use . 'sounds like' is not supported but will be taken as custom work as a future feature. Number of search results by the user. ETK Regulatory shows results in a table with pagination. Implementing scroll to access next 'pa	is a configur	able optio	ns controlled	and

as a future feature.

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
GEN- 17	Describe how the system will track licensees and link the records of all of their licenses, the full history of each license, all related documentation, and all disciplinary actions in progress and taken against each license. When a new application is entered for an individual or establishment, a notification regarding any other licenses associated with the applicant should pop up during data entry.	×	X		
informa	nse: ETK Regulatory is a licensee centric system and has a comprehensive view of a licensee record that contion such as history, documentation, disciplinary actions, etc. Transaction system in ETK Regulatory support needs, searching and displaying other license information during a new application data entry, as an example	ts rules that c			
GEN- 18	For licensees that have more than one license in process, describe how the system will display multiple application status checklists at once. For example, display both checklists for an individual that has both a PLADC and PLMHP application pending, or all applications, names, and street addresses associated with an establishment.	×	X		
them a	nse: ETK Regulatory treats every license transaction as a separate application process. The portal is available dashboard of all the license applications that are in progress in one place. The licensee can then drill down ir a checklist of all pending items that require the licensee's attention - an example would be to provide addition ments.	nto that applic	ation and	see the statu	ıs, as
	When an applicant is issued a new license, describe how the system will have the capability to automatically null and void specific licenses previously held by the applicant, as specified by staff for the license type, within the same license type or other license types.				
GEN- 19	Examples include: If an APRN license is issued to Brad, his current RN license would remain active. If an LPN license is issued to Janet, her current Medication Aide license would be made null and void. When Diane's Child Care is approved for an operating/non-expiring license, the current provisional license will be made null and void on its expiration date, and a non-expiring license issued at that time.	X	X		
	nse: Transaction system in ETK Regulatory supports rules which can be custom written as per agency needs. an be triggered by a configurable step of the application process, submission, checklist or approval as examp		all examp	les stated abo	ove. This
GEN- 20	The system administrator should be able to initiate, modify, and configure Nebraska-specific requirements for each license type.	Х	Х		

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
interfact configu	nse: ETK Regulatory is a highly configurable application. Administrators can set up multiple boards, license ty e. They can maintain and change that configuration throughout the life of the system. Transactions can capturable question and answer screens. A pre-defined set of common rules are available and agencies can build with the life of the system.	ire all kinds o	f informati	on through	
	lough the behavior of the system around specific license type information is high configurable through a UI, T rd SDLC when moving business configuration through their environments (test - staging - production).	yler recomme	ends the a	gency follow	a
GEN- 21	Describe how the system will calculate averages, percentages, days between, deviations, etc. between multiple data elements.	х	Х		
be trigg	nse: ETK Regulatory allows extension of data objects which can contain additional data fields, some or all of v ered and run on any event, including user action. If this need is part of application process, ETK Regulatory v and calculations that will eventually be stored in the database or be part of decision making.				
GEN- 22	Describe how the system will accommodate AKA (also known as) identification, previous names, and DBAs (doing business as) for licensees who either legally change their name or go by another name. The system should track and associate facility name, ownership data, and survey results by the facility address, such as the record for a nursing home at 123 Main St. shows a history of the companies and DBAs that operated the nursing home, and all inspection results and compliance findings for the facility.	х	Х		
record. records record	nse: ETK Regulatory allows for configuration of different name types that can be owned by the Entity (individured Multiple name types can be configured for each as well as min/max active allowed and whether the name is a (and all other contact information such as address, email and phone) are stored as historical inactive records will have a configured "AKA Name" that will be required, populated and updated as time goes on. Viewing the all entries for the "AKA Name" as well as the current record.	required or n s. As such, it	ot. Áll ch	anges to nam le that a licens	se
GEN- 23	Describe how the system will incorporate data entered online (sometimes automatically and sometimes after staff approval); auto-fill information that has been duplicated in other parts of the database, checklist, or license information document; and allow staff to update that information as needed. All changes, as well as the staff person making/approving the changes, should be documented and the old information archived.	х	Х		

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
stored. comple auto-ap applica	nse: ETK Regulatory has both a back-office and public facing portal modules. Both of these modules share or As portal applicants are filling in the information, it is saved for progress but not submitted to the back office feted the entire online transaction. The application is then routed to the appropriate back office staff for approve if sufficient information is provided. Staff assigned to an application can work the checklists and update tion prior approval. ETK Regulatory has a very robust and configurable audit capability. The agency has the lost any field and table. Information such as who made the change, what the change was from and to, as well a lit log.	or approval u al. Transactio additional in ability to tracl	ntil the ap ns can als formation c and keep	plicant has to be configur associated we to a history of	ed to vith the changes
GEN- 24	If an individual licensee's contact information is updated on one license, either online or by staff, records for all licenses held by that licensee should automatically be updated.	Х	Х		
informa license informa	desponse: ETK Regulatory maintains contact information on both the entity (the individual) and on the license. License specific contact information is typically information pertaining only to that license (such as Practice Location Address or Doing Business As name). This information is not shared between different censes since it is owned by the specific license. The entity contact information however is displayed and can be updated on any applications. This contact information is owned at the entity and once updated via any application (such as a Renewal for one license) will update and display for the other licenses owned by that entity.				
GEN- 25	The system administrator should be able to access and edit the questions/instructions/etc. on renewals, applications, and all other forms/templates, whether online and paper.	х	Х		
	nse: ETK Regulatory is extremely flexible and configurable. Labels, questions, possible answers, drop downs can be changed by the agency without requiring code changes from Tyler.	and all conte	ent availab	le in the publ	ic portal
GEN- 26	Describe how the system will accommodate input of historical license records with limited data and documentation. All data needs to be migrated (active/inactive), be editable, and be used in reports.	х	Х		
Regula legacy	art of every implementation, Tyler will work with the agency to extract, transform and load all historical data as tory (active/inactive). All migrated data can be edited and used in reports. We have over two decades of expressystems to identify what needs to be mapped to the new licensing solution. As long as this information is in sease, our conversion engineers can map and load it into ETK Regulatory.	erience helpir	ng agencie	es sift through	n their
GEN- 27	Describe how the system will support entity types and address types. Examples of entity types are as follows: individuals, businesses, facilities. Address change capability must be available to individual licensees at any time on the website, and as part of renewals.  Only individuals can change their address. Establishments are not allowed to change their address.  Reference Attachment One, Type and Number of Licensees.	х	х		

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party	
						ı

Response: Entity types can be supported as a field with drop down options from which to select in the system, once licensees login. Address change can be managed with a simple text field that can be updated, and can be configured to certain entity types (e.g. individual) being granted the role-based right to edit the address field and other entity types (e.g. establishments) not granted that right.

#### **Initial Licensure and Examination Requirements**

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
	For <b>individual licensees</b> , describe how the system will capture and maintain core demographic information. Core demographic information must include at a minimum:				
ILA-1	Name, including first, middle, last, maiden, AKA, etc. Date and place of birth Social Security Number – the full number should not be displayed in any reports or other documentation unless approved by DHHS Contact preference, identified as phone, text, email, mail, etc. Multiple email addresses, identified as home, work, school, designated contact address, etc. Multiple phone numbers, identified as home, work, cell, notification text, etc. Home address Multiple mailing addresses (work, home, etc.) Date of death School, education type, and date of graduation, with drop-down lists of approved schools and coursework Type and date of examination, pass/fail notation, and ratings or grades received, if any Application/license type, issuance date, license status, license number, unique person identifier, and basis on for license issuance Compact-related information, including declared state of residence and declaration date Description of all disciplinary action pending or taken against the licensee, including the type of disciplinary action, the effective date range of the disciplinary action, a description of the basis for disciplinary action, etc. Any additional data fields DHHS deems appropriate.	X	X		

Response: ETK Regulatory captures information for the individual person (entity) as well as any of their licenses. For both the entity and license, the system can capture contact information such as names, addresses, email and phone numbers which can be defined within the system. License information is also captured and updated by the system as per captured business requirements. Education information can currently be captured but a minor enhancement would be needed to register schools and approved courses. A more robust education history object is on the current product road map. Other entity or license owned information can be tracked in

can be ii	nked to entities and credentials.			1
ILA-2	For establishment licensees, describe how the system will capture and maintain core demographic information.  Core demographic information applicable to the license type, must include at a minimum:  1. Physical location of the establishment 2. History of establishment ownership and compliance by physical location 3. Contact preference, identified as phone, text, email, mail, etc. 4. Multiple email addresses, identified as work, designated contact address, etc. 5. Multiple phone numbers, identified as desk, cell, fax, notification text, etc. 6. Licensee name, DBA name, facility number, license type, license number, issuance date, expiration date, status, and basis for license issuance 7. Occupancy certificate, including date and issuing authority 8. Multiple mailing addresses and contact information (corporate headquarters, branch/satellite/off-site/practice locations, etc.) 9. Ownership information, including names, dates served, physical location, contact information, ownership type, non/profit status	X	X	
	<ol> <li>Number of beds/capacity</li> <li>Population served, including hours and age ranges for child care licensees.</li> <li>Geographic service area (multiple county names with start and end dates per county)</li> <li>Services provided (multiple entries with start and end dates per entry)</li> <li>Management personnel (multiple entries with start and end dates per entry)</li> <li>Disciplinary history, including each disciplinary action taken, start and end dates of each action, and a summary of the situation that resulted in the disciplinary action</li> <li>The establishment's TIN/FIN/W-9</li> <li>Any additional information DHHS deems appropriate.</li> </ol>			
Respons	e:			I
ETK Reg informati system a Provided (including defined r	rulatory captures information on an organization (entity) as well as the license record. For both the entity and I on such as names, addresses, email and phone numbers which can be defined within the system. License information in sper captured business requirements. ETK Regulatory Objects can be built to capture such things as Popula and Management Personnel. These objects can be configured as child objects to the entity and / or license and gonline) and via the back office screens. Ownership information can be captured as either a new child object elationship between entities. In a relationship approach, the owners would themselves become entities in the strions or licenses.	ormation is also o tion Served, Geoo nd can be admini on the entity or lic	aptured and ugraphic Servicestered throughense, or it can	updated by the se Area, Services h applications n be captured as a
ILA-3	Describe how the system will calculate prorated fees and initiate refunds for individual licenses and groups of licenses, based on license type-specific requirements.	Х	X	

Volume 2: Technical Approach Tyler Technologies, Inc. For example, Jane applied for an RN license in July, with payment of \$123. Jane met all requirements for a nursing license on October 15. The nursing renewal date is October 31. If Jane chooses to have her license issued on October 15, the system should automatically calculate and default to the pro-rated fee (\$30.75), and initiate a refund if necessary (\$92.25). Response: ETK Regulatory utilizes a rules engine which has been extended to fee calculation. As such, pro-rated fee logic can be configured for applications. Within an application review, the back office user can see the allocation of funds and generate a refund for over-payment. Describe how the system will generate/document license issuance correspondence and licenses after all licensure requirements are met, and accommodate/schedule license issuance dates in the future. For example, Jane met all requirements for a nursing license on October 15. The nursing renewal date is October 31. If Jane chooses to have her license issued after the renewal date, the system should track her ILA-4 future license issuance date and generate a license on the specified date. Χ Χ Another example: a provisional child care licensee has met all requirements for an operating/non-expiring license on March 1. The provisional license doesn't expire until April 1. The system should track the expiration date of the provisional license, and generate the operating license with the effective date of April Response: ETK Regulatory includes the use of license expiration date rule policies that can account for when an expiration date is set based on such things as first effective date or minimum license period. If a standard policy does not exist, a custom policy can be built to satisfy specific business requirements. It is common for each client to require a number of custom policies as specific business requirements vary, and the system has been built to accommodate these requirements. Describe how the system will allow issuance of licenses with or without a specified expiration date or ILA-5 Χ Χ application/renewal/annual fee. Response: ETK Regulatory includes the ability to configure license types and define whether those license types will expire, and if so what expiration date policy can be established (starting calculation date, period of licensure by year and or month(s), minimum period of licensure and renewal length). As such it is possible to configure license types that do not expire and require no fees to stay in a current or active status. Alternatively, the license type could be configured to expire annually on a specific date and renewal applications configured to collect required fees. Describe how the system will separately track the Declared Primary State of Residence (PSOR), declaration date, and license compact status (single-state or multi-state) for licenses subject to compact agreements. Changes in PSOR should not change the license compact status. II A-6 If a license subject to a compact agreement is under disciplinary limitation, the license compact status Χ Χ should automatically be set as single-state, and maintained as single-state until the disciplinary limitation is removed. Describe how the system will determine if states in address field and states in PSOR field are compact or

Volume 2: Technical Approach Tyler Technologies, Inc. non-compact states for that particular license type. If licensees update their mailing address state or PSOR, the system would use a decision tree to determine if a) a notification should be sent to the license-typespecific staff work queue for review and processing, b) the license compact status should be automatically changed, or c) no additional actions are necessary. Response: ETK Regulatory allows for configured address types to be stored against specific license types. For compact license types a Declared Primary State of Residence address type would be configured and used. Furthermore, ETK Regulatory has a license discipline status feature that will allow for discipline statuses to be added onto the current 'base' status for a duration of time. Once the discipline status has ceased the system will automatically remove it leaving the appropriate base status intact. It is likely that a customization would be required to track the single-state and multi-state parameter as well as a process to switch between the two depending on the requirements. Describe how the system will track and show the status of each application requirement, and generate/document deficiency notifications. The system should identify and track the status of incomplete applications, calculate the number of days between receipt date and license-type-specific destruction date, generate appropriate correspondence, and alert staff of applications that are due to be destroyed. Staff should be able to assign retention according to retention schedules, and the system should notify staff to ILA-7 Χ Χ approve destruction or extend the destruction date. For example, Jane sent in an application that didn't include citizenship status documentation, and a systemgenerated letter/email notified Jane of the deficiency. Jane didn't send in the documentation within 90 days, so her pending application should be sent to a work queue for staff to assess an administrative fee, initiate a refund, remove the application from the pending application process, and destroy the file. Response: ETK Regulatory applications can be configured with checklists and checklist items to track the satisfaction and completion of requirements. These checklists can be configured to automatically clear with the addition of new validation rules. Deficiency letters can be generated by the application which can be configured to include a summary of the deficient checklists and items. Checklists and items can also be configured to for a due date based on submission date or when the checklist is activated (for use when checklists are configured in sequences). ETK Regulatory uses Enhanced Inbox Queues to notify users if applications, checklists or checklist items are nearing their due date. Furthermore, alerts can be enabled to draw extra attention to specific applications as needed. Describe how the system will accommodate and document applications based on examination or reciprocity. The system should document the jurisdiction, declared primary state of residence, the date ILA-8 declared, and whether the license is single-state or multi-state. License types each have their own Χ Χ application forms. No two license types have exactly the same requirements or number of processing steps. Response: ETK Regulatory applications can be configured to capture desired information that best suits the agency's business requirements. For example, separate new

applications for licensure can be configured such that new license by reciprocity is a different application (with its specific questions and requirements) than the new

	on via examination. Alternatively, applications can be configured to change which information is collected base on. Varied license types and processing steps will be accommodated.	d on answers pro	vided within	n the	
ILA-9	Describe how the system will incorporate examination features such as scheduling, proctoring, national test integration, score integration, non-applicant examinations, etc. The system should allow staff to register applicants for examinations, create sign-in sheets, verify the identity of applicants, administer tests, link applicant records, allow score uploads from providers, create related letters/emails, and track communication with applicants. The system must document exam data, such as administrator, type of exam, scores, etc., for each exam taken. The number of exams taken must be tracked and alert staff when the limit for the license type is reached, if applicable.	Х		×	
Respons	se:		-		
be regis grades of potentia examina adminis	gulatory currently does not yet have an education examination module, but can be enhanced to include the follotered within the system and would have examination sites and schedules. The exams themselves would be corporated some some some some some some some some	nfigurable to identi for an examinatio e uploaded and re past implemented	fy necessa n request a corded aga d system fu	ary parts and pand select the ainst the inctionality to	passing
ILA-10	Describe how the system will provide an online account system with an intuitive interface for applicants to securely submit application materials/fees, <b>get receipts</b> , check the status of applications, schedule examinations, and view their scores/results. Online data entry should be interactive, with popups of current/past licenses, current contact information, proposed corrected address information, ZIP+4, etc., as specified in GEN-15. Describe how the system will maintain an electronic record of all online applications, payments, and status changes.	X	x		
Respons	se:				I
applicati submitte that incl	gulatory has an online portal that allows the registered user to select any application that has been configured a ons include applications for new licenses, change of entity or license information (name or address change), license may require fees to be paid via the shopping cart, and the status of an application can be checked at any time ude existing entity or license data will display that information to the user (minimizing data entry) and address erverification.	ense renewal and e from the recent a	so on. Ap activity sec	plications thation. Applicat	ions
ILA-11	Describe how the system will link and track the requirements of a secondary Provider Status Certification at the same time that the primary license application is being processed (i.e., a dental anesthesia permit for a dentist, or a nurse anesthetist certification for a registered nurse).  Describe how the system will require that the primary license be issued first, before any dependent license can be issued.	Х	x		

_				
Respons	e:			
	ry licenses would most likely be configured in ETK Regulatory as separate licenses. Depending on the specific to ensure that a new license is not applied for, and or approved unless the entity holds a specific valid license of			approval rules can
ILA-12	Describe how the system will provide a unique identifier for each licensee, each establishment's physical location, and a cross-reference mechanism for licensees who hold more than one primary license. For example, Dr. Smith holds a current dental license and a current medical license, or a hospital holds a current hospital license and a current long-term care license.	Х	Х	
Respons	e:			
issuing u	ulatory is an entity centric system in that an individual or organization should be one entity in the system. Enti- nique license numbers with their independent statuses and expiration dates (if applicable). From the entity rec ntities and Licenses can have their own address information so that you could track the Entity's primary mailing (which would be unique to each license). The same is true for names, phone numbers and email addresses.	ord it will be clear	how many	licenses the entity
ILA-13	Describe how the system will maintain and track multiple related supervisor/supervisee licenses, with start and end dates for each, and not allow the maximum number of supervisees for a license type to be exceeded. The system must not allow license issuance until applicants for a supervisee/dependent license have entered into an agreement with a qualified, active licensee to supervise their work. The system should display all dependent licenses for a supervising licensee on one screen. Staff will review and approve/deny supervision relationships prior to license issuance. Approximately twenty (20) license types need to establish and track supervisors and/or employers.	Х	х	
Respons	e:			<b>-</b>
specify the dates and configure be configure licenses	pulatory includes a configurable relationship feature that allows for entities and licenses to be related together (ne types of entities, minimum and maximum number of licenses and statuses required for a valid relationship. It is defined to change status once the dates are reached. Application checklists can be configured to verify the presence of the dates once a relationship is no longer valid (missing, status not maintained, exceeding the minimum or pured so that a supervising license's status change can be pushed down to supervised licenses; for example, a also then become expired. Relationships display on the entity and credential screens and can be grouped for odate the twenty (20) license types that need to establish and track supervisors and/or employers.	Relationships can of a required relation maximum count). a supervisor become	have future onship. Sys Furthermo nes expired	e start and end stem alerts will be re, relationships ca and all supervised
ILA-14	Describe how the system will allow supervisors and supervisees to initiate, update, and terminate their supervision arrangements online. The system should generate and document alerts to staff and to all licensees involved in the arrangement when changes are made, and provide a method for those involved to indicate their approval of changes made. Staff will review and approve or deny the updated supervision relationships, and notify the supervisor and supervisee(s) of approval or denial.	Х	х	

#### Response: ETK Regulatory relationships can be included in applications which can be made available for online users. Such an application could be called "Maintain Supervision" Arrangements" and would enable the supervisor license holder to update, add or remove related licenses. Once submitted, these applications can be approved by the back office. Planned enhancements to the relationship feature include the ability to request a new relationship or a change to an existing relationship resulting in a pending status that must be approved by the other party. This will integrate with the application feature which will initiate a new application for the other party to find online and complete. Describe how the system will generate and document alerts if a supervisor's license is disciplined, revoked, or inactivated. Supervisees should be notified immediately, as they are not allowed to work without an ILA-15 active licensee's supervision. Alerts should also go to the staff responsible for the license type, so that they Χ Χ can inactivate, void, or put a hold on all of the supervisee licenses. Some license types may require that the supervisee license status is changed automatically under specific circumstances. Response: ETK Regulatory can place system alerts on licenses when they fall out of a required relationship parameter. These alerts can be picked up in configured enhanced inbox gueues so that users can be made aware and process them accordingly. Furthermore, relationships can be configured to automatically set the status of a supervised license should the supervisor license status change. Describe how the system will link and track the status of an application when a temporary license has been issued. For example, Jane Doe moves to Nebraska and makes application for a nursing license, Jane is given a Χ Χ ILA-16 temporary nursing license, based on her licensure in another jurisdiction, so that she can begin working while her permanent license application is being processed. The system should maintain the temporary license record while allowing processing of the permanent license application. The system should maintain the historical data reflecting both licenses that are tied to the individual. Response: ETK Regulatory is an entity centric system that allows for an entity to have multiple licenses at a given time. Depending on specific requirements, a temporary license could be configured in the system as a different license type or classification to a permanent license. An individual may then have a temporary license in an active status that expires within six months while they are applying for a separate permanent license. Both licenses (one active, the other pending) will be visible on the individual entity and maintain their separate statuses and dates. Describe how the system will allow employers to upload/import/enter employee rosters to update individual applicant/licensee employment records, including start and end dates, and accommodate multiple employers for each licensee. ILA-17 For example: Χ Χ Jane Doe, a nurse aide applicant, will be working for Good Samaritan Nursing Home, Home Health Care Services, and Shady Rest Nursing Home. Each of her employers should be listed on her applicant/licensee record, with attached start and end dates for each.

Volume 2	Volume 2: Technical Approach			Tyler Technologies, In	c.
	Shady Rest Nursing Home should provide a quarterly report of their employees and their da employment, including new hires and terminations.	ates of			
Respons	se:	1			1
to track t	gulatory currently includes a relationship mechanism which can be configured to track employ the organization and nurse licenses. These relationships are currently entered and maintaine t is required this would be an enhancement.	ment. For example a d via applications wh	n employment r ich can be mad	relationship can be con e available online. If ar	figured n upload
home ma	isted example, Shady Rest Nursing home may initiate a "maintain nursing staff" application way then modify the start and end dates of those employed nurses, end current relationships oployee record.				
ILA-18	Describe how the system will accommodate the nursing and faculty loan program, including information, loans, payments, etc. Data is currently stored in a small database regarding re amounts, payment data, and current amounts owed. DHHS envisions migrating this data ar payment tracking functions in the system, much like other accounting transactions.	cipients, loan	Х	x	
Respons	se:				•
that spec collect m complete	gulatory can be enhanced with a custom set of modules to track and manage loans. A new med with attributes (max amounts, interest percentages, forgiveness period). These loans coucific data can be captured and updated for that given loan record. Depending on requirements nonthly payment requirements. Integration with the existing invoice process would make it pose online. Finally, tracking of license status and practice location would be compared against to automatically close out loans that reach the forgiveness condition.	ld be issued to entitions, amortization period ssible to generate pa	es and reside as ls can be calcula yment application	s a child object on the e ated and scheduled out ons that an online user	t to could
	knowledges the need for the State to migrate existing database data and creating payment tra cation envisioned by Tyler.	acking functions in th	e system. This	need is within the scop	e of the
	Describe how the system will accommodate the following three (3) exam types.  1. For online examinations DHHS envisions the examinations currently conducted				
ILA-19	<ul> <li>online via Survey Monkey and ProProfs to be administered via the personal online accounts. DHHS would be notified by the system of detailed score reports that are linked to the applicant's record.</li> <li>2. For in-person exams, DHHS envisions applicants being notified of approval to take the examination, and scheduling the examination via the personal online accounts.</li> <li>3. For examinations administered by others, DHHS envisions staff notifying the</li> </ul>	X		X	

applicant and the testing entity via the personal online accounts that the applicant was approved to take the examination. Exam companies would interface with the system to enter score reports on the applicant's record.

DHHS must be able to run attendance sheets for use during the exam. DHHS also enters exam scores, some by exam section, and some are calculated fields. Staff would manually enter the score reports to be linked to the applicant's record. Some exams must be administered periodically, depending on the license type, as a condition of renewal.

Response: Tyler will be including this functionality as a custom build. This capability is not currently in the solution, so it will be built to the State's specifications.

#### **Renewal Licensure Requirements**

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
RLA- 1	Describe how the system will be able to assess and process periodic fees for license types without expiration dates, according to license-type-specific requirements and timelines.	Х	Х		

#### Response:

ETK Regulatory uses invoices to collect fees on license types that do not expire. Invoices are created ad-hoc or by a scheduled job. ETK Regulatory allows scheduled jobs to take in parameters to control which licenses will receive an invoice and the timeline (one off or reoccurring on a schedule) of the invoice. Invoices can displayed and paid by registered online users or can be mailed. Online payments will be applied directly to the invoice at time of payment. Mailed in payments will be processed by a cashier and applied to the invoice.

Minor modification to create the automation job to issue invoices for the NE DHHS specific license type requirements.

Describe how the system will allow automatic and manual initiation and closure of renewal periods, according to license-type-specific requirements and timelines. The initiation process should automatically assess a renewal or annual fee, if required for the license type. Staff must be able to override an automatic initiation and cancel all fees.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party			
Respo	nse:							
agency describ	TK Regulatory allows an initial and standard expiration policy that controls the renewal periods to be defined for each license type issued by the gency. Additionally, each license type's renewal period can include lead days, penalty grace periods, and delinquent grace days if required. The settings lescribed and the current license status control if a license is eligible for selection in a renewal process. The renewal process and expiration policies (initial and tandard) control the renewal periods for each license.							
run on renewa license	TK Regulatory has a renewal batch feature. A renewal batch can be setup for one or more license types and a time frame. Renewal Batch execution can be in on demand and/or scheduled via a job. When the renewal batch is executed, licenses that meet the criteria to be renewed will be selected for inclusion in the inewal batch. The created batch can then be reviewed and modified or accepted. Once the renewal batch is accepted, Renewal notices can be sent out to sense holders through the license holders preferred communication method (mail or email). Paper renewals can be received and worked by staff or license bolders can login to the online portal to renew the license.							
	the Renewal is opened, a renewal transaction is available for the license holder or agency staff to process. Re red as part of the renewal transaction, including fees for the renewal.	newal require	ements wi	ll be collected	and			
submit	e note, renewal fees are not assessed to the license until the license holder or back office user submits a renewated, staff can modify or void the fees associated to the renewal if needed. If the renewal transaction is not inititaken), the license will expire based on the expiration policy setup and no fees will need to be cancelled.							
Minor	modification to create the automated renewal batch job with NE DHHS specific license type requirements.							
RLA- 3	Describe how the system will generate renewal and fee notices prior to expiration, in accordance with the requirements for each license type, for all licensees of a specific license type. Different license types may be renewed monthly, annually, biennially, every three years, or every four years, based on the expiration date for the license type or the anniversary of the issuance date. License-type-specific renewal instructions, licensee name, license type, license number, fee, expiration date, and any special requirements should be included in the notice.  For example, the system should be able to produce renewal notices for individuals with multiple license authorizations such as a physician whose medical license expires 10/01/18, whose Nebraska controlled substances registration expires 08/31/18, and whose backup supervising physician certificate for a physician assistant expires 10/01/18.  The system must be able to track and generate notices of annual fees due for operating/non-expiring child care licenses, which have due dates based on the anniversary of license issuance.	X	х					

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party			
Respo	nse:							
policie	As described in RLA-2, each license type will have renewal related setup values that control the frequency and time of the renewal based on the expiration policies defined by the agency. For each license type, a renewal template can be defined that contains the specific instructions and information for the license that is eligible for renewal. The renewal batch job output includes the renewal notices.							
	cement variables and replacement tables come standard with ETK Regulatory. Additional replacement variable project implementation if needed.	es and replac	ement tal	oles can be co	onfigured			
The ab	oility to track and generate notices for annual fees (example of the child care licenses) is described in the resp	onse for RLA	-1 above.					
RLA- 4	Describe how the system will also generate renewal notices on demand. The system should calculate the number of days between the license issuance date and the expiration date, and automatically produce renewal notices that fall within predefined time frames for specific license types. For example, Joe Smith's physical therapist license application was approved on 09/01/21, after renewal notices were sent but before the expiration date of 11/01/21. A renewal notice must be generated and sent to him.	X	x					
Respo	nse:							
	e refer to response in RLA-2. Renewal notices can be generated on demand. Additionally, ETK regulatory can etion of the initial application by using a rule. If the agency decides to use a rule, it will need to be configured a							
RLA- 5	Describe how the system will provide an online renewal system with an intuitive interface that allows licensees to establish personal online accounts, generate personalized renewal documents, submit renewal forms and other documentation, pay fees online and offline, and allow licensees to print renewal documentation. Renewal documentation includes but is not limited to wallet card(s) and certification(s) that have the licensee name, license type, license number, license status, disciplinary and/or limitation status if applicable, updated license expiration date, and any other information required for the license type. The system should maintain an electronic record of all renewals, payments, and status changes.	Х	Х					

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
Respo	onse:				
provid (licens modul and co card's templa	Regulatory provides an online portal for license holders to establish accounts, link to existing records, and do be set the user with information related directly to the business they need to conduct (like renew or apply), the abide holder information including contact information) and license information (including status and expiration date that interacts with a rules engine to drive business data collection, workflow, and output of the transaction. Tollect fees, and to provide specific communication to the online user if there is a deficiency. Output of the transand wall certificates can be provided to the online user once the renewal transaction is approved in the back cates, use replacement variables and replacement tables, and are associated to each license type.  Insactions, uploaded documents, fees details, payments, and generated documents are saved in the system. Lee available to view through a history tab. License status changes are also able to viewed on their own tab.	lity to review tes). ETK Reç ransactions a action include office. Wallet	account regulatory us are used to es docume cards and	elated informa ses a transac o collect data, ent generation wall certificat	ation tion , assess n. Wallet tes are
RLA- 6	When licensees log into their personal online accounts, describe how the system will provide a list that includes all of a licensee's current licenses and expiration dates, including multiple branches/locations for establishments, and indicate which licenses are eligible for renewal at that time. Personalized renewal documents should be generated for online completion of each license renewal form. The system should require that primary licenses be renewed before dependent licenses.  A licensee should be able to securely log into a personal online account, select the license(s) to be renewed, complete the personalized online renewal application(s), attach any required documentation, and pay fee(s) online. The system should also give an option for licensees to complete and print the personalized renewal form(s) for submittal by mail or in person.  Depending on the information provided online, the system should accommodate \$0 fees and military waivers of fees when appropriate. Multiple renewal fees should show in a shopping cart-type list to be paid in one transaction. The licensee should receive an automatic, system-generated email with a receipt and confirmation that the renewal(s) and fee(s) have been submitted.  Describe how the system will determine whether all renewal requirements have been met, or if manual renewal is required. If staff review is required, the system should suspend the payment and put the renewal in a license-type-specific work queue for staff to manually approve. If all renewal requirements have been met, the system should automatically approve the renewal(s) and document the payment(s) on the licensee record without staff intervention.	X		X	

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party			
Respo	onse:							
Please	e refer to response for RLA-5 for a description of online accounts and transactions.							
require execut	ransaction Definitions can be setup and tailored for each type of license and activity needed. Within the Transaction definition, the corresponding business equirements and rules necessary to process the license and activity can be setup and will be presented to the online (and back office user) appropriately when executing the transaction. Transaction availability rules can be setup to control when and how a business activity is accessed via a transaction. ETK regulatory urrently has the ability to add a transaction conditionally to a work queue for approval or to auto approve if all requirements have been met.							
	action capabilities include \$0 fees, the ability to do military waivers, use of rules to enforce data collection (requestion on how the applicant answers, and output of the transaction on failed (denial letter, for example) and success	, .	•					
The or	conducting business online using transactions, the user can add completed items to his/her shopping cart and nline users will see the status of their submitted and approved transactions (like an application or renewal), in t pages.							
The ab	oility to suspend a payment may need custom work once the specific requirements are understood.							
RLA- 7	Describe how the system will allow licensees to delegate authority for license renewals, and to change the delegation at any time.  For example, physical therapists may delegate renewal authority to their employing practice to submit renewals and pay fees on their behalf. Practice staff should be able to submit multiple renewals and payments for the specific licensees who have delegated that authority. A list of employees who have delegated renewal authority should be displayed on the practice's online account, for selection of the licenses to be renewed. Multiple payments should show in a shopping cart-type list to be paid in one transaction. Receipt(s) should be automatically generated and sent to the practice email account. Practice staff should be able to generate renewal wallet cards and/or certifications for all of its physical therapists at once. The system should process the renewals and document each payment on individual physical therapy licensee records.  A corporation has several nursing homes. Each nursing home delegates authority to the corporation to renew its license. The corporation can then renew all licenses at once, on one transaction.	X	x					

#	Requirement	(1)Comply	(a)Core	(b)Custom	Party
Respo	onse:				
the roa	Regulatory currently allows for more than one authorized user to transact business for a license. An enhancement and map to allow for the management and delegation of activities by the primary account holder to additional usuals.  bility to do multiple renewal in a single transaction is on the road map.				•
RLA-	Describe how the system will track continuing education classes and hours as a prerequisite for renewal. License types may allow attestation that the requirement was met, and require a random audit list of licensees to be generated after the renewal deadline. Others may require licensees to submit continuing education certificates, which should be attached to the licensee record. Drop-down lists of approved schools and classes should be incorporated for data entry. Most individual professions have a continuing education general audit process for multiple license types. The majority of individual license types do not	x		X	

### Response:

Rea

ETK Regulatory seamlessly interfaces to a full feature Continuing Education (CE) web application. Some of the feature the CE application provides are:

• Tracking of CE credits for licensed professional:

Number of Licensees.

- History of the CE credits are maintained by licenses.
- CE credits can be linked as a license renewal requirement.
- Tracking education providers and course offerings.
- Ability for education providers to manage CE offerings and record CE credits to the professional licensee.

track CE hours. Currently, up to five (5) license types enter CE hours. See Attachment One, Type and

- Manage CE audits.
- Management and issuance of correspondence to professional license holders and education providers. Correspondence can be issue for events such as renewal requirements and selection for CE audit.
- Mobile application.

During implementation, the Project team will work with NE DHHS to analyze the CE requirements. Tyler understands that the majority of individual license types do not track CE hours, and will work with the State to determine what is needed.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
	Describe how the system will allow the licensee to immediately generate and print renewal documentation from their secure online account, including wallet card(s) and certification(s), after a single or multiple license renewal has been approved either automatically or manually. Renewal license documents should include the licensee name, license type, license number, license status, disciplinary and/or limitation status if applicable, updated license expiration date, and any other information required for the license type.				
RLA- 9	For example, Beth's multiple license authorizations (mental health practitioner expires 9/1/2020, her certificate as a professional counselor expires 9/1/2020, and her certificate as a marriage and family therapist expires 9/1/2020) need to be renewed. The system must process the renewals according to a decision tree and primary/secondary license logic; by allowing Beth to pay all 3 or only 1 or 2 of the 3 renewal fees in one transaction. The system must recognize that the certificates (secondary) cannot be renewed if the mental health license (primary license) is not renewed; and allow Beth to generate and print renewal documentation immediately after the transaction is completed.	X	X		

### Response:

Please refer to responses for RLA - 2, RLA 5, and RLA 6.

The ability to control the order of renewals and/or which renewal to be completed through a decision tree would require a rule to evaluate if/when a transaction can be started based on license requirements.

RLA-10 The online renewal system should allow individual licensees to securely request that their licenses be placed on inactive status, to select the effective date, and to pay a fee, if required by license-type-specific regulations. Describe how the system will automatically change the license status to inactive on the date specified by the licensee.

x

### Response:

Please refer to the responses for RLA-5 and RLA-6. A transaction can be defined to allow an online user to request his or her license be placed in an inactive status.

ETK Regulatory has a scheduled job that automatically manages status transition of licenses based on configurable input parameters. The parameters include a current status, target status, and date to use to determine when to execute the change.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
RLA- 11	Describe how the system will allow licensees to securely complete and submit reinstatement requests online after expiration, and pay all required renewal, reinstatement, and late fees. Reinstatement requests should be placed in the license-type-specific staff work queue. The system must track the history of license expirations and reinstatements, and allow licensees to generate and print reinstatement license documents, including wallet card(s), from their secure online account. Reinstatement license documents should include the license type, licensee name, license number, license status, disciplinary status if applicable, the new expiration date for each license, and any other information and workflow required for each license type.  Most individual profession license types and establishment license types have a reinstatement process for multiple license types. Reinstatement has three basic processes, after expiration, after inactive and after discipline. Each follows the same general process for the type of reinstatement, but there are unique requirements depending on the license type.  See Attachment One, Type and Number of Licensees.	X	X		

## Response:

Please refer to responses for RLA - 2, RLA 5, and RLA 6. A reinstatement transaction can be defined which will include data collection, fees, document generation from a template with replacement variables, and work assignments.

Tyler has reviewed and acknowledges Attachment One, Type and Number of Licensees as well as the reinstatement process as described by the State above.

RLA 12	Describe how the system will track annual fee due dates and license expiration dates, invalidate licenses, send notices to staff work queues, and generate expiration notices/correspondence for licensees who have not met renewal requirements by the expiration date, at a point in time specified for the license type. The system must allow processing of renewals and fees after the expiration date, due to mail delivery allowances and staff processing time.	X	X			
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### Response:

Please refer to responses for RLA - 2, RLA 5, and RLA 6. Transaction can have due dates and notifications can be sent to agency staff to remind them of due dates as well as the items appearing in their work queues. License expiration is controlled by a scheduled job and the inputs to the job allow for a grace period. The grace period will be setup to allow for staff processing time of applications received by mail.

# **Accounting and Fees Requirements**

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
ACT-1	Describe how the system will have an informative, intuitive data entry process for payments which generates a unique receipt number for each payment; ensures that all required payment information is entered; payments are applied to the correct licensee record; and payments are allocated to the correct fee(s). The list of fees to be paid must include the date assessed/due and a fee description. A responsive system that generates additional fields based on the entries made would be ideal – for example, when "Check" is selected for Payment Type, a required data entry box appears for Check Number, but when "Credit Card" is selected, a required Transaction Record box appears instead. The system should interact with external systems, such as SharePoint and OnBase, to document and process transactions.  OnBase is currently used by DHHS for document storage, but does not interface with L2K.  SharePoint is currently used as a workflow management tool, using information extracted from L2K that partially auto- populates a refund form that is then uploaded to SharePoint after additional manual entry.  DHHS does not have interface specifications for OnBase or SharePoint.	×		×	

### Response:

ETK Regulatory records payments or cash receipts into batches. Each batch consists of multiple cash receipts records of multiple tender types such as cash, checks, money orders, credit cards etc. The cash receipt record records the following information related to the cash receipt, matching number, payer name, payer address, tender type, check dates, effective date, receipt amount and reference number.

The cash receipt tender type is a configurable drop down list for the cash receipt record. The reference number is used to record the identifying id such as check number or authorization number. The tender type is used to determine the nature or use of the reference number.

ETK Regulatory has a document manage tool that can be used to record documents associated payment. A minor enhancement to the cash receipt process is required to interface with the document manage system.

The capability to interface between Entellitrak-Regulatory and the required systems will require a custom interface, and has been included in our cost estimate.

Describe how the system will maintain a comprehensive fee/payment/refund history, and show a history of multiple transactions on one screen, including all changes made to financial records and who made the changes. The system must show an overall licensee account balance which clearly indicates if it is positive, negative, or zero. A single screen should have the capacity to show a minimum of 15 transactions at a time, with capability to scroll through additional transactions in the record. Describe how your system archives and/or deletes data according to records retention schedules.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party					
Respo	nse:									
transa	egulatory provides access from the license home screen to the transaction history of the license. It provides the ctions, fees applied, amount paid, amount refunded and the balance due. Should the transaction history exceed ditional transaction by scrolling or paging through the list.									
	legulatory maintains an audit trail for the databases data objects including; transactions, fees and cash payme created and updated dates of each entry in the database data objects.	nts. The audi	it entry red	cords to the st	aff user					
ACT-	Describe how the system will provide detailed information regarding each payment, such as business unit, subsidiary, object code, date received, date entered, payer, payment amount, payment type, check/transaction number, fee description, fee amount, payment balance, refund, etc., and show all information regarding a payment on a single screen. Business units and subsidiaries must be linked to license types, object codes should be linked to transaction types, and all 3 should automatically populate the record according to the transaction and license type.	х	х							
Respo	nse:		•							
receipt applied and re	Response:  EKT-Regulatory records payments into batches of cash receipts detail records. The cash receipt record records the following information related to the cash receipt, matching number, payer name, payer address, tender type, check dates, effective date, receipt amount and reference number. As the cash receipt is applied to the transaction, the payment records the fee and revenue codes the payment was applied to. A processing sequencer is used to set the priority of fee and revenue code payment in the event of a short payment. Payments tied directly to the transactions fee and revenue codes allows for the recording of refunds directly to the transaction fee and revenue codes.									
refund	egulatory fee codes are directly linked to the agency's revenue code that defines the object codes. As payment ed, entries are automatically recorded to a general ledger data object with links to the business units, license t A search screen is provided to allow easy access, reporting and exporting of the financial records.									
ACT-	Describe how the system will be able to generate reports by all payment data fields, including business unit, payment amount, receipt number, transaction record, fees paid, licensee account balance (all outstanding fees and payments), and refunds.	Х	Х							

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
Respo	onse:		1		
ETK R	Regulatory can provide this capability with configuration.				
organiz	Regulatory is an integrated database with links to the GL Journal data object from transaction/applications, enforzation entities. These links allow access to and filtering of the GL Journal entries. Reports can be configured eas units, payment amount, receipt number, transaction record, and fees paid.				
ACT- 5	Describe how the system will maintain and provide adequate documentation for issuance of refunds, including generating notices to licensees and creating refund forms that include all needed information, such as business unit, licensee name and address, profession, license type, license number, payer name and address, payer SSN/TIN/FIN, payer Address Book Number; payer mailing address; receipt date, receipt number, total receipt amount, payment type, description of fees paid (including administration fees), fee amounts paid, fee status, amount to be refunded, business unit/subsidiary/object code, reason for refund, refund status, notes/remarks, etc. (The State does not park payments).	x	x		
Respo	onse:	l	1		
text ald check, letter.	Regulatory correspondence module can be used to configure refund letters to be issued. The correspondence ong with data pulled from the ETK Regulatory database. The data pulled from the database can include inform the license holder and transaction. The data pulled into the letter is only limited by the security privileges grant The letters generated by ETK Regulatory are stored directly with the individual, organization or license record.	nation related nted the user	to the pay attempting	er or remitter g to generate	of the the
record	ds recorded in EKT-Regulatory track the payer, the amount of the refund, as well as a reason code and comm led as a comment into the refund reason comments. Alternatively a new attribute could be added to the refund of disposition of the refund.				
ACT-	Describe how the system will document returned checks, including the reason the check was returned, steps taken to locate the licensee, and final disposition of the check.  Example: a refund was mailed to an applicant, but the post office returned it marked undeliverable.	Х	х		
Respo	onse:	1	1		

Refunds recorded in EKT-Regulatory track the payer, the amount of the refund, as well as a reason code and comment. The status of the refund could be recorded as a comment into the refund reason comments. Alternatively a new attribute could be added to the refund reason code to allow for the recording of the

The State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB) Licensure Information System (LIS)

status of disposition of the refund.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
ACT-	Describe how the system will track insufficient funds (NSF) checks, invalidate all fees paid by an NSF check, identify and invalidate all related licenses, send a notice to the work queue of the staff assigned to the license type(s) involved, and document all related account changes and correspondence.	Х	Х		

## Response:

ETK Regulatory allows for the tagging of payments or cash receipt details as insufficient funds (NSF). When a cash receipt is tagged as NSF the following action are automatically triggered. Tagging a cash receipt as NSF requires the user to record a NSF reason code and description.

- The cash receipt detail record is tagged with a status of "NSF".
- Monies applied to transaction and transaction fee codes are invalidated by reducing by the amount paid from the cash receipt detail.
- The payment record is tagged with a status of "NSF" but remains as a history of the payment.
- General ledger entries are recorded to reverse revenue recorded as well as records an entry to the NSF GL account.
- An NSF alert record is recorded in the NSF alert queue and is tagged to the individual, organization, license home page and cash receipt detail records.

A correspondence letter can be configured and linked to an NSF transaction to record and track the NSF process. The transaction can be configured to suspend the license, record the NSF correspondence, and apply any service charges related to the NSF along with the transaction fees and any refunds issued. The licensee would then have the option to remit a replacement check or make payment via online portal.

8 Describe now the system will support linancial interagency transfers.	ACT- 8	Describe how the system will support financial interagency transfers.	X		Х	
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Response: ETK Regulatory will be able to provide this function via custom project interface to support financial interagency transfers.

# **License Certification/Verification Requirements**

Req #		Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
	cards, c form. Do signatur location issuance limitation Fees ma	e how the system will generate and track issuance of duplicate or reissued wall licenses, wallet ertifications, and other documents with all required images and data fields, in electronic and written ocumentation may be system-generated online or manually prepared by staff. Images may include es, logos, seals, etc. Examples of data fields include licensee name, license number, license type, facility certification/licensure status, issuance date, expiration date, license status, basis for license e (such as examination, waiver, or reciprocity), education, test scores, disciplinary history, ns, compact information, ages/population served, hours/days of operation, etc. ay or may not be required, and amounts may vary, depending on the amount of staff time required ice the requested documentation.				
	•	dividual profession has a reciprocity/endorsement process for multiple license types. Reciprocity es follow the same general process, but there are unique requirements depending on the license				
	See Atta	achment One, Type and number of licenses.				
LCV-	-	oads of names, SSNs, license numbers, etc. should be allowed, as well as a subscription service license record and status changes for specific licensees	X	Х		
	Example	es:				
	1.	An insurance company requests a staff-issued verification of a nursing home's license status, CMS certification status, and disciplinary history.				
	2.	An employer searches an online database to verify each employee's nursing license status and disciplinary history, and prints a system-generated certification or wallet card of each license for her records. Print options should include one-at-a-time and bulk search/print options.				
	3.	Another state's licensure unit requests staff-issued certifications for 50 physician licenses to verify their license status, including disciplinary history, prior to issuing a reciprocal license. This request may be for the primary license only, secondary license linked to a current primary license, or primary license and all secondary licenses linked to the primary license.				

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party					
Respo	Response:									
the da Reprin	degulatory includes a document generation module that allows for the configuration of templates. These templates tabase, images and formatting. Generation of these documents can be initiated by online users via a configuret) which can be configured to include fees. Bulk document generation currently exists in the system but would users such that a user could generate a request for multiple certificates (or other template documents).	ed applicatio	n (i.e. Ger	erate Certific	ate					
Tyler h	nas reviewed and acknowledges Attachment One, Type and number of licenses.									
LCV-	Describe how the system will provide an online account system that allows licensees to securely generate and print their own licensure documentation, including wallet cards, duplicate/reissued licenses, and certifications.	X	×							
Respo	nse:									
the da	degulatory includes a document generation module that allows for the configuration of templates. These templates tabase, images and formatting. Generation of these documents can be initiated by online users via a configur t) which can be configured to include fees.									
LCV-	The online account system must also allow licensees to request staff-generated license documentation, indicate where the documentation should be sent, whether it is for compact use, pay the fee, and receive a receipt. The system should track request status, such as pending, completed, and sent, so that the licensee can check its status online.	x	x							
Respo	nse:									
can be	An ETK Regulatory configured application can be used by online users to request the generation of a document. Within the application additional information can be collected to provide the back office staff with the necessary instructions. This application can also be configured to collect fees, and once paid would be ready to be processed by the back office staff. The user can track the status of made available applications.									
LCV-	Describe how the system will display licensee data, with licensee-related public documents, in the public database, including disciplinary actions and limitations, inspection results, and ownership documentation, and allow the general public to generate and print license certifications.	Х	Х							

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party					
Respo	Response:									
such a online	ETK Regulatory online portal public search displays entity and license information that has been designated as public. This includes entity and license held data such as public contact information and license status information. Also, enforcement related case information including disciplinary information is also displayed online in the public search once the case has been designated for public visibility. System generated or collected documents can be designated for public visibility and the portal public search displays them. Public generation of license certification is also supported.									
LCV- 5										
Respo	Response:									
ETK R	'TK Regulatory stores all applications with information supplied. Fee payment is recorded in a debit and credit cash system with payment usage being recorded									

in the applications. Online payments are stored within a shopping cart table for later reference if needed. Documents generated within the system are stored on

the record for which they were generated.

# **Complaint and Investigation Requirements**

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
	Describe how the system will document complaints and investigations from initiation to completion, while keeping the information confidential. The system needs to track complaints; link them to the licensee file; link them to the investigation record; log any and all communication sent/received related to the complainant, licensee, or other people involved; link photos and video to the complaint/investigation record; and maintain confidential investigation and hearing documentation.				
	There are approximately three hundred fifty (350) forms for inspections such as initial, re-inspection, focused, routine, etc.				
	Complaints can be gathered in a number of ways, such as online, in person, by letter, by email, and by phone call.				
	DHHS tracks compliance-related activities as follows:		х		
	<ol> <li>For individuals and/or businesses subject to the Uniform Credentialing Act, License 2000 is used.</li> </ol>				
COM-	<ol> <li>For child care licensing, License 2000 is used and each of the three (3) Child Care Licensing Supervisors use a separate Excel spreadsheet.</li> <li>For residential child caring/placing agencies, two (2) Excel spreadsheets are used.</li> <li>For community-based services, seven (7) Excel spreadsheets and Outlook calendars are used.</li> </ol>	X			
	<ol><li>For health care facilities and services subject to the Health Care Facilities Act, ACO, Excel spreadsheets, and/or paper forms are used.</li></ol>				
	DHHS wants to improve its efficiencies in this area. DHHS may be willing to adapt its compliance tracking to align with the solution proposed by the bidder.				
	DHHS tracks investigations as follows:				
	<ol> <li>For individuals and/or businesses subject to the Uniform Credentialing Act, an Access database is used.</li> <li>For child care licensing, License 2000 is used;</li> </ol>				
	<ol> <li>For residential child caring/placing agencies, an Excel spreadsheet is used;</li> <li>For community-based services, SharePoint is used;</li> </ol>				
	<ol> <li>For confinding-based services, share-only is used,</li> <li>For health care facilities and services subject to the Health Care Facilities Act, ACO, Excel spreadsheets, and/or paper forms are used.</li> </ol>				

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party	
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### Response:

The Enforcement Module is used for tracking, recording, analysis, and investigating issues, inquiries and requests filed with the agency. It provides work queues for assigning Cases to investigators using action items to generate the appropriate form letters to move the Case to resolution. A case can be initiated for both licensed and unlicensed entities and are tracking within the case via the case participant function. Recording and managing Cases is the starting point for most Enforcement activities. Cases can be created for reasons such as Code Violations, Legal Infractions, Court Cases, Malpractice Settlements, Change of Staff Privileges, and Out-of-State Actions. ETK Regulatory automates the data collection to Case resolution through a series of user-definable processes. These processes may involve a Case being routed through any number of Departments or staff members, including Investigation and Legal.

Each Case screen displays information related to that Case record. Depending on the privileges assigned to you by your system administrator, the Case record may have different child object tabs or fields.

The common Case components are as follows:

- Case Participants the standard case participants are the target (Respondent) and the source (Complainant). Additional case participants include any other contact attached to the case, including Legal representation for the target or Source, witnesses or damaged parties. Any case can have any number of targets; only one can be defined as the primary target.
- Enforcement Checklists used to manage predefined checklists that can be applied to cases.
- Violations non-compliance of the statute, regulation or law that is evaluated.
- Compliance Orders deal with actions taken to become compliant. Typically they are associated with a discipline, they can exist independently. They
  track events and support fines.
- Actions used to track events that are needed for the Case and can include triggering alerts, assigning due dates, and updating the status of a case
  action types can also have associated documents.
- Resolutions used to track milestones within the case such as 'Closed with Action' or 'Closed without Action'. Resolutions can be linked to case actions so they can update the status of the case.

Documents - Case related documents are separate from and not directly exposed to the credentialing group as they contain sensitive information that only authorized users can view. Documents can be owned by the case, case actions or compliance orders.

Tyler has reviewed the additional inspection information and compliance-related activities released during the bid reissue, and will be able to comply with the State's requirements. We have adjusted our price model accordingly to accommodate the stated requirements for compliance tracking, and will impose efficiencies where feasible and appropriate.

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
COM- 2	Describe how the system will allow the public to submit complaints online. Complaints should be routed to the appropriate staff's work queue, and template letter/email options should be available for communication with licensees and complainants. The system should document all communication regarding the compliant, and allow workflow between staff as defined by role. For example, Licensure Unit staff receive a complaint, and should be able to forward it and all related documentation to an investigator.  Depending on the broad license category, the method of complaint reporting used, and the findings during the investigation, there are a variety of process flows that may be followed. License categories would include individuals, businesses, health care facilities and services, child care, and community-based services.		X		

### Response:

A minor modification is required to allow for online submissions of complaints.

ETK Regulatory's complaints module allows for the assignment of cases to work queues. The case work queues can be configured to be managed by checklist items that are assigned to queues and enforcement staff based on staff roles. As the case is processed and checklist items are completed, the case may be passed from one case worker to another as is defined in the agencies procedures. EKT-Regulatory also allows for specific case actions or activities to be assigned to an enforcement staff member. Notification of a case action types can be configured as workflow queue or a direct email to the enforcement staff member assigned to the case has will have access to the data information and documents uploaded or generated from the case based on the staff member's role or privileges.

Communications templates can be defined to inform case participants such as the target or licensee and the complainant. The communications are issued either as a letter document or an email. ETK Regulatory stores copies of the communication document. ETK Regulatory can accommodate the multiple process flows required, and multiple license categories.

Describe how the system will allow role-based security access to complaint/investigation information to ensure that only staff with the appropriate levels of security be allowed to access, view, and mark data/documentation as public. All of the confidential information and documentation regarding the complaint and investigation must be tracked and linked to each other and the licensee.

The information marked as public must be available online to all staff and the general public, and should be updated in real time.

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
Respor	nse:								
	ETK Regulatory security involves creating roles and groups for users. A role is created for granting users permissions to data objects or screens and is assigned permissions based on the role requirements. Users can be added to a group and assigned roles depending on the requirements.								
the pub	ises data typically starts out hidden from users that do not have access to the case module; however it is not uncommon for case data to become available to e public as the life cycle of the case advances. This feature provide a mechanism for case staff to control which cases and details under the case are eligible be exposed outside of the case screens and implements a case summary screen where this information can be viewed outside of the case screens.								
The tar	get users for this feature are:								
•	Enforcement Only – Only user with enforcement privileges may see specific cases and details under the care Enforcement and Target Participant – User with enforcement privileges and the target participant (Respond participant would have access to the case data via the online accounts Agency - those who have access to the entity or credential screens and need to see case related data for a	ent) may see		•					
Public -	- The general public will have access to view the case information tagged as "Public"								
COM- 4	Describe how the system will track names, contact information, statements, communication, correspondence, and other information for all people involved in a complaint or investigation. The system should provide a pop-up alert if a person has changed his/her contact information during an investigation or pending disciplinary action, and notify identified staff such as investigators, hearing officers, etc.	X	Х						

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party	
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### Response:

ETK Regulatory uses participants to track individuals and organizations related to the case. A Case Participant is a person or organization involved in the proceedings of a Case. For example, a person can register a complaint against an Entity in ETK Regulatory, and that Entity can hire a legal representation to defend their case. The standard case participants are the Target and the Source. Additional case participants include any other Contacts attached to the Case, including Legal representation for the Target or Source, witnesses or damaged parties. Any Case can have any number of Targets; however only one is defined as the Primary Target. The case participant allows for the tracking of names, address and phone numbers. Documents or Correspondence related to the case or participant may be uploaded to the case, case actions or compliance orders.

ETK Regulatory allows for Alerts or notifications to be configured for updates made to related case information or pending action either via an alert rule or by the case action types. Case action type allows for email notifications to be sent based on the following case action types events.

- Assignment of the case action to a case participant or agency case user.
- With a certain period of days prior to the case action event date

When the case action event date expire with no recorded acknowledgement from the user.

# **Disciplinary Action Requirements**

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
DIS-1	Describe how the system will document and display disciplinary actions and limitations imposed on a licensee, the date range of the discipline/limitation, the type/category of discipline taken, the findings of fact, monitoring requirements, and all related documentation. The system must track assessment of administrative penalty fees, payment plans, payment amounts, and information for each payment made per fee, with the unpaid balance of each fee. A licensee may have numerous overlapping disciplinary actions, monitoring requirements, and penalty fees that must be tracked. Staff must be able to mark all data fields and documentation as either public or confidential. Board and disciplinary actions marked public should be updated to the online database in real time.  For example, a disciplinary action requires an administrative penalty fee, and body fluid testing each month for two years, resulting in an additional monthly charge of \$85. A complete history should be documented for each fee assessed and each payment made on each fee, and a total of all unpaid disciplinary-related fees should be provided on each licensee record.	X	X		

#### Response:

When an agency determines that a target participant is guilty of a violation, they can add a discipline record to the case and associate it to the appropriate target participant.

Disciplines can be used in the following ways:

- Clerical or Reference only Are for record only and do not impact the license status.
- Credential Status only update Updates the license status only and not the discipline status.
- Discipline Status only update Updates the discipline status applied to the target participant of the ease. The license status is not updated.
- Credential Status and Discipline Status update Updates the discipline status applied to the target participant of the case as well as the corresponding license record's status.

Discipline status is similar to license status and based on configuration, it can affect the scope of a license held by a target participant.

For example, a target participant has a license in 'Active' status. After a discipline of probation is applied to the license, the discipline status changes to 'Probation'. The resultant license status is then described as Active, in Probation. The license status and discipline statuses are displayed separately on the banner of the license screen.

Multiple discipline statuses can be applied against a license held by a target participant. Out of these multiple discipline statuses, the one which is currently active; based on start and end dates, with the highest weighted value is considered as the effective discipline status and is displayed on the license screen.

ETK Regulatory discipline's has disposition tag that is used to record the disposition or status of the discipline. It allows the staff user to record the disposition of the discipline. The discipline disposition options are configurable to allow the agency to customize the options available.

Discipline case visibility provide a mechanism for case staff to control which disciplines are eligible to be exposed and viewed outside of the case screens.

The target users for this feature are:

- Enforcement Only Only user with enforcement privileges may see specific cases and details under the case.
- Enforcement and Target Participant User with enforcement privileges and the target participant (Respondent) may see the case. The target participant would have access to the case data via the online accounts
- Agency those who have access to the entity or credential screens and need to see case related data for an entity or a credential being viewed
- Public The general public will have access to view the case information tagged as "Public"

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party			
	y of the applied discipline statuses to a target participant and the effective discipline status can be viewed from <i>dential</i> screen.	the Credent	ial Status	History tab				
direct	ETK Regulatory uses compliance orders to track the assessment of the disciplinary action including fines and drug test. The compliance order can be linked directly to the case discipline item and is subject to the same rules for case visibility as the discipline. The compliance order allows for the tracking of start and due Dates as well as the disposition of the compliance order. The compliance order disposition allows the staff user to record the disposition of the compliance order. The compliance order's disposition options are configurable to allow the agency to customize the options available.							
due d	Compliance order can be configured to allow for scheduled compliance order activities. A scheduled compliance order is a compliance order that have multiple lue dates and compliance order dispositions. This allows for a compliance order to be scheduled over a period of time such as monthly drug tests or quarterly eports.							
target	or administrative penalties compliance orders issue invoice transaction to the target participant. The invoice transaction as well as allows for the payment of the fine either via mailed or online payment. History of the fine use and target participants' home page.							
DIS- 2	Describe how the system will also track disciplinary actions taken against Nebraska licensees in other jurisdictions. The system must be able to import and export disciplinary action data as needed for compact agreement compliance.  For example, an automated daily import and export are required to exchange disciplinary information with NURSYS, with alerts to appropriate staff if the import or export fails. Imports must automatically update the licensee record and issue alerts to appropriate staff.	X		×				
Respo	onse:							
	Regulatory tracks disciplinary action taken against and out of state license as an unlicensed respondent. ETK I t and export of disciplinary actions. A custom module would be built to meet this requirement. Tyler will work wi e.							

	eq #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
DI 3	13-	Describe how the system will track citations issued for an establishment on its employees' license records, and on the physical location record.  For example, Mary Johnson is a licensed nursing home administrator for Shady Rest Nursing Home. If a citation is issued against Shady Rest Nursing Home, the citation should also appear on Mary Johnson's nursing home administrator license. The citation should also be linked to the physical location of the establishment, so that all citations for that physical location can be documented and tracked regardless of past or current establishment name or ownership.	X	X		

## Response:

ETK Regulatory allows tracking multiple targeted participants and address within an enforcement case. An alert rule adapter could be configured to display an alert to the employees' credential based on the employment relationship.

In the example stated within the above requirement, Shady Rest Nursing Home would be listed as the primary respondent. Once the citation is issued as a compliance order to the primary targeted participant, the alert rule adapter would display an alert on the employees' credential home paged based on Shady Rest Nursing Home employment relationships

# **Inspections and Mobile Functionality Requirements**

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
	Describe how the system will have comprehensive functionality for inspections, both in the office and in the field. Staff must be able to enter data, complete checklists, cite the specific statutes/regulations violated, input specifics regarding violations in public and confidential fields, incorporate documentation and photos, and create inspection reports online and offline. If online, the database must be updated in real time. If offline, the mobile system must synch with the database when connectivity becomes available.				
MOB- 1	For example, a child care inspection reveals that a child was injured by falling off a diaper-changing station that did not meet safety requirements. Staff must note the violation on a checklist, cite the regulation violated, enter the public information of how the child was injured, and enter confidential information with the child's name, medical treatment, and photos of the injuries. Data entered must populate an inspection report for internal use that includes the confidential information and documentation, a summary report, and an in-depth inspection report that includes citations and public information. The summary and public information reports must be posted to the website when indicated by staff.	Х		Х	

### Response:

ETK Regulatory's Case functionality allows staff to capture inspection data, complete checklists, and cite violations of statues/regulations under an inspection case type. ETK Regulatory's Case functionality supports document generation via letter templates, inspection reports can be configured as per business rules and generated in this manner. Case objects have a case visibility setting, this visibility settings dictates which case data points are available to be exposed internally by agency staff as well as what data is eligible for public consumption.

ETK Regulatory will be extended to support offline processing for cases by syncing an inspector's workload to their device via ETK Regulatory's Mobile Inspector functionality thereby allowing inspectors to execute an inspection visit without an internet connection and then when the inspection regains internet access to sync and update the database and trigger downstream events as per preexisting configurations. ETK Regulatory's Mobile Inspector functionality allows the Inspector to capture findings, process inspection forms & checklists, capture photos with the onboard camera, generate reports, etc.

MOB- 2	Describe how the system will track and support the entire inspection process: scheduling an inspection; planning an efficient schedule/route; navigating to the establishment; completing the onsite inspection checklist; citing applicable statutes/regulations; populating and generating appropriate inspection reports via templates; obtaining required digital/electronic dated signatures; scheduling follow-up inspections; linking follow-up inspections to the original inspections; generating, documenting, and sending referrals to other entities, etc.	×			x	
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#### Response:

ETK Regulatory supports a utility used by staff responsible for scheduling to assign inspection windows and inspectors to eligible cases. The scheduling utility allows the staff scheduling the inspection to restrict inspector assignment to only those inspectors eligible to work in the inspection district the inspection will take place in, if appropriate per business rules. Inspection districts can be defined as appropriate by business needs and could reflect geographic regions. If defined by geographic regions, inspection district can be used to ensure that inspectors are assigned to inspections that within appropriate travel distances (e.g. an inspector based out of North Bend being eligible to do an inspection in Fremont vs. Broken Bow).

ETK Regulatory cases have a participant concept that distinguishes between targets (the entity the case is focused on), source (the entity that initiated the case), and other involved party. For inspections, target participants reflect the entity being inspected and the inspection address can be recorded as appropriate, this inspection address is the address that would be leveraged for scheduling purposes. Case data is stored separately from data stored against the Entity or License records, so in the event that the inspection address from the application, license, etc. is different than the actual address the inspector encounters, the inspector will be able to record the updated inspection address and proceed with the inspection if appropriate per business rules.

ETK Regulatory can be extended to integrate with ESRI a 3rd party mapping service for additional support in generating point to point routes and navigation for the inspector.

ETK Regulatory scheduling functionality supports a calendar view to see inspection assignments by inspector.

Each inspector will be able to sync their caseload to their tablet or laptop and execute inspections using ETK Regulatory's Mobile Inspector functionality and push updates for the inspection visits when they sync again.

As mentioned in MOB-1, inspection data will be recorded under an Inspection case type. The inspection case types allow multiple visits under the inspection case and data is recorded against the visit (e.g. inspection checklists, violations, applicable reports/letters generated, photos, etc.), this allows for scenarios where multiple visits are required for the inspector to grade the inspection. When appropriate (e.g. signing off on an inspection visit) inspections will capture digital signatures. As appropriate per business rules when an inspection visit is completed, the inspector will be able to either:

- schedule another inspection visit (e.g. verify corrective actions have been taken and are acceptable)
- complete the inspection case and schedule the 1st visit for the next inspection case based on the inspection score and the periodic case schedule
- complete the inspection case without scheduling the next period inspection

Inspection visits are be inherently linked back to the parent inspection case. Inspection cases created as a result of a completed inspection case maintain a linkage to the original inspection case, this reference is displayed on the originating inspection.

ETK Regulatory case actions can be configured to generate referrals, case actions can be initiated by themselves or as part of a case resolution. The case action can be defined so that when executed it update the owner of the case.

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
MOB-	Describe how the system will maintain all inspection information, link it to all related establishment and individual license records, and display the findings for required inspections, self-reports, and complaints associated with each establishment's physical location. Inspection information marked as public, such as summary and public information inspection reports, monitoring reports, complaints, etc. that are designated as public should be available to the public online.  Examples of related establishment and individual licenses include pharmacy/pharmacist, nursing home/nursing home administrator/physical location, and child care provisional/operating licenses.	х	×						
Respor	nse:								
combin case su license ETK Re suppred display	ng without a license). ETK Regulatory recognizes that case data is typically sensitive information and contro ation of screen permissions and visibility settings. Case visibility settings dictate when and what data element by system to agency staff and/or the general public. Case summaries are accessible from the main entity and is a target participant of a case and the case details has been made available to be viewed by agency staff of egulatory's public search functionality leverages case visibility settings and other considerations (e.g. is the enseed from being exposed in public search, etc.) when determining if the licensee is eligible to be returned in put to the general public.  Regulatory leverages additional case types to record self-reports and complaints, these cases would tie back to ant. Public search functionality will present the public with any case details that have been made available to	nts are eligibl l/or license so utside of the atity private, is ublic search	e to be ex creens wh case subs s the licen as well as	posed outside en the entity of system. se record being what data po	e of or ng				
MOB-	Describe how the system will generate ad-hoc reports on mobile devices, such as by staff name, establishment name, physical location, related licensee name, geographic area, and supervisory area.	Х	Х						
Respor	nse:	1		1					
controll templat has inte	ETK Regulatory leverages letter templates to generate reports from cases and allows ad-hoc letter generation. The content and format of the output is controlled by letter template configuration. The letter template functionality will be extended to support offline letter generation for the appropriate letter templates via ETK Regulatory's Mobile Inspector, this will allow the inspector to generate the appropriate reports without an internet connection. If the inspector has internet connectivity the inspector will be able to send the report via email. If the inspector does not have internet connectivity the will be able to queue the report to be emailed when the inspector syncs their inspections.								

MOB-

5

Describe how the system will assign onsite inspections in accordance with license-type-specific requirements for periodic physical inspections of an establishment, including random inspections. The

system must support reassignment of partial or entire caseloads in an efficient manner. The system must

identify inspection compliance dates that are coming due or are past due for a particular establishment or staff member, generate inspection forms/checklists, and put them into the appropriate staff work queue.

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Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
Response:									
When resolving an inspection case, the resolution can be defined to create a follow-up inspection and assign it a due date based on the rating of the preceding inspection case. ETK Regulatory scheduled jobs can be extended to leverage business rules to generate a number of inspection cases as appropriate. ETK Regulatory allows agency staff with the appropriate access to manually create cases. ETK Regulatory case scheduling functionality will identify eligible inspection cases as appropriate for the criteria used, inspector(s) will be assigned to these cases and their statuses updates to prevent the case from being included if additional schedules are generated with overlapping criteria.									
	ETK Regulatory's scheduling functionality supports itineraries that can be generated and sent to the inspector for review, as part of the review process the inspector will be able to indicate if they are unavailable to work the inspection and the reason why (e.g. policy reasons, changes in availability, etc.).								
ETK Regulatory allows for the creation of work queues based on business rules (e.g. inspections that are approaching due date, past due, etc.). Based on setup and permissions, each inspector will be able to access the appropriate queue. When the inspector syncs their caseload to their device, the appropriate forms and checklists will be available for the inspection visit.									
MOB- 6	Describe how the system will generate license-type-specific reports and automatically assign the next required inspection date after an inspection has been completed.	X	Х						
Respor	ise:								
ETK Regulatory inspection cases support document generation based on letter templates that can be defined by license type and when generated will contain the data points and formatted as defined in the letter template. Cases allow document generated on demand. Additional extension is possible if gated document generation is needed.									
ETK Re	egulatory Mobile Inspector allows Inspectors to generate documentation while offline.								
	Resolutions applied to the inspection case can be defined to generate the next inspection and calculate the due date based on the score/rating of the parent inspection case.								
MOB-	Describe how the system will incorporate templates for inspection forms, checklists, and statutes/regulations by Establishment license type, such as pharmacies, child care facilities, salons, health care facilities/services, etc.	Х	Х						

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
Respon	ise:				
defined busines	egulatory case functionality supports the definition of checklists and statues that can be applied to cases as per to facilitate the capture of the appropriate data points and determine the inspection form(s) that are available as rules. The inspection forms will allow the inspector to record their findings, identify violations and correspond tion visit, and respond with standard language.	on inspectio	n cases a	s appropriate	per
MOB-	Describe how the system will provide an easy way for the inspector to select the statute/regulation violated, such as using drop-down boxes, and provide public and confidential comment fields for staff to detail the specifics of the situation.	х	Х		
Respon	ise:				
statue/r	egulatory supports definition of statue/regulation with simplified language and full legal language. The inspect regulation via ETK Regulatory search functionality that allows the user to search by the statue/regulation sum is notes, staff responsible for the case have the ability to control the exposure level of the notes via case visib	mary. ETK F			nality
MOB- 9	Describe how the system will allow for multiple status dates for reports/ citations/deficiencies/disciplinary actions. Reports should not be made public until after a date designated by staff, to allow for appeals, corrective actions, etc. before results are made public.	х	Х		
Respon	ise:				
public e exposu expose appropri	egulatory case functionality support status dates for reports, citations, deficiencies, and disciplinary action. Exposure for case data based on case visibility settings. The case visibility setting at the case object level is a re, no case data can be exposed to the public. This master switch allows agency staff to stage case data to be do to the public until the master switch is set at the case object level. ETK Regulatory allows users to update riate per business rules, case action configuration could be extended to update the master case visibility setting case.	master switch be queued for case visibility	ch that unt r public ex r settings o	til set to allow onsure but no on demand as	public o data s
MOB- 10	Describe how the system will interact with GPS, in office and on the mobile device, to display all establishments within a specific area of Nebraska and map out inspection schedules/routes in the most efficient manner possible.	x			Х
Respon	se:		1	<u>'</u>	1
present	egulatory case functionality can be extended to integrate with a 3rd party mapping service, ESRI. Based on t ed with pins for each inspection location. Filtering can be added to allow for prioritization based on considera xity, etc.				

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
MOB- 11	Describe how the system will have a scalable interface for working with different devices such as desktop computers, laptops, tablets, and cell phones. A mobile tablet is the State-preferred device for mobile inspections. At the current time, the State of Nebraska uses Windows-based hardware devices using Android app functionality.  Currently, approximately seven thousand (7,000) inspections/surveys are conducted annually, on license types such as Water Wells; Cosmetology schools & salons; Nail Tech schools & salons; Body Art facilities; massage therapy schools & establishments; funeral establishments & branches Community-Based Services; Hospitals; Health Clinics; EMS Services & Training Agencies; Nursing programs; Nursing Homes; Assisted Living Facilities; Home Health Agencies; Hospices; Adult Day Services; Children's Day Health Services; Rural Health Clinics; Health Maintenance Organizations; ESRDs; Mental Health Substance Use Facilities; Centers for Developmentally Disabled facilities; Psychiatric Residential Treatment Facilities; Intermediate Care Facilities; Public Water Systems; Asbestos, Lead, and Radon Mitigation establishments; Nurse Aide programs; and Child Care establishments with seven (7) license types.  DHHS staff will use the module, and others with read- only capability will utilize the information.	X	X		
	See Attachment Six - Inspection Documents				
	See Attachment Seven – Investigation Documents				

### Response:

ETK Regulatory's Mobile Inspector functionality is designed & optimized to be used on mobile tablets using the Chrome browser, browsers such as Internet Export, Firefox, MS Edge, and Safari are not supported at this time. ETK Regulatory's Mobile Inspector can be accessed from laptops and desktop computers. It is not recommended to access ETK Regulatory's Mobile Inspector from a cell phone, as it is not optimized for that experience.

Tyler acknowledges the 7,000 annual inspections/surveys listed above. Tyler acknowledges Attachment Six and Seven, and commensurate information.

Response: Tyler's ETK Regulatory solution has capacity to support 100+ DHHS staff, and up to 50 other DHHS staff with mobile capabilities, with the capability for the users to update in real time via the internet, or offline and upload later, for up to 500 different forms. The solution has been load tested for over 20,000 concurrent users.

# **Reporting Requirements**

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
RPT-1	Describe how the system will facilitate data collection, analysis, and report generation by authorized users via a web-based application scalable to desktop computers, laptops, tablets, and cell phones.	х	Х		
	Entellitrak will allow NE DHHS to gain tighter control of their Licensure system. Entellitrak will be a comprehensive and centralized repository for all Public Health Licensure information that can be accessed by authorized users regardless of their location, 24/7 around the clock. Implementing Entellitrak helps with:				
Response:	<ul> <li>Provide a centralized, enterprise-wide, Web-based, COTS case management system that tracks, manages, and maintains Public Health Licensure information</li> <li>Allow NE DHHS to make most changes through configuration rather than customization</li> <li>Automate and streamline selected workflows within NE DHHS, virtually eliminating duplicate data entry as well as redundant and time-consuming manual processes</li> <li>Create separate roles and permissions and provide the ability to assign access levels to forms and Web pages down to the field level</li> <li>Maintain an automated, unalterable audit log that tracks who made changes to a license/case record and at what date/time</li> <li>Automatically generate documents using defined forms templates and pre-populate license/case record-specific information on the templates</li> <li>Send alerts and notifications on any activity</li> <li>Provide standard searching/reporting as well as the ability to create ad hoc queries/reports</li> </ul>				
RPT-2	Describe how the system will have an intuitive, dynamic report creation functionality that is user friendly and allows easy creation of ad-hoc reports without Contractor support.	Х	Х		
Response:					
ETK Regula	atory provides these capabilities as core functionality through the Advanced Search capabilities.				
RPT-3	Describe how the system will search, display, and generate reports by any field or combination of fields, using the same field names as shown on staff screens.	Х	Х		

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
Response:					
ETK Regul	atory provides these capabilities as core functionality through the Advanced Search capabilities.				
RPT-4	Describe how the system will import and export information for data analysis.	Х	Х		
Response:					
ETK Regul	atory provides the capability of import/export to Excel for the State as a core capability.				
RPT-5	Describe how the system will facilitate automatic report generation on a staff-defined schedule, and automatically send the reports to designated internal and/or external customers. The system must alert appropriate staff if a report fails.	Х	х		
Response:		•	•		
ETK Regul	atory provides the ability to configure scheduled jobs, workflow, and notifications as core capabilities.				
RPT-6	Describe how the system will generate ad-hoc reports using templates for inspections, monitoring, and complaints regarding establishments, link them to the license record and the physical location, and display them online.	х		Х	
Pesnonse:		•			

### Response:

Please note that Templates/Notifications and Canned Reports using Jasper are available with customization, but we believe that the agency is better served through non-canned reports. ETK Regulatory offers a robust report generation and design capability that provides users with the ability to generate and format ad hoc reports, which we recommend as a best practice. The Entellitrak Report Builder module – included with ETK Regulatory -- offers these ad hoc capabilities through a user-friendly interface and provides a variety of options for report output including HTML documents, Microsoft Word documents, Microsoft Excel spreadsheets, and PDF documents.

Req#	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
RPT-7	<ul> <li>Describe how the system will support calculating averages, percentages, days between, deviations, etc. between multiple data elements using the following scenarios:</li> <li>Days between would compare, for instance, the date an application was entered and the date the license was issued, and give us the total number of days for each application.</li> <li>An average may be the average number of days it took for all Nursing applications to be issued.</li> <li>Percentages would be the percentage of nursing applications issued within two (2) days.</li> <li>Deviations would show the outliers in the data, such as one problematic application that took sixty (60) days to process.</li> </ul>	X	X		

Response: The solution supports calculating averages, percentages, days between, deviations, etc. between multiple data elements using standard formulas and then reporting in table format, to demonstrate outliers. The scenarios listed will be configured as standard reports.

# **Data Interface Requirements**

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
INT- 1	Describe how the system supports two-way data interfaces with other applications as needed, to export and import data. An industry-standard HL7 interface is desired.  For example, the system must automatically export and import disciplinary data with NURSYS on a daily basis; automatically import establishment license and certification data from the federally-owned Aspen Central Office (ACO) software to update the database on a daily basis; allow other state entities to upload and populate data, such as Step Up To Quality ratings for child care programs and fingerprint-based background searches; and allow third parties, such as schools, exam providers, and employers, to upload and overwrite data.  DHHS anticipates disciplinary databanks, compacts, schools, exam companies, and employers to interact with the system and must have a unique method developed for each one.	х		X	

Response: ETK Regulatory is a flexible, customizable and extensible solution which allows for easy integration with external and third party applications. Any interface need will have to be analyzed, data mapped, format identified and code written to send data back 'n forth. ETK Regulatory supports creation of scheduled jobs which would interface (using APIs or web services) with these external application. Jobs can be scheduled and frequency set as needed. Industry standard HL7 interface will follow same process. Tyler acknowledges that disciplinary databanks, compacts, schools, exam companies, and employers will interact with ETK Regulatory, and will require a unique method for each via role based interaction.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
INT- 2	Describe how the system will internally or externally interface with a scanning/imaging system that links documents to specific licensee records via an intuitive interface that minimizes staff time. All documents should be tracked in the licensee applicant file, designated by receipt date, mailing date, item category, retention schedule, security/access level, etc., as identified by staff.	X	X		

# Response:

ETK Regulatory supports scanning. It connects to external scanners, scans data and uploads scanned document to selected object in the application, including licensee record (Entity). ETK Regulatory object can be extended to capture additional information like mailing date, receipt date, category, retention schedule, etc. Security/Access level is controlled by ETK Regulatory role based security.

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	INT- 3	Describe how the system will create and store documents using Word/Excel which can be exported for use in accounting systems such as OnBase and SharePoint.  For example, a completed refund form produced in Word should be exported to SharePoint for approval and processing. Data reports should be exported to Excel	х	х	
		processing. Data reports should be exported to Excel.			

## Response:

ETK Regulatory supports export and import of documents. Export and Import from/to other applications would require a new interface built from/to ETK Regulatory. API based approach would be taken to talk to these external applications. ETK Regulatory does not support work/excel plugins but documents created in Word/Excel can be manually uploaded.

# Online Transaction and Public Interface Requirements

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
ONL- 1	Describe how the system will provide a searchable online database of licensee records and related public documents that is updated in real time, through an intuitive interface. The system must allow multiple data field selection in the search feature. The system must provide "sounds like" and alternative spelling options for identified search fields, with at least 15 results shown per screen, and additional results available by scrolling. The results list should include basic information such as licensee name, license number, license type, license status, and license expiration date. Search elements, results data, and additional information should be tailored to specific license type needs.	x		X	
Respo	onse:				
disclos	TK Regulatory's public portal anyone with internet access can able to access the Public Search feature and view sure. ETK Regulatory determines eligibility for public disclosure based on configuration (based on business rule agency staff.				oints
	Regulatory's Public Search functionality supports various data points to search on, from basic details like name, ntial status to address details such as city and zip code.	credential ty	pe, creder	ntial number,	and
	Regulatory's Public Search can be extension to support additional configurations to further tailor the Public Sear atory can be extended to support phonetic for "sounds like" and alternative spelling services in Public Search.	ch experienc	e by licens	se type. ETK	
ONL- 2	The system's online database must provide an option to search for licensees within a specified mileage of a zip code through an intuitive interface. For instance, users may select from a list of mileage amounts, such as within 25, 50, 100, or 150 miles of the zip code. Results displayed should be tailored to license type. For example, search fields for child care establishments should include business hours, ages served, Step Up To Quality rating, and a selected the number of miles from the specified zip code.	х			х
Respo	onse:				
device criteria	Regulatory can be extended to support an integration with ESRI a 3rd party GIS service in Public Search and base location) identify results and map them based on point to point distances. EKT-R's Public Search can be extended. License objects can be extended to allow the capture of additional license type data points such as business and the Public Search functionality can be extended to present this data.	nded to supp	ort distan	ce based sea	rch
ONL- 3	The system's online database must have a Frequently Asked Questions (FAQ) section to help users navigate and locate the information they need through an intuitive interface.	Х	х		

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
Respo	Response:								
	ETK Regulatory supports extension points for the public portal dashboard to present the registered online user with informational resources like Frequently Asked Questions and How to Guides.								
ONL- 4	Describe how the system will be able to change the online database interface to use languages other than English (Spanish, Vietnamese, etc.), or provide a link to the translated interface.	X		X					
Respo	Response:								
suppoi	ETK Regulatory's internationalization functionality allows the user to change their locale setting and view text in the language associated to the locale. Current supported languages are Spanish, French, and Dutch. Internationalization functionality would need to be extended to support additional languages such as Vietnamese.								
ONL- 5	Describe how the system will display license-type-specific information when a license is selected, with a list of related public documents such as disciplinary action, inspection reports, ownership documentation, construction project information, etc. Documents must be displayed upon selection. For child care establishments, describe how the system will indicate the establishment's Step Up to Quality rating, whether or not the child care is currently in compliance, and display all citations online without any identifying names displayed to the public.	Х	X						

### Response:

Note: This response is conditioned based on the extension points in response for ONL-1 and ONL-2

ETK Regulatory's Public Search will present the public with data and documents that have been defined as eligible for public consumption. The eligibility of data to be displayed to the public is determined by configuration as well as record specific data. ETK Regulatory supports the upload and generation of documents that can be stored against various objects like entities, licenses, cases, etc. Agency staff, with the appropriate permissions, can set these documents to be available for public consumption via the record specific controls and set the display dates as appropriate per business rules (e.g. the document is available for 90 days, at a future date, perpetuity, etc.). Online users are able to download a copy of documents presented to them.

As mentioned in ONL-2, ETK Regulatory can be extended to support the capture of Step Up To Quality data and present it in Public Search when a corresponding license record is viewed. Compliance and citations are captured in ETK Regulatory's case functionality, redacted documents can be uploaded to the appropriate case and these redacted versions of a file made available for public consumption. ETK Regulatory's document management system supports redaction functionality.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
ONL- 6	Describe how the system will provide links that generate documents, such as certifications and wallet cards, through an intuitive interface for the selected license. The generated documents should be printable in a professional-looking format, such as a pop-out PDF with letterhead, seal, or other image elements required by DHHS. Information provided on the documents should be specific to each license type. Staff must be able to update the templates as needed.	X	X		

#### Response:

ETK Regulatory leverages transactions to capture data and fees (as applicable) and output documents via letter templates. Letter templates can be defined and formatted to use the appropriate image elements (e.g. letterhead, seals, etc.) and refer to and use credential specific data. Administrators have access to update transaction and letter template configurations. ETK Regulatory allows for the generation of various documents throughout the lifecycle of the transaction (e.g. deficiency letters, certificates, wallet cards, etc.). Documents such as certifications and wallet cards will often times be linked to the approval of the transaction, once generated these documents are available for download from the online dashboard from recent activity for 30 days. If business rules allow licensees to print copies of certificates/wallet cards on demand, ETK Regulatory's online dashboard can be extended with additional services to present the licensee with documents that have been generated and associated to their record(s).

Describe how the system will allow applicants, licensees, board members, and the public to establish secure personal online accounts, with role-based security regarding public and editable data fields, through an intuitive interface. Describe how the system will allow users to configure the dashboard/interface to their needs. The system should facilitate and document two-way communication between staff, applicants, licensees, and the public. The system should provide a drop-down list of shared email accounts identified by what types of questions should go to each one.  All of the license types have multiple applications, such as initial, renewal, reinstatement, exam, etc. See Attachment One, Type and Number of Licensees.			
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### Response:

ETK Regulatory supports self-registration for users to create personal registered online accounts, agency staff accounts are created through a separate means. Personal registered online accounts are created with a default role that cannot be modified by the online user. ETK Regulatory's role-based security will dictate the access the online user can be granted. ETK Regulatory's configuration options control the transactions, fees, services, etc. that an online user will and will not have access to. ETK Regulatory allows agency staff to process transaction checklists and add deficiencies to the transaction as appropriate. Agency staff can add a transaction action that will notify the online user that their attention is needed to resolve issue(s) on the transaction. The online user can then provide updates (payment, documents, etc.) from the online portal and the agency staff are able to review these updates and take the appropriate action on the transaction.

ETK Regulatory's online portal can be extended to support contact information by board and allow online users to find contact information (point of contact, phone, email, etc.) by board as well as board specific instructions/information (e.g. office hours, helpful information to include, etc.).

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
ONL- 8	Describe how the system will allow the public to generate rosters and lists of licensee contact information for printing and/or download, based on standard reports and/or personalized reports based on criteria/data fields they select through a "wizard" or other intuitive interface. Criteria must include the zip code area search specified in ONL-2. Downloads must be available in standard formats such as Excel, .csv, and .txt. Any applicable fees should be securely collected online.	X		X	

### Response:

ETK Regulatory's public services can be extended to provide online users with the ability to generate rosters via an interface similar to Public Search, the user will enter criteria and based on the license type selected generate a roster in the predefined template associated to the license type. The roster service will support similar criteria as Public Search (e.g. zip code, county, city, license type, etc.).

If fees apply, an invoice transaction can be defined and associated to the license type to be used for rosters. EKT-R's public services can be extended to support generating an invoice transaction without requiring an online account and submit payment via the system's payment provider.

ONL- 9	Describe how the system will provide an online shopping-cart-type payment system, document all transactions and payments for each online account and corresponding license record, display a list of all fees due, and allow partial or full payment of designated fee(s) through an intuitive interface. The system must allow payment of ad-hoc fees assessed by staff against a licensee's record. Notification of transactions should be sent to the license-type-specific staff work queue. For example, fees required to be paid in full may include roster/list fees, application fees, renewal fees, reinstatement fees, late fees, etc. Fees that allow partial payment may include compliance costs, administrative and civil penalties, administrative fees, etc. Licensees may need to pay an additional license fee due to fee proration.	X	Х		
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Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
Respo	onse:								
transa registe can ele	ETK Regulatory's Online Dashboard allows registered online users to initiate and submit transactions, if the transactions has fee(s) associated to it the transaction is then accessible in the shopping cart. When viewing the shopping cart the registered online user will see the fee(s) that apply by transaction. If the registered online user is submitting multiple transactions, the registered online user can choose to submit a single payment for all submitted transactions or they can elect to submit payment before initiating the next transaction. If the registered online user's shopping cart has multiple transactions in it, they can elect to de-select transactions they do not wish to submit payment for at that time, the online user can add these transaction(s) to their shopping cart again at a later time.								
partial ETK R	ETK Regulatory's shopping cart functionality can be extended to support partial fee payment. Business rules will dictate when partial fees are allowed. If a partial payment is made for a transaction with multiple fees, the money will be applied in an order of precedence based on predefined business rules.  ETK Regulatory supports the assessment of ad-hoc fees to a license record via invoice transactions. When an invoice transaction is published, it becomes								
	ble for registered online users to access and submit payment when they sign onto an online account associated s can be defined to notify staff of important events as per business rules (e.g. payment submitted, approaching				r				
	The online payment system must use the State of Nebraska's credit card processor, which is currently Elavon, and must be able to work with a broad range of other payment processors. Secure socket layer (SSL) encryption should be used. Describe how the system will permanently store all of the payment information on the licensee record, including the payer contact information, transaction data, attachments, payment processor transaction confirmation number, and last 4 digits of the payer's credit card number for each transaction. Payment reports should be able to be run with date and time specifications.								
ONL- 10	System must record the transaction ID, licensee name, license number, license type, and payer name to ensure that payments are accurately credited and refunded.	х	X						
	State contract 66533-O4 is with U.S. Bank for Credit Card Processing.  http://das.nebraska.gov/materiel/purchasing/contracts/pdfs/66533(o4)awd.pdf								
	Elavon does not use a specific product, but whatever product is used must be either an Elavon product or certified with Elavon.								

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
Respo	Response:								
agency they ca such a (applicy address contact renews the Sta	ETK Regulatory's online payment provider integration support is designed to be flexible as each implementation of the system can be setup to leverage the agency approved payment provider. SSL TLS 1.2 encryption is used for online payments. When an online user submits their application online and fees apply they can be redirected to the payment provider when they submit the shopping cart. The payment provider will collect credit card data and contact information such as billing address and return confirmation number and timestamp. The confirmation data can be associated to the transaction and the transaction (application data and attachments) links back to the license record it was submitted under. ETK Regulatory supports the ability to store the payer name and address information in the cash receipt detail record, when provided by the payment provider. While ETK Regulatory transactions can be configured to capture contact information for the licensee, it is possible that licensee contact information is not the same as the contact information for the card holder (e.g. a nurse's renewal is paid for by a corporate card for the practice the nurse works at). ETK Regulatory can store the information requested by the State, and will work with the State to understand the need for Elavon certification, if relevant.								
ONL- 11	The system must meet Payment Card Industry (PCI) data security standards. Quarterly PCI audits must be provided to DHHS that verify compliance with PCI standards. Annual proof of compliance is also required, either by providing certification on the VISA website ( <a href="https://www.visa.com/splisting/searchGrsp.do">https://www.visa.com/splisting/searchGrsp.do</a> ) or by providing a PCI Data Security Standard Self-Assessment Questionnaire and Attestations of Compliance signed by a qualified security assessor. All components of the system provided by the Contractor must mitigate level 3, 4, and 5 vulnerabilities as quickly as possible.	Х	х						

### Response:

As credit card processing is handled through payment providers such as Elavon, ETK Regulatory does not store credit card information. The PCI compliance information will need to be provided by the payment provider. The customer would have to be responsible for completing PCI compliance activities and forms; Tyler security would support the customer in this effort as it relates to ETK Regulatory under contractually determined level of Security Support.

If the state chooses to use our Tyler Payments offering, and not Elavon, Tyler Technologies payment solutions are regularly audited by an approved Quality Security Assessor to verify compliance with the standards set by the Payment Card Industry (PCI). You can find our current PCI Data Security Standards (PCI DSS) Attestation of Compliance on the <a href="https://www.tylertech.com/about-us/compliance/pci-compliance">www.tylertech.com/about-us/compliance/pci-compliance</a>. Tyler Technologies compliance can also be found on VISA's list of service providers.

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party
ONL- 12	Describe how the system will allow the public to complete and submit applications online; submit related documentation; view application status/checklist/deficiencies; schedule and take examinations; review scores; make payments; and receive receipts through an intuitive interface. The system must check applicant information against the database as it is entered, in real time, to check to see if the person has held any licenses, and present the applicant with the appropriate initial or reinstatement license application form. The application should be sent to the license-type-specific staff work queue. For example, Harold applies online for an LPN license, with a universal first page that asks for basic information (name, DOB, SSN, prior licenses). The system checks the database and finds that Harold has an inactive LPN license. The system asks Harold if that was the license he held, and if the answer is yes, provides him with a reinstatement application form as the next step/page.	X	X		

#### Response:

Anyone with access to the internet can register an account with ETK Regulatory portal, as part of the account registration the Registered Online User can be able to respond to questions that will attempt to locate existing license records and association them with the online account. This onboarding process is configurable.

Based on various configuration settings, the ETK Regulatory online dashboard will present the Registered Online User with transactions and services they are eligible to execute. Additionally, transaction availability rules can be defined and associated to transactions, these rules can be tailored to reflect specific business scenarios that would make the user ineligible for accessing specific transaction(s).

	Describe how the system will allow licensees to generate, complete, and submit renewal forms online; submit other renewal documentation; make payments; and receive receipts through an intuitive interface. Notification must be sent to the license-type-specific staff work queue.  DHHS currently has approximately 378 license types. Approximately 83 of the 378 license types do not renew.			
ONL-	There are five (5) categories of renewal processes:	X	X	
13	1. Individuals			
	2. Businesses			
	3. Child Care			
	4. Community-Based Services			
	5. Health Care Facilities and Services			
	See Attachment One, Type and Number of Licensees.			

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
Respo	Response:								
As referenced in ONL-7, licensees can register a personal online account. When the user signs onto ETK Regulatory's portal the licensee can be able to initiate renewals transactions from their online dashboard based on licensees associated with their online account when appropriate per business rules/processes that dictate when the license type allows renewals. Once the licensee submits their renewal transaction, the licensee can be able view and submit payment for the applicable fee(s) for the renewal transaction. ETK Regulatory supports transaction queues that are populated based business rules (in this case renewals), agency staff will have access to the appropriate queues based on security configurations and can be able to action the submitted renewal transaction as appropriate per business rules. Agency staff could also monitor additional renewals scenarios (late renewal, no payment, etc.) via additional queues and/or alert functionality.									
Tyler a	cknowledges the licensee types, as listed above and in Attachment One.								
ONL- 14	The online account system must allow licensees to submit name changes and related documentation, update contact information, update employer information, and view their transaction, fee, and payment history, as allowable for each license type, through an intuitive interface. Notification should be sent to the license-type-specific staff work queue.	×	Х						
Respo	nse:								
accour employ docum	egulatory's online dashboard will present the licensee with the transaction(s) they are eligible to action based on the analysis and applicable business rules. ETK Regulatory's transaction definitions allow the definition of transactions light ment updates, etc. to be defined and these definitions will determine when the transactions is available for the ents) and fees can be captured as part of the transaction.  egulatory's online dashboard services can be extended to display account history, this allows the registered on	ike name cha licensee and	nges, add I what dat	lress changes a (including	S,				
online	account such as submitted transactions, payments, and account updates.								
	egulatory supports transaction queues that are populated based business rules, agency staff will have access y configurations and can be able to action the submitted transaction(s) as appropriate per business rules.	to the approp	oriate que	ues based on					
ONL- 15	Describe how the system will allow licensees to securely complete and submit self-inspection documents, plans of improvement, written verification of correction, and other documentation/ correspondence online. Describe how the system will also track online submissions, and associate them with the licensee record, as well as generate and track staff response/denial/approval correspondence regarding the documents submitted.	Х	Х						

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party					
Respo	Response:									
associ docum agency able to	ETK Regulatory's online services allow online users to view cases (such as inspections) when the entity/license record associated to the online account is also associated to the case as a target participant. This inspection service for the online portal also supports case checklists where agency staff can defined documents that the licensee needs to provide and expose them via the inspection service. When the licensee submits documents through the checklist, the agency staff can accept the submission or reject it with comments and make the checklist item available for the licensee to submit again. Agency staff can be able to generate additional correspondence related to the inspection in the back office and make it available for the licensee to view online via the inspection service.									
ONL- 16	Board member data must be maintained in the database, including public and confidential contact information, service dates, and the population being represented. Information designated as public must be automatically posted and updated daily on the website in board-specific rosters that are available to the public.	×	х							
Respo	nse:									
eligible (any or points	Regulatory supports configurations as well as record specific settings that are set as appropriate per business rule for public use and what is private & confidential. ETK Regulatory supports extension points for the online portaline user) to access the pre-generated roster(s). ETK Regulatory supports scheduled jobs that can generate and output format and manage the generated rosters as appropriate per business rules.  This response is based on the roster being generated in ONL-8 is separate from ONL-16.	tal that can b	e leverage	ed to allow the	e public					
ONL- 17	Public meeting and hearing information, such as notices, agendas, minutes, proposed regulations, 407 reviews, etc. must be available to the public via the public-facing website. The public must be able to subscribe to information of interest to them, and automatically be notified when such information is made available or updated on the website. Information on upcoming events should be posted as it arises, and public access to past event information should be maintained.	X	X							
Respo	nse:									
public	degulatory's online portal supports extension points that can be configured to allow the online user to access se (e.g. public meeting and hearing information). ETK Regulatory's online functionality can be further extended to ribe to select items of interest and be notified when updated information is available.									
ONL- 18	Confidential information used by board members, investigators, legal staff, and other designated individuals must securely be made available to only those individuals via the website. Designated individuals must be able to subscribe to information of interest to them, and automatically be notified when such information is made available or updated on the website.	Х	X							

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party					
Respo	Response:									
inform	ETK Regulatory supports various controls through security, configuration, and record specific data points that define what, when, and where confidential information is eligible for display in back office and public facing screens. As per ONL-17, ETK Regulatory's online functionality can be extended to support subscriptions and notifications such that the designated individuals can be able to subscribe to important information and									
ONL- 19	Licensee information must be automatically posted and updated daily on the website in license-type-specific rosters that are available to the public.	Х	Х							
Respo	nse:									
	ETK Regulatory's Public Search functionality leverages real-time data. As per ONL-16, predefined rosters can be systematically generated and made available on ETK Regulatory's public facing portal.									

## **Training Requirements**

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party				
TRN- 1	Describe how the Contractor will provide and update the administrator reference materials and data dictionaries to include current data elements and functions in new versions.	X		Х					
Tyler's	Response:  Tyler's Business Analyst/Technical Writer will provide the ETK Regulatory Product User and Product Administrator guides within the Help module of the configured ETK Regulatory solution. Updates for each guide are available upon request with each new ETK Regulatory release.								
TRN- 2	Describe the strategy for providing train-the-trainer instruction and materials, online training, online user reference materials, on-going support, and help features for instruction on use of the applications, and are updated to include current data elements and functions in new versions. Include the number and outline of training sessions necessary to optimally implement and operate the system. Describe the delivery method, which should include a combination of classroom and online learning techniques.	Х		Х					

Response: As the primary provider of Entellitrak training services, Tyler stands behind the ETK Regulatory solution with a large team of product experts. Tyler's training program empowers clients to fully use and administer the system to meet the users' environmental needs.

Tyler will provide train-the-trainer sessions that facilitate one-on-one mentoring assistance and guidance. Each training class includes a trainer and participant guides that are used by the trainer to introduce system features and functionality using exercises and assessments throughout the session. Tyler strongly encourages the assistance and participation of client trainers in the delivery of end-user courses. Scheduled training dates will be mutually-agreed upon with a typical day beginning at 9:00 am and ending at 4:30 pm. Training session times will be arranged with the client project manager and other system stakeholders. Start and end times will be agreed upon to accommodate trainee schedules.

Tyler recommends a class size of no more than 25 participants per class session with one Tyler instructor, as class sizes greater than 25 students (with a single instructor) are generally not as effective or efficient. ETK Regulatory Product User training typically takes place over two days, and Product Administrator training typically is accomplished in one day. Training on advanced product configuration is available upon request and typically takes an additional two days depending on the participants' familiarity with the system before training begins.

Tyler's available training options include:

- On-site training at client site (travel costs apply)
- Instructor-led: face-to-face training at the fully equipped Tyler training center in Herndon, VA
- Train-the-Trainer (T3) to facilitate knowledge transfer
- Advanced training workshops for configuration and implementation methodology
- Custom training and courses based on specific client requirements
- Computer Based Training (CBT) for self-guided training

Courses cover a wide range of topics from basic tool utilization, to advanced searching and reporting, to user-led configuration. Client staff members receive all the training and personal attention needed to facilitate a successful relationship.

Tyler and client respective roles and responsibilities in meeting the proposed Training Plan:

#### Tyler

- Develop and implement the Training Plan
- Develop and disseminate the required the training materials (training agenda, classroom exercises, training manual)
- Train client trainers in following user group functionality: End-users and Administrators.
- Assist in knowledge transfer process for IT personnel

#### Client

Req #	Requirement	(1)Comply	(a)Core	(b)Custom	(c)3rd Party					
<ul> <li>Review and approve the Training Plan</li> <li>Review and approve the training materials (training agenda, classroom exercises, training manual). Note: there will be one round of review and final acceptance.</li> <li>Identify the appropriate attendees for training</li> <li>Provide classroom facility, necessary equipment and network connections</li> </ul> Tyler strongly encourages the assistance and participation of client trainers in the delivery of end-user courses. Tyler recommends that client trainers be trained in one central location on-site, and then those newly trained client staff members train the other user roles at multiple locations across the client's locations.										
TRN-	Describe how the system provides help and training functions, which should be built into the software.	Х	Х							
be crea	egulatory contains a Help module that contains links to Product User and Product Administrator guides. Client ated and maintained by Product Administrators, and associated with specific forms within the application to pro				ges can					
TRN- 4	Describe how the system provides interactive communication such as user groups for staff questions and support.	Х	Х							
Trainin the end	Response:  Training attendees are given multiple opportunities to provide feedback and ask questions directly to the trainer, and are asked to complete a training survey at the end of each day of training. Survey feedback is reviewed after each session and any adjustments needed are made the following day. After go-live when a system goes into production support, our support team will have a dedicated analyst responsible for meeting periodically with the agency to review outstanding issues and									
TRN- 5	Describe how the system provides libraries of available reports, including instructions on modifying the reports.	Х	Х							
and Ad	nse: legulatory contains both out-of-the-box XML reports, and a configurable advanced search feature that can be underly divanced Searches can be shared with users, groups, and roles within the system. Tyler provides a separate X ters that have the responsibility of creating or modifying XML reports within the system. Advanced Search train	ML Advance	d Report to	raining to rep	orting					

## **Public Health Investigations Module Requirements**

Req#	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PHI-1	The system must allow internet based access methods, for all types of users, after initial registration. Please describe the channels by which users can interface with the system.	Х	Х		
•	ETK Regulatory is a web-based solution, and is accessible through any browser based device, including laptop, tablet all major browsers, such as Chrome, Safari, etc.	, or mobile	e device	e. The so	olution
PHI-2	The system must allow users to register for system access via the internet. Please describe how the system meets this requirement, including how system access rights are determined and assigned.	х	х		
•	End users can access the solution and register for system access via the eFile web portal. Roles can be identified via and/or single sign on.	sign-up, a	and con	firmed by	/ State
PHI-3	The system must log off users after a system administrator configurable period of inactivity. Such inactivity periods may vary by user role. Please describe how the system meets these requirements.	х	х		
Response:	This is a core capability of the solution, and can be configured by the system administrator.		1		
PHI-4	The system must allow for full or partial search responses when searching. Please describe how the system meets this requirement.	х	х		
results. For	This capability can be configured. Through the use of security permission controls can be applied on which users can example, some users are not authorized to see SSN data. Also, many data can be made public (available to online user the back office).				

Req#	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party						
PHI-5	The system must use system generated complaint numbers. Complaint numbers must be unique to each individual complaint. They must never repeat and can be alpha, numeric or a combination. Please describe how the system meets these requirements.	X	х								
Response: identifier.	This capability is standard. Each complaint in ETK Regulatory provides an auto-generated case/complaint number w	hich can b	e used	as a unio	eup						
PHI-6	The system must include configurable logic or business rules on data entry that trigger customizable responses, distributions, alerts, work flows and or handling. Please describe how the system meets these requirements.	Х	Х								
events, aler	ts, or other activities, based upon a wide variety of scenarios.  The system must allow for extensive screen, form, field, widget, radio button and drop down list configurability.	×	×								
	PHI-7 Please describe how the system meets these requirements.  Response: ETK Regulatory is designed to allow for configurable forms, fields, radio button, dropdown list and more. The initial configuration will be performed as part of the implementation, and system administrators will be trained in simple configurations as well.										
PHI-8	The system must perform duplicate checks on data entry. Please describe how the system meets this requirement.	Х	Х		·						
for duplicati Also there i	At the time of data entry, ETK Regulatory uses drop down and fill-in to avoid duplication. There are standard rules that on of entity data based on key entity criteria. Configuration is also identified by key codes which have unique constrains an ability to write rules as needed to check for duplication of data anywhere in the transaction process. This duplication process. This duplication of data anywhere in the transaction process. This duplication of data anywhere in the transaction process. This duplication is needs.	ts that will	error if	duplicate	ed.						
PHI-9	The system must provide for user configurable (based on role) and automated correspondence. Please describe how the system meets these requirements.	Х		Х							

Req#	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party					
Response: As part of the configurable workflows designed in implementation, ETK Regulatory will triggered to send notifications when certain events occur, such as overdue license.										
PHI-10	The system must include user configurable, automated work flow management for tasks (assignment, review, etc). Please describe how the system meets these requirements.	X	Х							
	This capability is standard. Workflow configuration is possible via the highly configurable Workflow Engine at the heart ents can be identified and trigger actions that can be customized as well as assignments and re-assignments of cases.	of the ca	se man	agement						
PHI-11	The system must allow for user set, custom error message text. In the Investigations custom web site, DHHS staff do error message handle on each data entry field that a user might be entering. If it is a first name, DHHS staff does error handling for that. If it is a phone number, DHHS staff does different "custom" error handling for a phone number field. The error messaging on the page that a user sees also tells DHHS staff what field is in error.	х		х						
	Please describe how the system meets this requirement.									
-	The system has built in error validation on standard data elements like emails, phone numbers, SSN, etc. to keep data ended with rules to do additional validation with custom error messages	entry cle	an. The	system o						

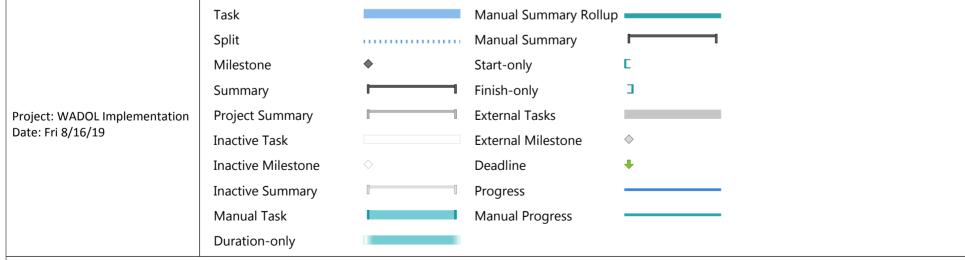
# Addendum to Attachment 2

On the pages that follow, please find the following required attachments:

BID-1 – Project Plan

BID-9 - Contract Closeout Plan

D	Task Name	Duration	Start	Finish	rter		4th Qu	arter		1st Qu	arter
					Aug	Sep	Oct	Nov	Dec	Jan	Fe
1	NEDHHS Implementation	796 days	Tue 10/1/19	Tue 10/18/22							
2	Project Management	766 days	Tue 10/1/19	Tue 9/6/22							
3	Project Kickoff	1 day	Tue 10/1/19	Tue 10/1/19							
4	Weekly Status Meetings	576 days	Wed 10/2/19	Wed 12/15/21							
5	Project Planning	576 days	Wed 10/2/19	Wed 12/15/21							
6	Manage Change Control Process	576 days	Wed 10/2/19	Wed 12/15/21							
7	Contract Closeout	10 days	Wed 8/24/22	Tue 9/6/22							
8	Environments and Software Installation	98 days	Wed 10/2/19	Fri 2/14/20							
9	Requirements Validation (Environments)	20 days	Wed 10/2/19	Tue 10/29/19							
10	Build Environments	75 days	Wed 10/30/19	Tue 2/11/20							
11	Build Development Environment	25 days	Wed 10/30/19	Tue 12/3/19							
12	Build Test Environment	25 days	Wed 12/4/19	Tue 1/7/20							
13	Build Production Environment	25 days	Wed 1/8/20	Tue 2/11/20							
14	Software Installation	53 days	Wed 12/4/19	Fri 2/14/20							
15	Software Installation (Development)	3 days	Wed 12/4/19	Fri 12/6/19							
16	Software Installation (Test)	3 days	Wed 1/8/20	Fri 1/10/20							
17	Software Installation (Production)	3 days	Wed 2/12/20	Fri 2/14/20							
18	Phase 1 (All customizations + 48 License Types (13%))	335 days	Wed 10/2/19	Tue 1/12/21							
19	Requirements Validation (Phase 1)	45 days	Wed 10/2/19	Tue 12/3/19							
	Task		Manual Summary	Rollup —		I					



Page 1

D	Task Name			Duration	Start	Finish	rter Aug	Sep	4th Quarter Oct Nov	Dec	1st Quarter Jan Feb
20		ement Requirements for 13% of 368 License Type		25 days	Wed 10/2/19	Tue 11/5/19	rag	Зер	300 1100	7 200	
21	Workflow and Se Types	curity Requirements for	48 License	10 days	Wed 10/2/19	Tue 10/15/19					
22	Reporting Requir	ements (Phase 1)		10 days	Wed 11/6/19	Tue 11/19/19					
23	Customization Re Imports, etc)	equirements (Interfaces,	Extracts,	20 days	Wed 11/6/19	Tue 12/3/19					
24	Enhancements Des	ign and Development		190 days	Wed 12/4/19	Tue 8/25/20					
25	Build and Unit Te	st Enhancements		180 days	Wed 12/4/19	Tue 8/11/20					
26	QA Enhancement	ts		40 days	Wed 7/1/20	Tue 8/25/20					
27	Solution Configurat	tion (Phase 1)		70 days	Mon 12/9/19	Fri 3/13/20					
28	Licensing/Enforce Configuration	ement/Workflow/Securi	ty	45 days	Mon 12/9/19	Fri 2/7/20					
29	Letters Configura	ition		25 days	Mon 2/10/20	Fri 3/13/20					
30	Data Migration (Ph	Data Migration (Phase 1)  Data Mapping Document		100 days	Mon 2/10/20	Fri 6/26/20					
31	Data Mapping Do			20 days	Mon 2/10/20	Fri 3/6/20					
32	Develop Data Co	nversion Script		80 days	Mon 3/9/20	Fri 6/26/20					
33	Migrate Docume	nts		25 days	Mon 3/9/20	Fri 4/10/20					
34	Training (Phase 1)			20 days	Mon 3/16/20	Fri 4/10/20					
35	ETK-R Train-The-	Trainer User Training (Ph	nase 1)	10 days	Mon 3/16/20	Fri 3/27/20					
		Task			Manual Summary	Rollup					
		Split			Manual Summary	,					
		Milestone	<b>♦</b>		Start-only	Ε					
		Summary			Finish-only	3					
-	oject: WADOL Implementation te: Fri 8/16/19	Project Summary			External Tasks						
Date:		Inactive Task			External Mileston	e 💠					
		Inactive Milestone	$\Diamond$		Deadline	•					
		Inactive Summary			Progress						
		Manual Task			Manual Progress						

ID	Task Name			Duration	Start	Finish	rter	_	4th Qu	1		1st Qua	
36	ETK-R Administra	ator Training		10 days	Mon 3/30/20	Fri 4/10/20	Aug	Sep	Oct	Nov	Dec	Jan	Feb
37	User Acceptance Te			60 days	Wed 8/26/20	Tue 11/17/20	+						
38	UAT (Phase 1 - Ite			15 days	Wed 8/26/20	Tue 9/15/20							
39	UAT (Phase 1 - It	•		15 days	Wed 9/16/20	Tue 10/6/20							
40	UAT (Phase 1 - It	•		15 days	Wed 9/10/20 Wed 10/7/20	Tue 10/0/20 Tue 10/27/20							
41	UAT (Phase 1 - It	·		15 days	Wed 10/7/20 Wed 10/28/20	Tue 10/27/20							
42	Go-Live (Phase 1)	cration + <sub>j</sub>		0 days	Tue 11/17/20	Tue 11/17/20							
43	Warranty Support	(Phase 1)		40 days									
44	Phase 2 (100 License	•		315 days	Wed 9/16/20	Tue 11/30/21							
45	Requirements Valid	**		45 days	Wed 9/16/20	Tue 11/17/20							
46	Licensing/Enforce	ement Requirements fo 27% of 368 License Type		45 days	Wed 9/16/20	Tue 11/17/20							
47	Workflow and Se License Types	Reporting Requirements (Phase 2)  Enhancements Design and Development (Phase 2)		15 days	Wed 9/16/20	Tue 10/6/20							
48	Reporting Requir			20 days	Wed 10/7/20	Tue 11/3/20							
49	<b>Enhancements Des</b>			40 days	Wed 11/4/20	Tue 12/29/20							
50	Reporting Requir	rements (Phase 2)		40 days	Wed 11/4/20	Tue 12/29/20							
51	Solution Configurat	tion (Phase 2)		75 days	Wed 11/18/20	Tue 3/2/21							
52	Licensing/Enforce Configuration	ement/Workflow/Secur	ity	50 days	Wed 11/18/20	Tue 1/26/21							
		Task			Manual Summary	Rollup		<u> </u>					
		Split			Manual Summary								
		Milestone	<b>♦</b>		Start-only	Е							
		Summary			Finish-only	3							
_	ct: WADOL Implementation	Project Summary			External Tasks								
Date:	Fri 8/16/19	Inactive Task			External Mileston	e 💠							
		Inactive Milestone	$\Diamond$		Deadline	•							
		Inactive Summary			Progress								
		Manual Task			Manual Progress								
		l .											

ID	Task Name			Duration	Start	Finish	rter Aug	Sep	4th Qua	arter Nov	Dec	1st Qua	arter Feb
53	Letters Configura	ntion		25 days	Wed 1/27/21	Tue 3/2/21	Aug	- Scb	Oct	INOV	Dec	Jan	100
54	Data Migration (Ph			120 days	Wed 1/27/21	Tue 7/13/21							
55	Data Mapping Do	ocument		20 days	Wed 1/27/21	Tue 2/23/21							
56	Develop Data Co	nversion Script		100 days	Wed 2/24/21	Tue 7/13/21							
57	Migrate Docume	nts		30 days	Wed 2/24/21	Tue 4/6/21							
58	Training (Phase 2)			10 days	Wed 3/3/21	Tue 3/16/21							
59	Regulation Train-	The-Trainer User Traini	ng (Phase 2)	) 10 days	Wed 3/3/21	Tue 3/16/21							
60	User Acceptance Te	esting (Phase 2)		100 days	Wed 7/14/21	Tue 11/30/21							
61	UAT (Phase 2 - It	eration 1)		15 days	Wed 7/14/21	Tue 8/3/21							
62	UAT (Phase 2 - Ite	eration 2)		15 days	Wed 8/4/21	Tue 8/24/21							
63	UAT (Phase 2 - Ite	eration 3)		15 days	Wed 8/25/21	Tue 9/14/21							
64	UAT (Phase 2 - Ite	eration 4)		15 days	Wed 9/15/21	Tue 10/5/21							
65	Go-Live (Phase 2	)		0 days	Tue 10/5/21	Tue 10/5/21							
66	Warranty Suppo	rt (Phase 2)		40 days	Wed 10/6/21	Tue 11/30/21							
67	Phase 3 (100 License	Phase 3 (100 License Types (27%))		360 days	Wed 9/16/20	Tue 2/1/22							
68	Requirements Validation (Phase 3)		45 days	Wed 9/16/20	Tue 11/17/20								
69		ement Requirements fo 27% of 368 License Type		45 days	Wed 9/16/20	Tue 11/17/20							
70	Workflow and Se License Types	curity Requirements fo	r 100	15 days	Wed 9/16/20	Tue 10/6/20							
		Task			Manual Summary	/ Rollup		<u> </u>					
		Split			Manual Summary	/							
		Milestone	<b>♦</b>		Start-only	Ε							
		Summary			Finish-only	3							
-	ct: WADOL Implementation	Project Summary			External Tasks								
Date:	Fri 8/16/19	Inactive Task			External Mileston	e $\diamond$							
		Inactive Milestone	$\Diamond$		Deadline	•							
		Inactive Summary			Progress								
		Manual Task			Manual Progress								
		1											

ID	Task Name		Duration	Start	Finish	rter		4th Qua			1st Qua	
71	Reporting Requir	rements (Phase 3)	20 days	Wed 10/7/20	Tue 11/3/20	Aug	Sep	Oct	Nov	Dec	Jan	Feb
72	Enhancements Des	ign and Development (Phase	e 3) 40 days	Wed 11/4/20	Tue 12/29/20							
73	Reporting Requir	rements (Phase 3)	40 days	Wed 11/4/20	Tue 12/29/20							
74	Solution Configurat	tion (Phase 3)	75 days	Wed 11/18/20	Tue 3/2/21							
75	Licensing/Enforce Configuration	ement/Workflow/Security	50 days	Wed 11/18/20	Tue 1/26/21							
76	Letters Configura	ation	25 days	Wed 1/27/21	Tue 3/2/21							
77	Data Migration (Ph	ase 3)	120 days	Wed 1/27/21	Tue 7/13/21							
78	Data Mapping Do	ocument	20 days	Wed 1/27/21	Tue 2/23/21							
79	Develop Data Co	nversion Script	100 days	Wed 2/24/21	Tue 7/13/21							
80	Migrate Docume	nts	30 days	Wed 2/24/21	Tue 4/6/21							
81	Training (Phase 3)		10 days	Wed 3/3/21	Tue 3/16/21							
82	ETK-R Train-The-	Trainer User Training (Phase	3) 10 days	Wed 3/3/21	Tue 3/16/21							
83	User Acceptance Te	esting (Phase 3)	145 days	Wed 7/14/21	Tue 2/1/22							
84	UAT (Phase 3 - It	eration 1)	15 days	Wed 7/14/21	Tue 8/3/21							
85	UAT (Phase 3 - It	eration 2)	15 days	Wed 8/4/21	Tue 8/24/21							
86	UAT (Phase 3 - It	eration 3)	15 days	Wed 8/25/21	Tue 9/14/21							
87	UAT (Phase 3 - It	eration 4)	15 days	Wed 9/15/21	Tue 10/5/21							
88	Go-Live (Phase 3		0 days	Tue 12/7/21	Tue 12/7/21							
89	Warranty Suppo	rt (Phase 3)	40 days	Wed 12/8/21	Tue 2/1/22							
		Task		Manual Summary	Rollup							
		Split		Manual Summary								
		Milestone	•	Start-only	Е							
		Summary I		Finish-only	3							
	ct: WADOL Implementation	Project Summary		External Tasks								
Date:	Fri 8/16/19	Inactive Task		External Mileston	e 💠							

Split Manual Summary

Milestone Start-only

Froject: WADOL Implementation
Date: Fri 8/16/19

Project Summary

Frinish-only

External Tasks

Inactive Task

Inactive Milestone

Inactive Summary

Progress

Manual Task

Duration-only

Manual Summary

Externolly

Manual Summary

Fourier

Manual Summary

Froject Summary

Project Summary

Project Summary

Manual Progress

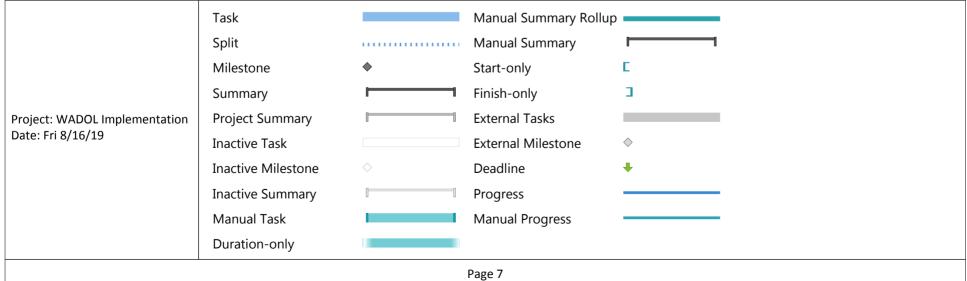
Manual Progress

Duration-only

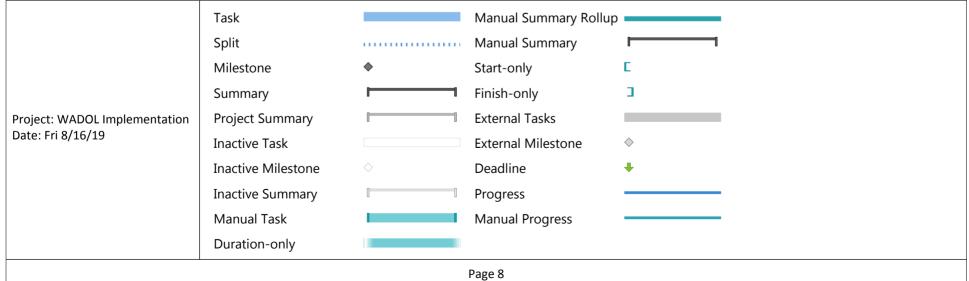
Page 5

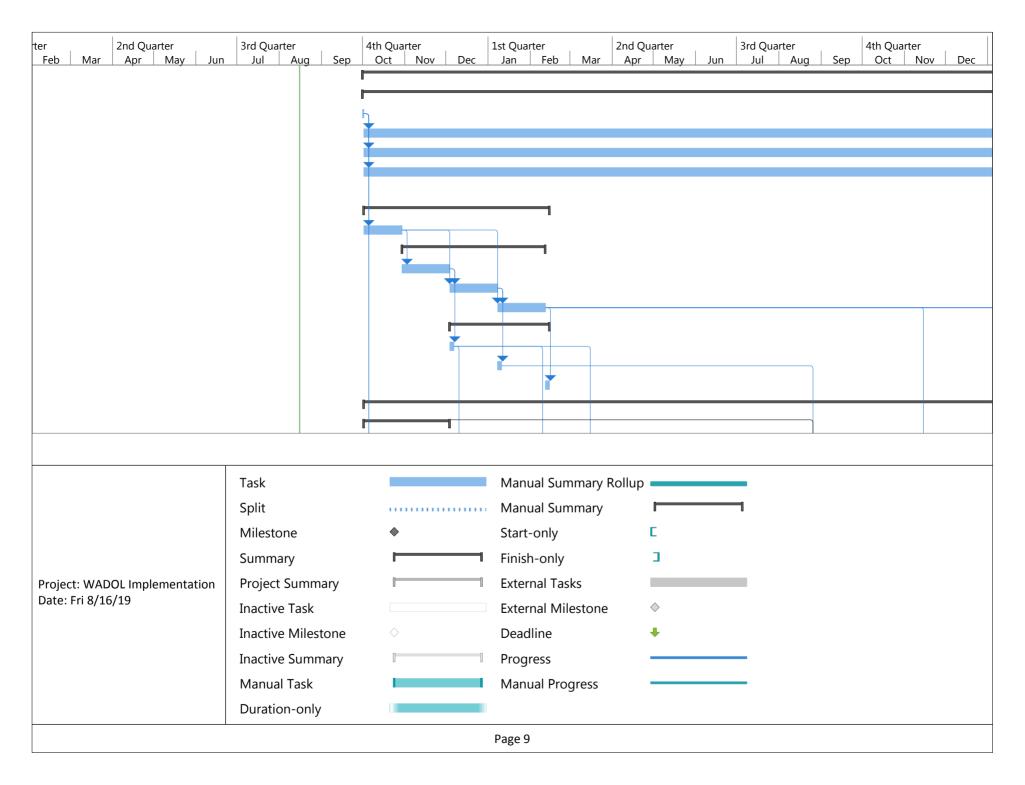
ID	Task Name			Duration	Start	Finish	rter	Sep	4th Qua	rter Nov	Dec	1st Qua	
90	Phase 4 (100 License	Types (27%))		315 days	Wed 8/4/21	Tue 10/18/22	Aug	Sep	Oct	INOV	Dec	Jan	Feb
91	Requirements Valid			45 days	Wed 8/4/21	Tue 10/5/21							
92	•	ement Requirements fo	r 100	45 days	Wed 8/4/21	Tue 10/5/21							
	License Types (~2	27% of 368 License Type	es))	·									
93	Workflow and Se License Types	ecurity Requirements for	r 100	15 days	Wed 8/4/21	Tue 8/24/21							
94	Reporting Requir	rements (Phase 4)		20 days	Wed 8/25/21	Tue 9/21/21							
95	Enhancements Des	ign and Development (I	Phase 4)	40 days	Wed 9/22/21	Tue 11/16/21							
96	Reporting Requir	ements (Phase 4)		40 days	Wed 9/22/21	Tue 11/16/21							
97	Solution Configurat	tion (Phase 4)		75 days	Wed 10/6/21	Tue 1/18/22							
98	Licensing/Enforce Configuration	ement/Workflow/Secur	ity	50 days	Wed 10/6/21	Tue 12/14/21							
99	Letters Configura	ation		25 days	Wed 12/15/21	Tue 1/18/22							
100	Data Migration (Ph	ase 4)		120 days	Wed 12/15/21	Tue 5/31/22							
101		Data Mapping Document		20 days	Wed 12/15/21	· · ·							
102	· ·	Develop Data Conversion Script		100 days	Wed 1/12/22	Tue 5/31/22							
103	Migrate Docume	nts		30 days	Wed 1/12/22	Tue 2/22/22							
104	Training (Phase 4)			10 days	Wed 1/19/22	Tue 2/1/22							
105		Trainer User Training (P	hase 4)	10 days	Wed 1/19/22	Tue 2/1/22							
106	User Acceptance Te	esting (Phase 4)		100 days	Wed 6/1/22	Tue 10/18/22							
		Task			Manual Summary	Rollup ———							
		Split			Manual Summary	,							
		Milestone	<b>♦</b>		Start-only	Е							
		Summary			Finish-only	3							
	oject: WADOL Implementation	Project Summary			External Tasks								
Date:	Fri 8/16/19	Inactive Task			External Mileston	e 💠							
		Inactive Milestone	$\Diamond$		Deadline	+							
		Inactive Summary			Progress								
		Manual Task			Manual Progress								
		1											

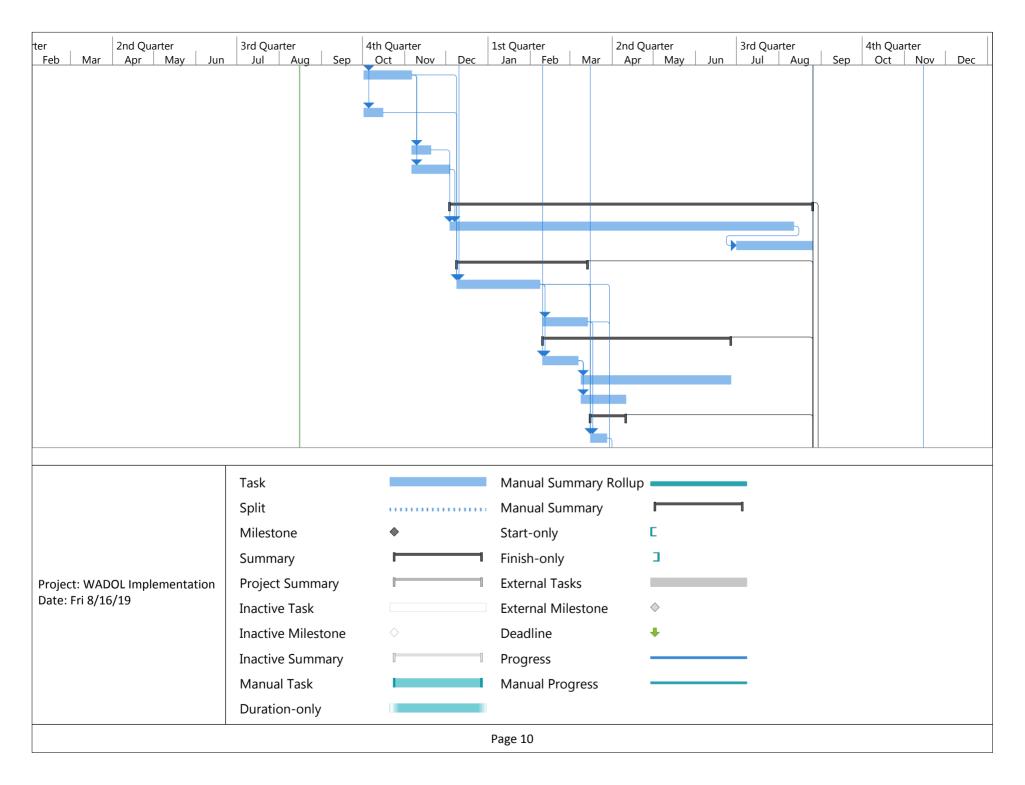
D	Task Name	Duration	Start	Finish	rter		4th Qu	arter		1st Qu	uarter
					Aug	Sep	Oct	Nov	Dec	Jan	
107	UAT (Phase 4 - Iteration 1)	15 days	Wed 6/1/22	Tue 6/21/22		•					
108	UAT (Phase 4 - Iteration 2)	15 days	Wed 6/22/22	Tue 7/12/22							
109	UAT (Phase 4 - Iteration 3)	15 days	Wed 7/13/22	Tue 8/2/22							
110	UAT (Phase 4 - Iteration 4)	15 days	Wed 8/3/22	Tue 8/23/22							
111	Go-Live (Phase 4)	0 days	Tue 8/23/22	Tue 8/23/22							
112	Warranty Support (Phase 4)	40 days	Wed 8/24/22	Tue 10/18/22							
113	Phase 5 (Mobile Solution + 20 Mobile License Types (6%	315 days	Wed 8/4/21	Tue 10/18/22							
114	Requirements Validation (Phase 5)	55 days	Wed 8/4/21	Tue 10/19/21							
115	Licensing/Enforcement Requirements for 20	45 days	Wed 8/4/21	Tue 10/5/21							
	License Types ( $\sim$ 6% of 368 License Types))										
116	Workflow and Security Requirements for 20 License	15 days	Wed 8/4/21	Tue 8/24/21							
	Types										
117	Reporting Requirements (Phase 5)	20 days	Wed 8/25/21	Tue 9/21/21							
118	Mobile Requirements	20 days	Wed 9/22/21	Tue 10/19/21							
119	Enhancements Design and Development (Phase 5)	140 days	Wed 9/22/21	Tue 4/5/22							
120	Reporting Requirements (Phase 5)	40 days	Wed 9/22/21	Tue 11/16/21							
121	Mobile Development	120 days	Wed 10/20/21	Tue 4/5/22							
122	Mobile Form Development	25 days	Wed 10/20/21	Tue 11/23/21							
123	Solution Configuration (Phase 5)	75 days	Wed 10/6/21	Tue 1/18/22							

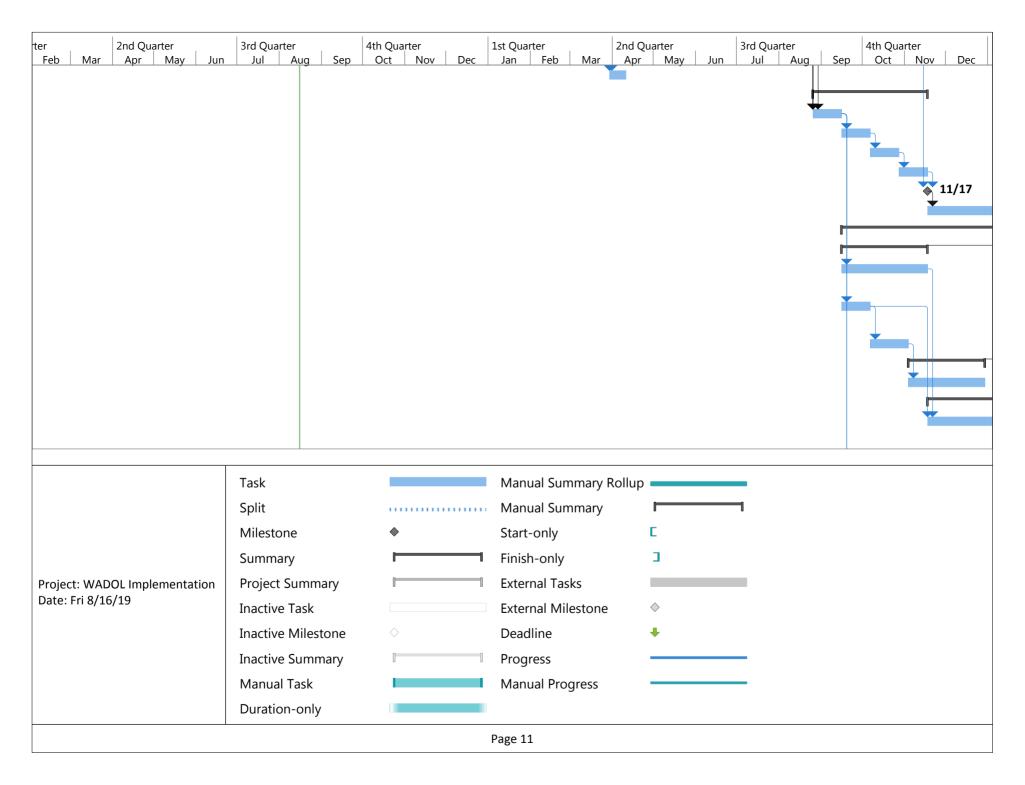


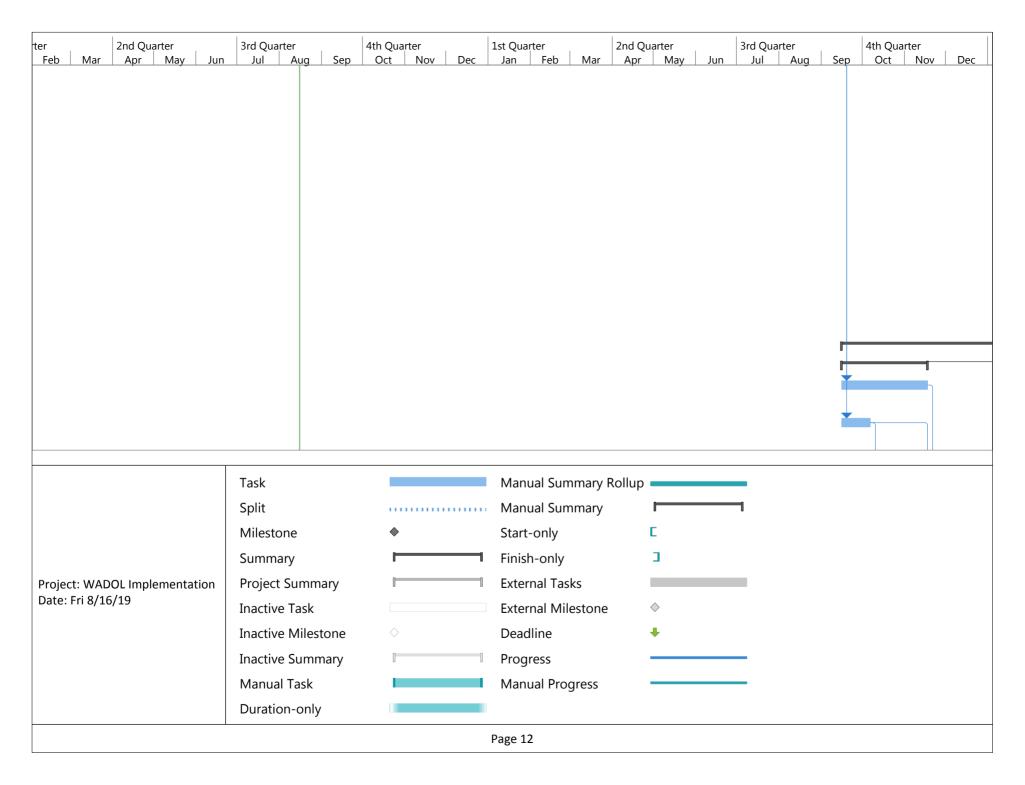
D	Task Name	Duration	Start	Finish	rter		4th Qu	arter		1st Qu	uarter
					Aug	Sep	Oct	Nov	Dec	Jan	
124	Licensing/Enforcement/Workflow/Security	50 days	Wed 10/6/21	Tue 12/14/21							
	Configuration										
125	Letters Configuration	25 days	Wed 12/15/21	Tue 1/18/22							
126	Mobile Configuration	25 days	Wed 10/20/21	Tue 11/23/21							
127	Data Migration (Phase 5)	120 days	Wed 12/15/21	Tue 5/31/22							
128	Data Mapping Document	20 days	Wed 12/15/21	Tue 1/11/22							
129	Develop Data Conversion Script	100 days	Wed 1/12/22	Tue 5/31/22							
130	Migrate Documents	30 days	Wed 1/12/22	Tue 2/22/22							
131	Training (Phase 5)	25 days	Wed 1/19/22	Tue 2/22/22							
132	ETK-R Train-The-Trainer User Training (Phase 5)	10 days	Wed 1/19/22	Tue 2/1/22							
133	Mobile Train-The-Trainer User Training	10 days	Wed 2/2/22	Tue 2/15/22							
134	Mobile Administrator Training	5 days	Wed 2/16/22	Tue 2/22/22							
135	User Acceptance Testing (Phase 5)	100 days	Wed 6/1/22	Tue 10/18/22							
136	UAT (Phase 5 - Iteration 1)	15 days	Wed 6/1/22	Tue 6/21/22							
137	UAT (Phase 5 - Iteration 2)	15 days	Wed 6/22/22	Tue 7/12/22							
138	UAT (Phase 5 - Iteration 3)	15 days	Wed 7/13/22	Tue 8/2/22							
139	UAT (Phase 5 - Iteration 4)	15 days	Wed 8/3/22	Tue 8/23/22							
140	Go-Live (Phase 5)	0 days	Tue 8/23/22	Tue 8/23/22							
141	Warranty Support (Phases 5)	40 days	Wed 8/24/22	Tue 10/18/22							

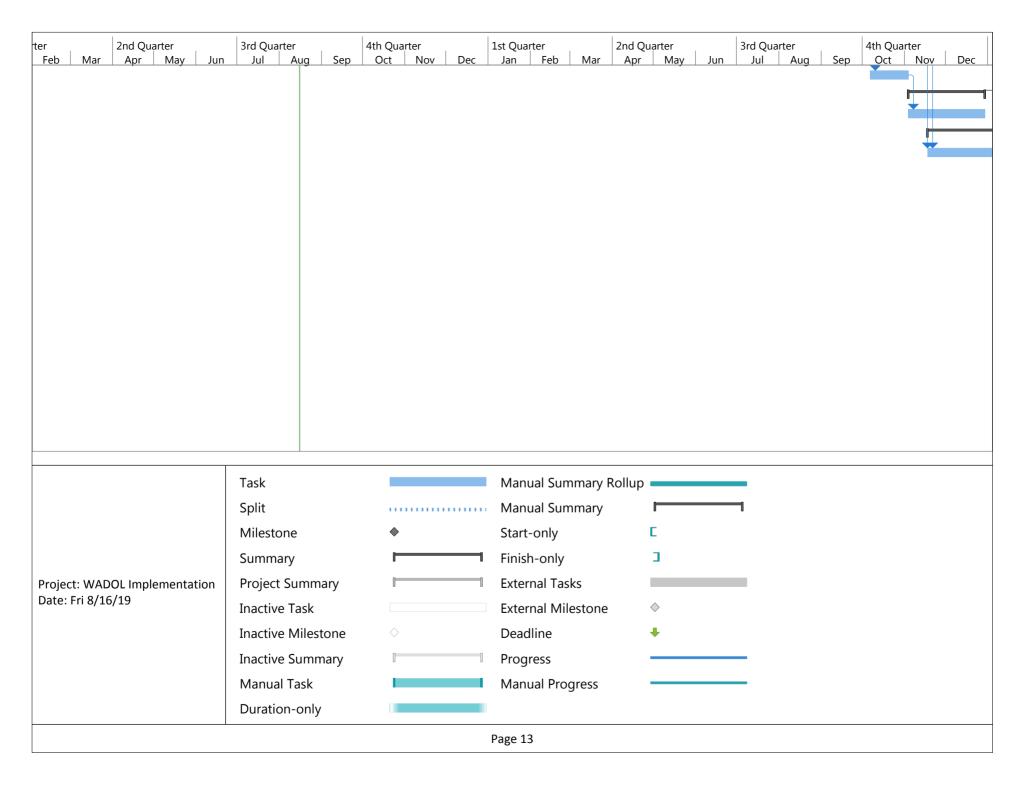


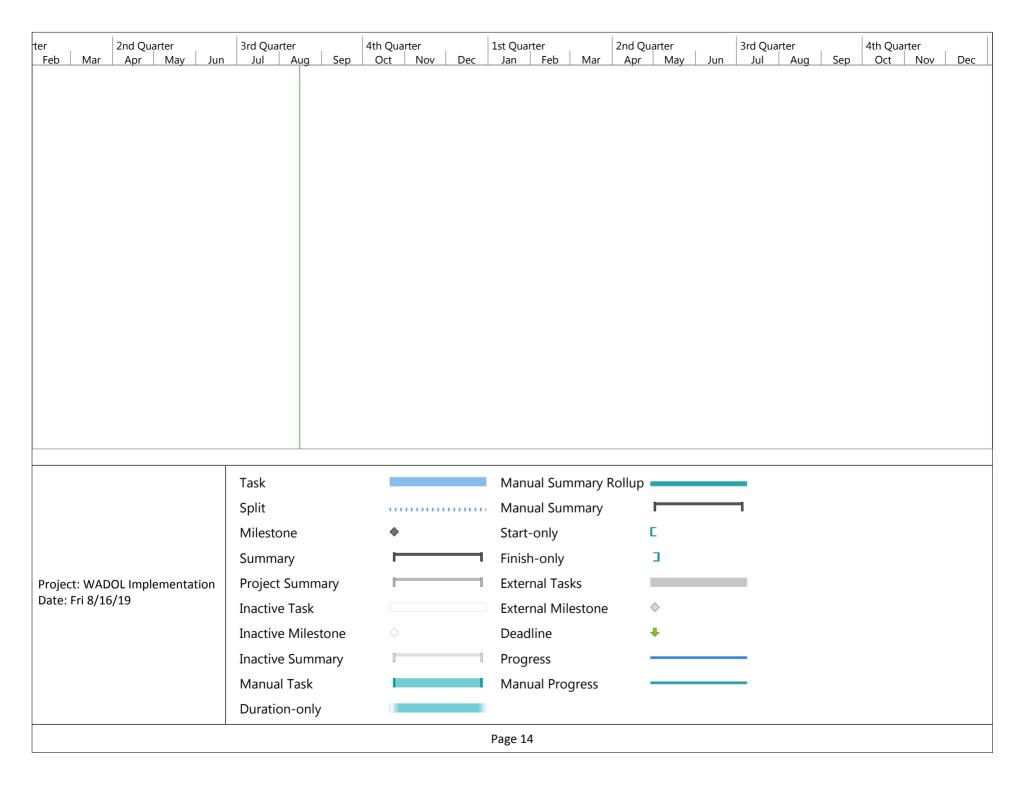


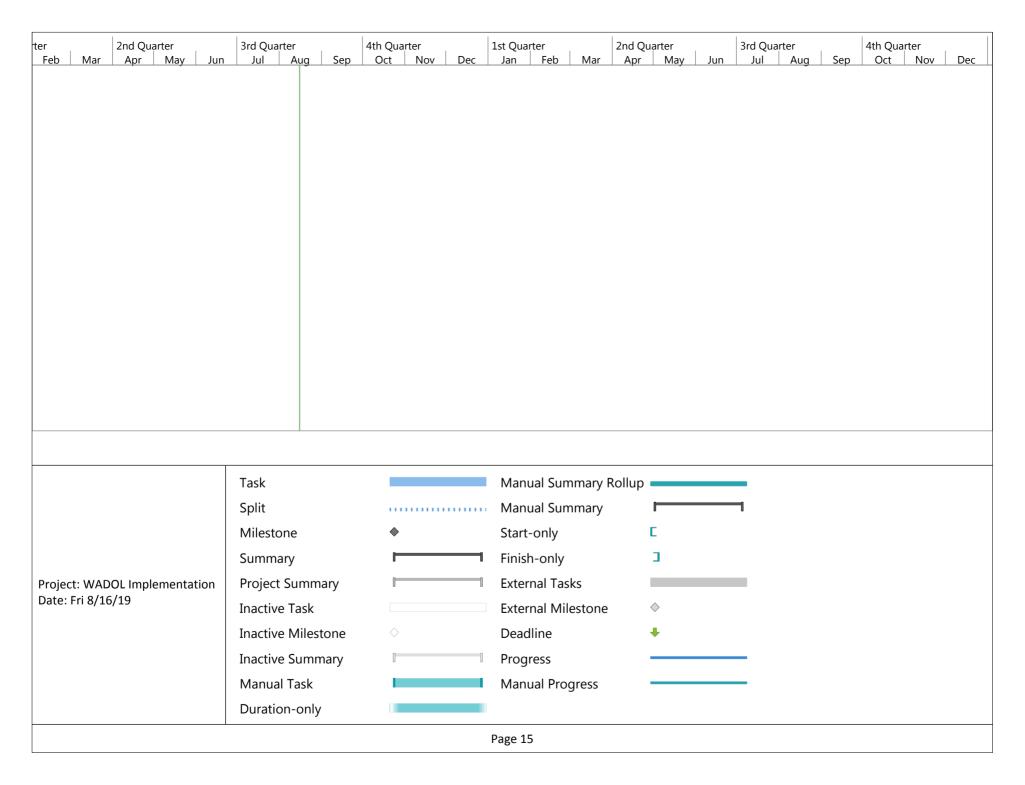


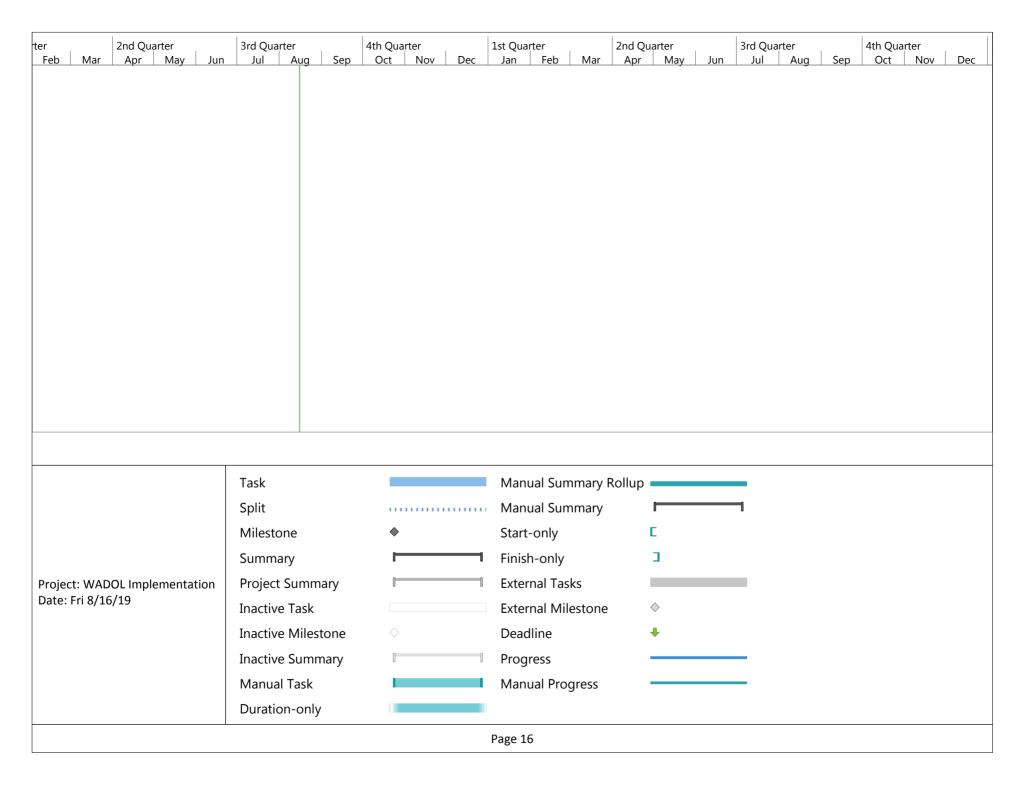


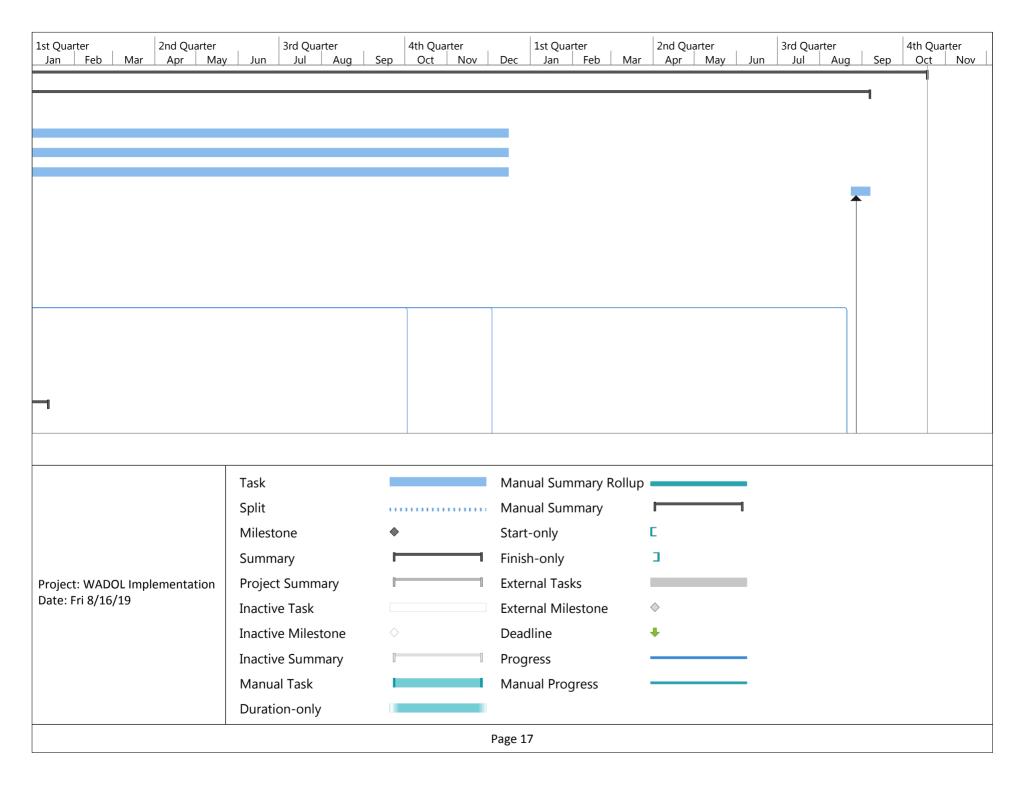


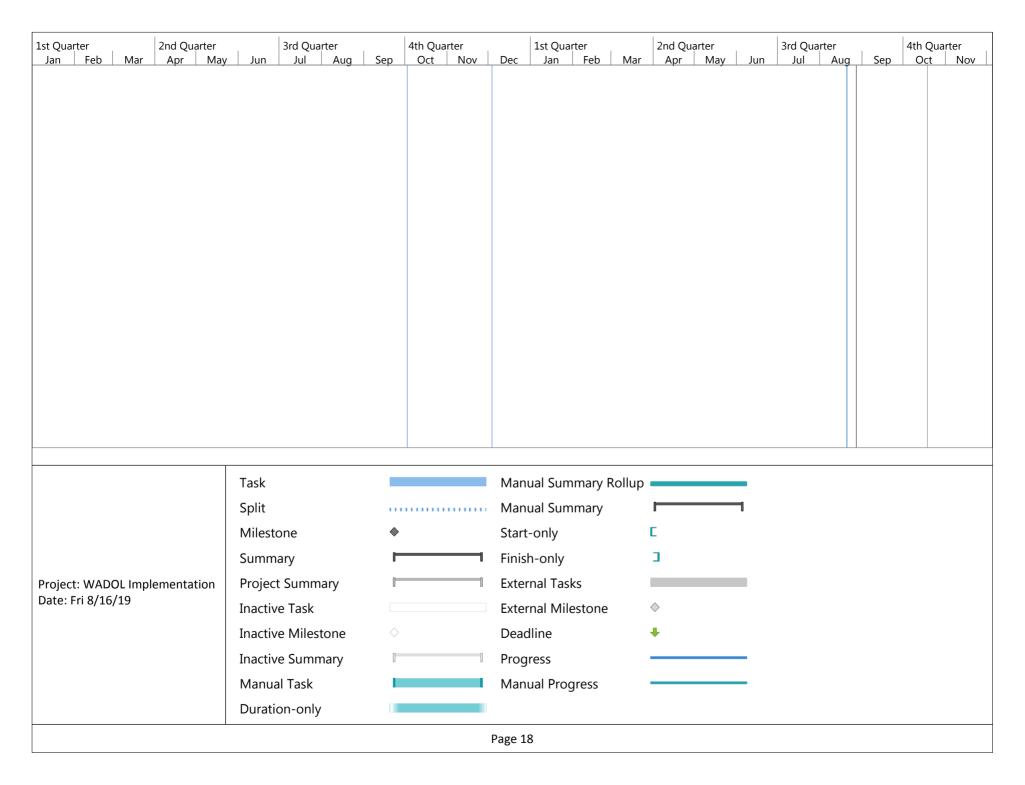


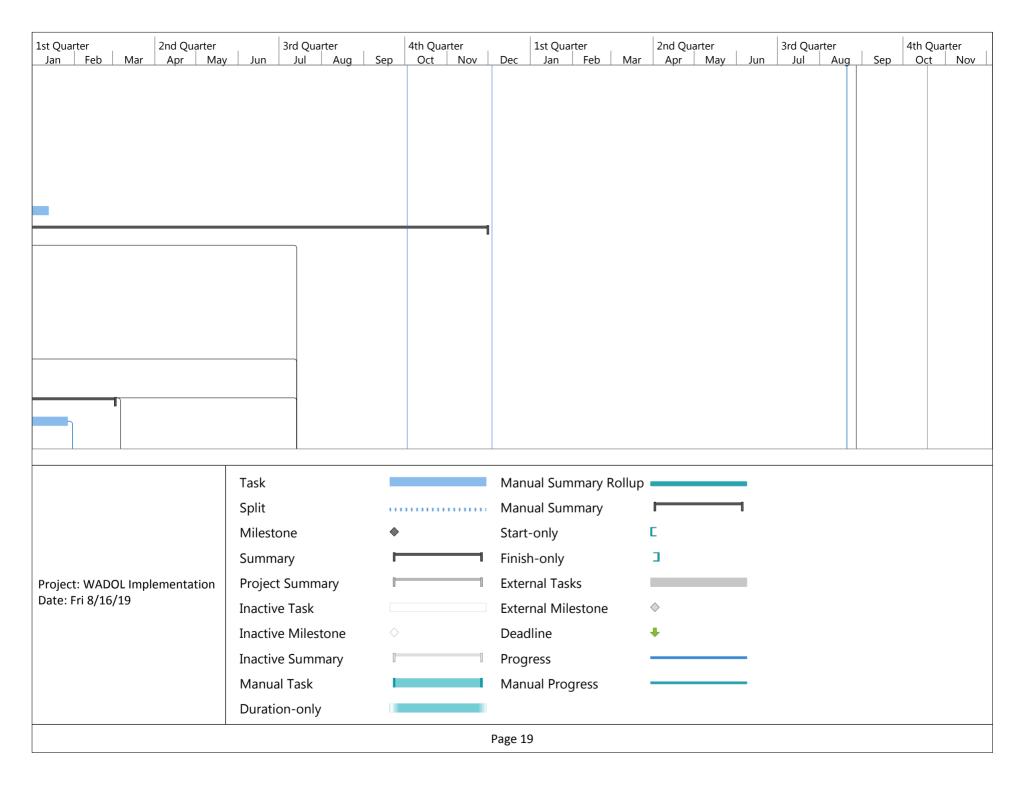


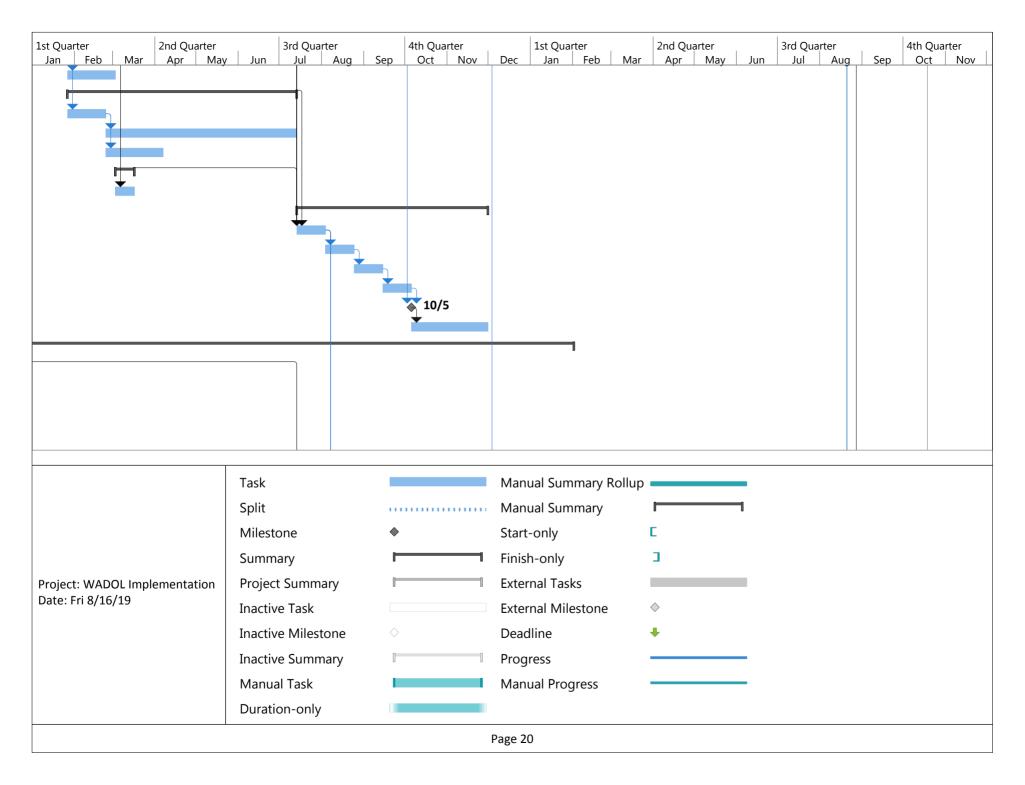


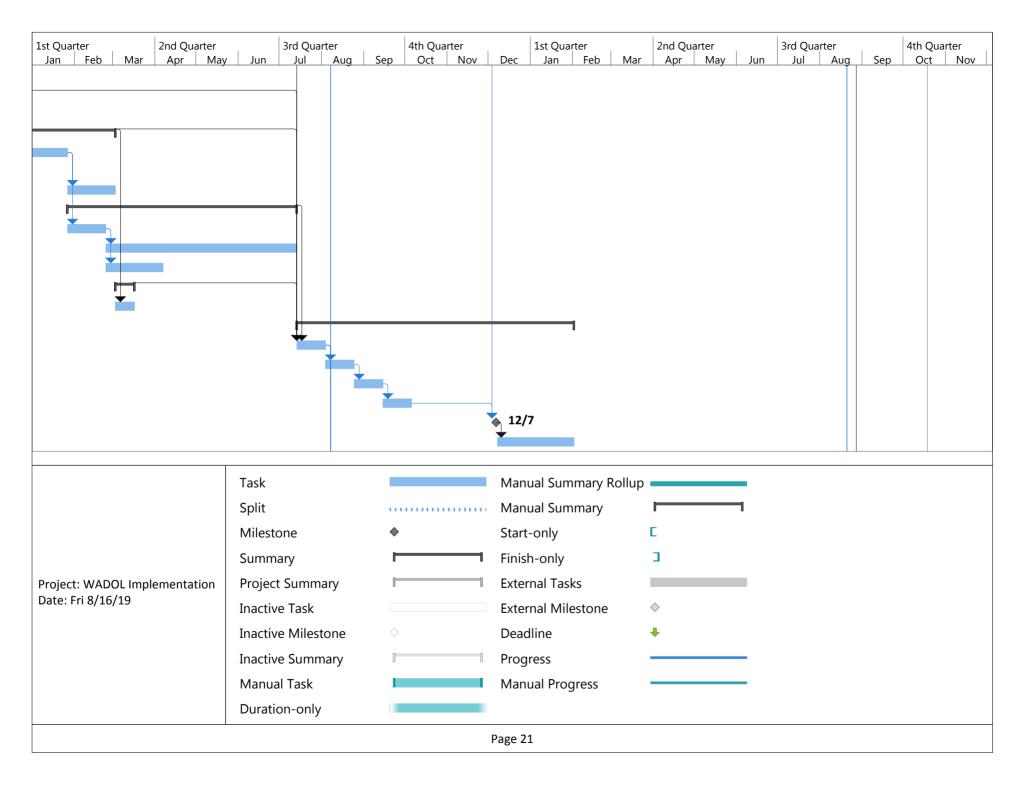


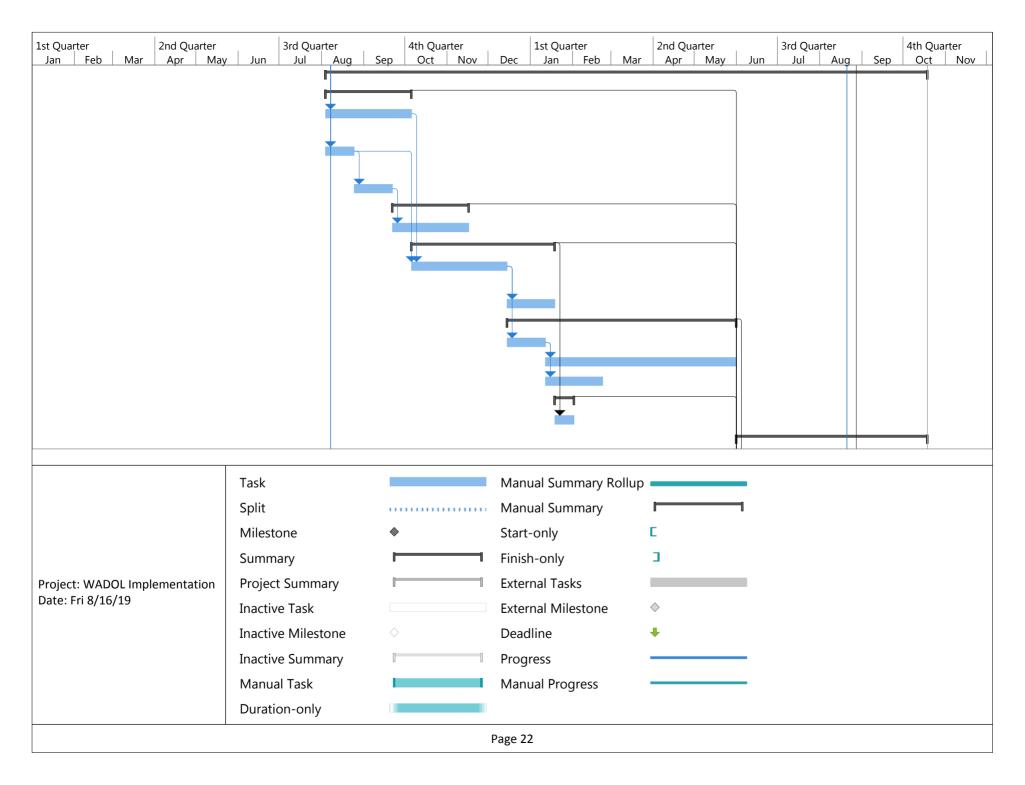


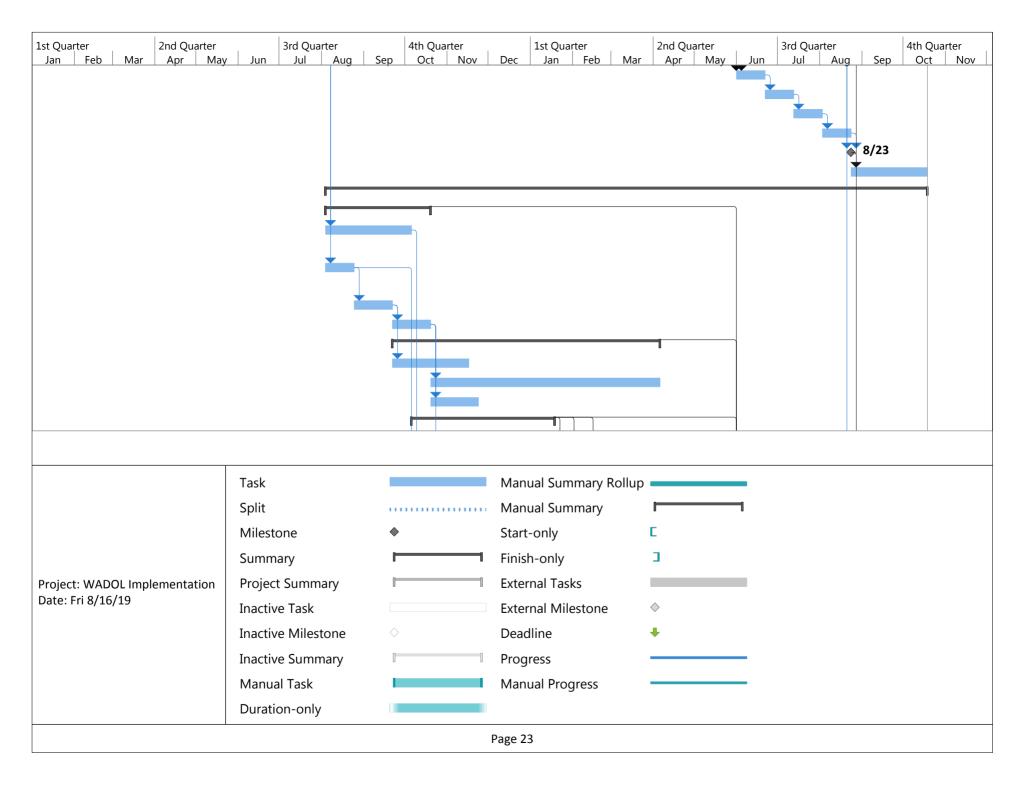


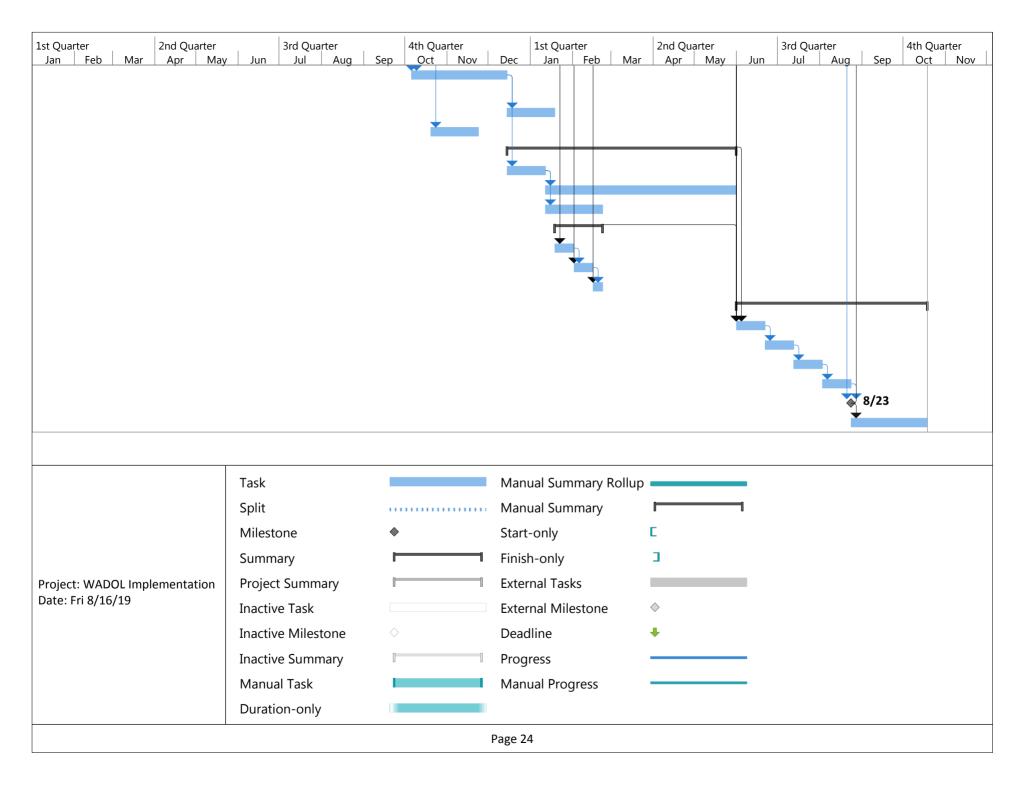












# Transition Plan [PROJECT NAME]

VERSION: 0.00







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SUPPORT INFORMATION

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# 1 Overview and Document Purpose

This document details the plan to transition a system to the Production Environment, and to Operational Support as applicable. If a system is transitioning to MicroPact Support, the details of that transition plan will be included in this document.

At MicroPact, transitioning projects to Product Operations is a process that is supported via our web based tools. The majority of the process is described, and tracked, via our web based team collaboration tools, which include Transition References, Transition Checklists, Transition Queues, Collaboration Sessions, etc. This Document provides a summary to be used when an external reference document is needed. This document must be updated by the MicroPact Project Manager before using for a System Transition.

### 1.1 Transition Process: From Deployment to Product Support

Process Overview

PROFESSIONAL SERVICES >> PRODUCTION >> 30-60 DAY BURN-IN PERIOD >> TECHNICAL MEETING >> FUNCTIONAL MEETING >> PRODOPS/PRODSOL

The full Transition Process can be found in MicroPact's Collaboration Space (Confluence).

### 1.2 Eligibility for Transition to Product Support

The [Project Name] will be transitioned to Production, and Product Support, according to the Project Master Schedule [Provide Information Below]

The [Project Name] will be determined ready for transition by the Project Manager, Key Stakeholders, working with MicroPact PS Practice Managers and Product Operations.



# 2 Transition Eligibility Criteria

- Burn-in period of at least 30-60 days
- Few outstanding tickets (reviewed by Project Team)
- No major work in the pipeline
- Documentation ready
- Limited support required
- Up-to-date Webinspect security scan & ATOTransition to Support

### 2.1 Transition Technical Meeting – Preparation

The bullets below what is expected to be covered in the Technical Review meeting prior to transition. This list is for information purposes, the actual Transition Checklists and worksheets are included in the MicroPact Collaboration Space (Confluence).

- Review of workflow processed by the ETP/Script Objects vs. defined in custom Framework.
- Brief walk-through of all system-configuration tables.
- Code Spot Check: Report complexity & Advanced Searches
- Code Spot Check: Pages/JavaScript complexity
- Mid-to-deep dive into unusual structures or functionality
- Review of naming conventions, code documentation and clarity
- Interfaces (web services, APIs, file uploads, etc)
- Custom/external libraries
- Timers/Scheduled jobs
- Special hosting/app server/DB server conditions
- Database triggers, stored procedures, and other "behind the scenes" behavior.
- Review of discrepancies between configurations in various environments
- Review of security concerns, including the use of SQLFacade and other secure methodologies.



# 3 Transition Logistics

The Transition information below is provided to MicroPact Practice Management and MicroPact Production Operations for processing.

## 3.1 Project Identification

Project Name	<project name=""></project>
Client	<client></client>
Project Manager	<this is="" you=""></this>
Production Date	<go-live date=""></go-live>
Project Charge Code	<billing code=""></billing>

### 3.2 Stakeholder Contact Information

Identify here, the client stakeholders that should be informed of the project's completion and transition. This includes both "business stakeholders" and IT contacts. If needed, add more rows to this table and specify title accordingly.

Client Information		
<b>Business Contact - Primary</b>	Name:	
	Address:	
	City, State Zip:	
	Phone Number(s):	
	Primary Email Address:	
	Title: <e.g. "business="" "director",="" "project="" analyst",="" etc.="" manager",=""></e.g.>	
<b>Business Contact - Secondary</b>	Name:	
	Address:	
	City, State Zip:	
	Phone Number(s):	
	Primary Email Address:	
	Phone Number(s):	



yst", etc.>
yst", etc.>

## 3.3 Technical Environment Information

1 echnical information			
Production Hosted By? (MicroPact/Client/Other)			
MP Hosted Environment Cleanup	1 ,	LL active environments hosted by MicroPact.  nvironment needs to be maintained post-	
			!
	Туре	OPTICS URL (This is the URL of the corresponding record in	Uı De
	Type	OPTICS URL (This is the URL of the corresponding record in OPTICS)	Ur De (Y
	<b>Type</b> Development		Ur De (Y Ye

Note: All questions below relate to the Production environment (as all lower environments should



match).	
The majority of these details are i do your best to fill out these detail	n PTS. If the client or other entity hosts the Production site, please ls as specifically as possible.
Product Version	<what (or="" entellitrak="" is="" of="" other="" product)="" production<br="" version="">currently using? (e.g. 3.19.0.0.0)&gt;</what>
Application Server	<what "jboss",="" "tomcat",="" "websphere")<="" (e.g.="" application="" does="" p="" server="" software="" the="" use?=""></what>
Database (SQL/Oracle)	<sql oracle="" server="" xxx="" xxxx=""></sql>
Operating System	<fill best="" knowledge="" of="" out="" the="" to="" your=""></fill>
Java Version	<fill best="" knowledge="" of="" out="" the="" to="" your=""></fill>
Web Server (Apache/Other>	<99% of the time, this will be Apache>
Authentication Method(s) (Local/Other)	<does account="" authentication?="" entellitrak="" environment="" for="" method?="" or="" other="" production="" some="" the="" use="" user=""></does>
Custom WAR?	<does as="" custom="" files="" implementation="" implementation?="" of="" part="" production="" the="" utilize="" war=""></does>
Other Customizations	<detail (e.g.="" any="" are="" core="" customizations="" entellitrak="" here,="" implementation="" not="" of="" other="" part="" th="" that="" the="" to="" xxx).<=""></detail>
Additional Notes	<detail any="" aspects="" be="" considered="" here,="" need="" support<br="" that="" to="">the client in their production environment. e.g. "The client hosts their production environment in a "single-sign on context".&gt;</detail>

# 3.4 Project Manager Deliverables

	PM Deliverables		
1	Project Documents? (Yes/No)	<confirm all="" been="" documentation="" has="" here,="" implementation="" in="" optics="" project="" related="" specifications.="" system="" that="" the="" to="" uploaded=""></confirm>	



2	Project Specifications? (Yes/No)	<highlight any="" are="" here,="" production="" project="" relevant="" specifications="" supporting="" system.="" that="" the="" to=""></highlight>		
3	Live in Production 30+ days? (Yes/No)	<confirm 30+="" active="" and="" been="" days.="" for="" greater="" has="" production="" system="" than="" the="" used=""></confirm>		
4	InfoSec Security Scan? (Yes/No)	<before a="" arrange="" environment="" for="" of="" prodops,="" project's="" project.="" scan="" security="" staging="" the="" to="" transitioning=""></before>		
	Forward report to ProdOps	Contact <b>InfoSec</b> ( <u>infosec@micropact.com</u> ) to arrange this. Provide results here (or as attachment to this submission).		
5				
6	Outstanding Development Tickets? (Yes/No)	<confirm 'open'="" and="" are="" are,="" below="" context="" details="" eligible="" for="" here,="" identify="" if="" is="" no="" of="" operations.="" product="" project="" project.="" provide="" still="" the="" there="" this="" tickets="" to="" transition="" why=""></confirm>		
		Ticket # Current Status		
		Proj- This bug is related to the core product and does not require immediate attention.		
		Proj- This ticket is currently being worked and will be finished on MM/DD/YYYY.		
7	Outstanding Enhancements? (Yes/No)	<does active="" any="" backlog,="" currently="" enhancements,="" have="" here="" if="" modifications?="" pending="" planned="" project="" specify="" the="" yes,=""></does>		
8	Special Maintenance?	<detail any="" final="" here,="" information="" is="" meet<br="" required="" that="" to="">customer expectations. e.g. "The client requires regular database backups of Production be provided every month."&gt;</detail>		
9	Clearance Required? (Yes/No)	<specify any="" clearance="" client's<="" employees="" exists="" for="" here,="" mp="" or="" p="" related="" requirement="" security="" the="" to="" whether="" with="" work=""></specify>		
	Type? Who is currently authorized?	system.		
		If "Yes", provide details on the security clearance type and who within MicroPact's team currently possesses access. (This will assist in providing a POC for ProdOps to coordinate arranging like clearances for ProdOps team members).		
	Additional Notes	<specify any="" associated="" here,="" issues="" or="" project.="" system="" the="" unresolved="" with=""></specify>		



### .

# 4 Production Transition Schedule

[COPY FROM MASTER PROJECT SCHEDULE HERE]



# 5 Transition Risks

Transition Risk			Mitigation		
Risk Description	Probability	Impact	Mitigation	Contingency	Owner





# 6 Transition Related Data Migration

This section is to be completed when a Transition Specific Data Migration activity is needed. NOTE: A full Data Migration Plan must be included as part of the Project Lifecycle.

MicroPact will facilitate Transition Related Production Data Migration through supportive operational procedures.

[Specific project related tasks provided here]

- 6.1 The system transition and retirement dates
- 6.2 Data and documents to be preserved
- 6.3 Disposition of remaining data.

### **6.4 Archiving of Lifecycle Products**

Project Archives include the system data, software, and documentation designated for archiving in the Transition Plan. The data and documents from the old system will be transferred for use in the new system or archived.

### 6.5 Exit Criteria

To ensure an orderly shutdown of the business operation, MicroPact will work with key stakeholders to identify specific exit criteria that includes (but will not be limited to):



### Attachment Three: Technical Requirements Traceability Matrix

#### ATTACHMENT THREE

#### **Technical Requirements Traceability Matrix**

### Request for Proposal Number 6249 Z1

Bidder Name:	Tyler Technologies Inc.		
--------------	-------------------------	--	--

Bidders should describe in detail how the proposed system meets the conformance specification outlined within each Technical Requirement. It is not sufficient for the Bidder to simply state that it intends to meet the requirements of the RFP. The traceability matrix must indicate how the Bidder intends to comply with each requirement and the effort required to achieve that compliance.

The traceability matrix is used to document and track the project requirements from the proposal through testing to verify that the requirements have been met. The Contractor will be responsible for maintaining the contract set of Baseline Requirements. This traceability matrix will form one of the key artifacts required for testing and validation that each requirement has been complied with (i.e., 100% fulfilled).

The bidder must ensure that the original requirement identifier and requirement description are maintained from the traceability matrix.

How to complete the traceability matrix:

Column Description	Bidder Responsibility
Req#	The unique identifier for the requirement as assigned by DHHS, followed by the specific requirement number. This column is dictated by this RFP and should not be modified by the Bidder.
Requirement	The description of the requirement to which the Bidder should respond. This language is specified in the RFP and must not be modified by the Bidder.
(1) Comply	Bidder should insert an "X" if the system complies with the requirement. Describe in the response how the system meets the requirement. If the system does not comply with the requirement, the Bidder should address the following:
	4. Capability does not currently exist in the system, but is planned in the near future (within the next few months)

	<ul> <li>5. Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the Bidder's standard capability</li> <li>6. Capability requires an extensive integration effort of more than 500 hours</li> </ul>
(a) Core	Bidder should insert an "X" if the requirement is met by existing capabilities of the core system or with minor modifications or configuration to existing functionality.
(b) Custom	Bidder should insert an "X" if the Bidder proposes to custom develop the capability to meet this requirement. Indicate "custom" for those features that require substantial or "from the ground up" development efforts.
(c) 3rd Party	Bidder should insert an "X" if the Bidder proposed to meet this requirement using a 3rd party component or product (e.g., a COTS vendor or other 3rd party). The Bidder should describe the product, including product name, functionality, and benefits in the response.

#### **TECHNICAL REQUIREMENTS**

The following requirements describe what is needed to support DHHS technical project operations.

Each requirement is identified by the following first three characters:

TEC	General Technical Requirements
STN	Standards Requirements
ERR	Error Handling Requirements
DBM	Database/Data Management Requirements
BKP	Backup and System Recovery Requirements
SEC	Security Requirements
DAC	Data Conversion Requirements
PTT	Production, Test and Training Requirements
INT	Interfaces/Imports/Exports Requirements
PER	System Performance Requirements

DOC	System and User Documentation

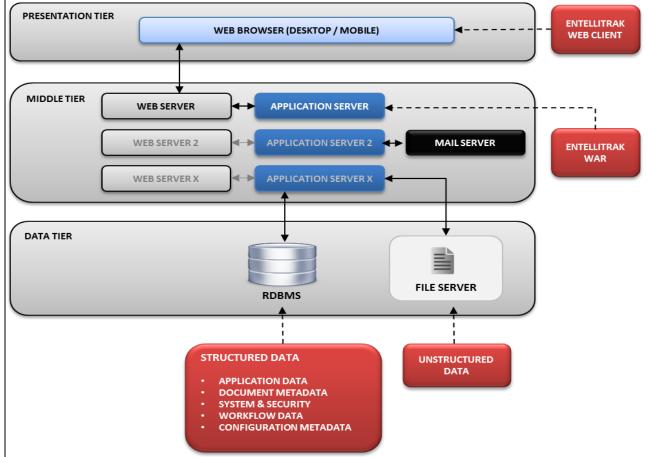
#### General Technical Requirements

This section presents the overall technical requirements that apply to the software. Describe in the response how the system meets the requirement.

Req#	Requirement	(1) Com ply	(a) Core	(b) Cust om	(c) 3rd Party
TEC-1	Provide a description and diagram of the technical architecture. Include all database/web/networking hardware, software, tools, etc. Indicate where the system is hosted. Indicate if any components are needed on the client and/or loaded on servers, etc.  DHHS envisions one domain to be hosted for all applications.	x	x		
	Currently, online renewal applications for individuals and businesses subject to the Uniform Credentialing Act are handled by System Automation.  Online initial applications for Nursing and online renewal applications for Long-Term Care are submitted via Nebraska Interactive.				

Response: At its core, the Entellitrak platform is a Java application that runs inside any standard Java Enterprise Edition (EE) application server or lightweight Servlet container such as Apache Tomcat. Entellitrak is built in Java, making the system compatible with leading operating systems (such as Windows, Unix, Linux), database servers (such as Oracle, SQL Server), all J2EE Application servers, and capable of integration and interoperability across internal and external data sources.

Entellitrak employs a standard three-tier architecture. For Entellitrak's models and corresponding business services, Plain Old Java Objects (POJOs) are used to keep the Application Programming Interface (API) lightweight, reusable, extensible and not bound to any heavy technologies. Instead, industry-standard open source libraries and technologies from respected sources such as Apache and JBoss are used to provide common functionality.



In the presentation tier, the Entellitrak user interface is a pure thin client allowing all capabilities of the platform to be accessed through a standard Web browser. The Entellitrak Web client is developed to be cross-browser compliant as well as accessible in compliance with Section 508 accessibility standards.

On top of the system architecture, Entellitrak employs a standard Model 2 Model-View-Controller (MVC) design pattern for organizing the software components for presentation. MVC organizes an application into three (3) separate layers:

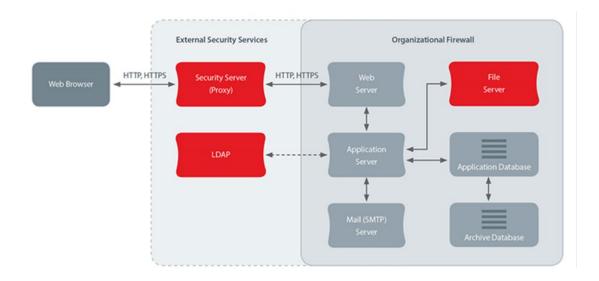
- 1. *Model:* The Application Model provides data representation and business logic; in other words, the model encapsulates core application data and functionality. It is represented by Services Layers, Business Layers, and the Data Layer.
- 2. Views: The Application Views provide data presentation and user input. Views obtain data from the model and present it to the user.

Represented by Java Server Page (JSP) and Servlets to generate the view.

3. Controller: The Application Controller provides request dispatching and control flow; in other words, the controller receives and translates input to requests on the model or the view. It is not limited to the solution, but can be extended to integrate with third-party tools, APIs, and Object Exchange Model (OEM).

In the middle tier, Entellitrak logically deploys to an application server and requires a database server. These elements of the logical deployment work together to process user/client requests. The Web server accepts Web requests and forwards to the application server to processes the client request. Depending upon the

nature of the request, the application server communicates with the database server for data transactions, the mail server for sending and receiving messages, and the file server for storing documents when the Entellitrak Document Management Module is enabled. If the application is configured to use external security services for authentication (as described in System Administration) then the Web server and application server will interact with the appropriate service as shown in the figure below.



LOGICAL DEPLOYMENT WITH EXTERNAL SYSTEM DEPENDENCIES.

In the data tier, standard relational database management systems (RDBMS) are used to store the structured data managed by Entellitrak for an application. Industry-standard database engines such as Oracle and Microsoft SQL Server are supported. Additional standard file storage technologies are used in conjunction with Entellitrak's native document management to provide flexible storage options for unstructured data.

From the ground up, Entellitrak is built upon a powerful and extendable execution environment that is platform independent. Both the architecture and deployment of the Entellitrak platform were designed to be lightweight to support both simple deployments from a single server to complex deployments for high availability and clustering.

Req#	Requirement	(1) Com ply	(a) Core	(b) Cust om	(c) 3rd Party		
TEC-2	Describe how the system is responsive to mobile technology and works with mobile devices such as smart phones or tablets.	Х	Х				
Response: 1	yler offers a mobile module as a seamless, and optional, part of the Entellitrak-Regulatory (ETK Regulatory)	solutio	n. The	mobile			
-	ws for the configuration of mobile screens.						
TEC-3	Describe any third party components that are proposed as part of the system, i.e. using Crystal Reports as a reporting tool.	X			X		
Response: 1	yler proposes Twilio, Melissa, and Twain plugin (used for the eScan module). Report Builder is Jasper repor	rts.					
TEC-4	Describe how the system is designed so that business rule parameters and code lookup tables can be easily updated without changing the overall application program logic.	Х	x				
Response: Tyler has designed the system to be a highly configurable application that allows organizations to tailor data elements, data entry forms, instructions, terminology, workflow, and business rules throughout the application to client-specific requirements for both increased comprehension and ease of use without the need for custom programming on the Entellitrak source code. The Entellitrak Enterprise Tracking Process (ETP) engine provides the capability of defining notifications, data dependencies, and business rules throughout the application.							
TEC-6	Describe the upgrade and maintenance process for the system. Downtime and impact to the users should be minimized.	Х	Х				
Response: The Entellitrak platform releases alternating major and minor updates on roughly 6-week cycle, i.e., 1 major release per quarter. Additional releases may be produced as required. All bug fixes are included as part of the standard maintenance. Downtime is up to the individual customer to decide when to upload new versions of the product.							
TEC-7	Describe any impact on customizations made to the system for upgrades and maintenance processes. Downtime and impact to the users should be minimized.	Х	х				
Response:	Customizations and configurations are done at the application level, rather than the core level of the code,	so upgi	rades ar	nd			
•	e are not impacted.	, 0					
1							

Req#	Requirement	(1) Com ply	(a) Core	(b) Cust om	(c) 3rd Party			
TEC-8	Describe any redundancy built into the system to limit any downtime.	Х	Х					
Response: Tyler offers two hosting options – hosting with the Tyler data center, or via Amazon (AWS). With either option, Tyler provides back-up facilities to maximize uptime. With our Tyler hosting center, Tyler offers 99.9% uptime, regular maintenance notwithstanding.								
TEC-9	Describe how the system has the ability to share data securely, including importing and exporting of data to/from other application software tools, such as a Microsoft Excel file, XML, comma separated value (csv) file, etc.	Х	Х					
·	The ETK Regulatory solution can provide for encrypted data exchange through CSV, Excel, and other commo	n meth	ods. XI	ML wou	ld			
TEC-10	Describe how the system has the ability to archive data and documents per the DHHS' required record retention schedules, which provides different retention periods for different document types. Describe the method and ability to adjust to changes in the retention schedule.	x	x					
-	The ETK Regulatory solution places active records into a closed status for cases and tasks that have been co	mplete	ed, whic	h for al	l			
intents and	purposes "archives" them. Records are purged according to customer data retention requirements.							
TEC-11	Describe how the system has the ability to provide audit information on all data accessed or changed within the system.	Х	x					
Response: Entellitrak provides comprehensive system logging that collects and preserves a complete audit history on every action and record in the system. This read-only audit log tracks all data entry, modification, and update actions. These actions are tracked by user identification; the user's IP address, the actions taken, the data entered, accessed or modified; and the date and time of the actions. The administrator can manage and maintain audit logs that may be kept on the application for as long as required. Only the system administrator has the capability to archive audit logs. Archived audit logs are stored in a condensed format and can be retrieved at any time.  The Entellitrak data retention capability can be configured to match any record retention policies, and to archive and store any required records.								
TEC-12	Describe how the system allows multiple users to use the software applications and database concurrently.	Х	×					
			•	•				

Req#	Requirement	(1) Com ply	(a) Core	(b) Cust om	(c) 3rd Party					
Response: The ETK Regulatory application is highly scalable, to allow users to work on multiple systems concurrently. The ability to use multiple										
systems will be limited by the users' internet access.										
TEC-13	Describe how the system is scalable and flexible enough to accommodate any changes required by the DHHS, or by any federal statute, federal mandate, federal decision or federal policy.	Х	Х							
enterprise ap	Response: The Entellitrak platform is designed to horizontally scale by employing industry standard clustering and load balancing techniques. Performance of enterprise applications are dependent on numerous factors including, but not limited to, user load, data density, integration points, network configuration, hardware specifications and application usage scenarios.									
load of 5,000 should levera	The Entellitrak platform has been load tested for up to 20,000 concurrent users, and successfully deployed for multiple large-scale applications with a concurrent user load of 5,000 concurrent users. The Entellitrak platform can support increased number of users via proper architecture, deployment and tuning. The applications should leverage Entellitrak's open architecture, employ design principles such as bounded context and enterprise integration patterns. Proper sizing of hardware, schema design, data portioning, indexing and software tuning are the key factors for such large deployment success.									
TEC-14	Describe how the system is able to scan, attach, and store different document types (pictures, documents, PDF file, etc.) within the system.	X	x							
attachment a upload them documents fr sent and save uploaded, the	Response: Tyler offers the eScan Module to transfer large quantities of paper forms into Entellitrak. eScan provides a one-step scanning solution for document attachment and management within the Entellitrak workload record. eScan allows workers to scan in faxes or secure email documents, convert them to PDF, and upload them directly into a case file from their workstation. These documents can be downloaded with a simple click of a button. eScan facilitates the import of legacy documents from open cases into the main Entellitrak system, so that all previous cases can be archived and tracked. eScan automatically generates an audit log, sent and saved to the Entellitrak system. The log captures details about the upload including the username, time uploaded, selected case(s), number of documents uploaded, the respective number of pages associated with each document, and the filename of each document uploaded to the selected case.									
TEC-15	Describe how the system has the ability to generate reports and ad hoc queries without performance impact to user access or system response time.	X	X							

Req#	Requirement	(1) Com ply	(a) Core	(b) Cust om	(c) 3rd Party		
Response: Tyler's solution provides the ability to generate reports and queries as standard functionality. Impact to user access or system response time will depend upon the end user's equipment.							
TEC-16	Describe the help desk operations and support that will be provided with the system.	Х	Х				

Response: For in-system support, Entellitrak comes with an online Help Module that provides ongoing training and support to users of the application. This fully asynchronous rich internet module allows the State to publish, manage, and review help topics in customizable Web pages. Users can manage the hierarchy of topics, add pages to a topic, edit pages, and add graphics and screenshots to pages. Additionally, users can export and import pages, search for a page using full-text search, and manage pages nodes within the TOC (table of contents) tree with either drag-and-drop or cut/copy/paste operations. Users create pages using an integrated rich text editor. This editor provides the capability to format and create content such as defining headers, defining bulleted lists, inserting images, and linking to other help content. In addition to the Web-based user interface, all help content can be exported to a PDF document, allowing help content to be distributed and available offline.

Additionally, Tyler provides Tier 3 & Tier 4 Customer support M – F, 8am to 8pm (ET) via toll-free number and email. Access to regular software product releases and patches. Production bug fixes and access to Tyler's "OPTICS" ticketing system are all included in the annual Support & Maintenance license.

#### Standards Requirements

DHHS currently operates its computer system in compliance with many technology and operational standards. These standards originate from internal development, industry best practices and governmental mandates. The Bidder should describe how all applications operate in compliance with these standards and practices.

Req#	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party			
STN-1	If web-based system applications are required, describe what industry standard browsers are supported by the system. If the system requires additional components, describe the technical details of those components.	Х	Х					
	Response: The core ETK Regulatory product does not require any client side software. The solution works with any web browser. The eScan module requires a Twain plugin.							
STN-2	The system must store data in federally compliant data centers residing within the continental United States of America.	Х	Х					
Response: Tyler offers FedRAMP Moderate certified federally compliant data centers that are USA-residing, either through Tyler hosting, or through our hosting partner – Amazon Web Services (AWS).								
STN-3	All data is the property of DHHS, and DHHS will retain the exclusive rights of use now and in perpetuity.	Х	Х					
Response: Acknowledged and comply.								
STN-4	The system must comply with accessibility requirements described in 45 CFR 85 and with State of Nebraska accessibility requirements located at: <a href="https://nitc.nebraska.gov/standards/2-101.pdf">https://nitc.nebraska.gov/standards/2-101.pdf</a> .	Х	Х					

		(1)	(a)	(b)	(c)			
Req#	Requirement	Com	Cor	Cust	3rd			
		ply	е	om	Party			
Response: Acknowledged and comply. Tyler has reviewed the accessibility requirements described in 45 CFR 85 and the State of Nebraska accessibility requirements, and finds that the bulk of these requirements are from the older 508 standards, which have been superseded by the Revised 508 Standards. Tyler complies with the Revised 508 Standards including WCAG 2.0 Level A and AA. These standards go beyond the statutes referenced in the document in Section 3.  Tyler understands the importance of designing, developing, and distributing software applications that are compliant with Rehabilitation Act - Section 508 accessibility requirements. All base applications developed by Tyler, including Entellitrak, are compliant with Section 508 accessibility requirements. A copy of a completed Entellitrak Voluntary Product Accessibility Template (VPAT) can be found at <a href="http://www.micropact.com/508/Entellitrak-vpat/">http://www.micropact.com/508/Entellitrak-vpat/</a> .								
STN-5	The system must comply with the sub-parts of Section 508 of the Americans with Disabilities Act (ADA), and any other applicable State or federal disability legislation. Refer to <a href="http://www.ada.gov/508/">http://www.ada.gov/508/</a> .	Х	Х					
Rehabilitat accessibilit	Acknowledged and comply. Tyler understands the importance of designing, developing, and distributing software application Act - Section 508 accessibility requirements. All base applications developed by Tyler, including Entellitrak, are completely requirements. A copy of a completed Entellitrak Voluntary Product Accessibility Template (VPAT) can be found at <a href="mailto:micropact.com/508/Entellitrak-vpat/">micropact.com/508/Entellitrak-vpat/</a> .				with			
STN-6	Describe how the system complies with digital signature requirements described in the Nebraska Digital Signatures Act, and all other applicable legal requirements in Nebraska for digital signatures. Refer to <a href="http://www.sos.ne.gov/rules-and-regs/regsearch/Rules/Secretary">http://www.sos.ne.gov/rules-and-regs/regsearch/Rules/Secretary</a> of <a href="https://state/Title-437.pdf">State/Title-437.pdf</a> for definition and standards in Nebraska.	х	Х					

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
Response	e: Comply. Tyler digital signatures and communication occur through a FIPS 140-2 compliant Transport Layer	Securit	ty (TLS)	connec	tion
utilizing 2	256-bit AES Encryption. Connection to the Authentication Mechanism occurs once the application server cer	tificate	is valid	ated as	being
signed by	a Trusted Third-Party Certificate Authority. Please note some of the items listed in the link referenced woul	d be no	t applic	cable. T	yler
would be	happy to provide our InfoSec Specialist to discuss items in detail with the State.				
STN-7	The system must comply with all HIPAA and other statutory, regulatory, and policy requirements for protected health information. Refer to <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a> .	x	Х		
Response	e: Tyler complies with HIPAA and related policies.	1	l	•	
STN-8	If the system requires client software to be installed, describe how the system ensures that all software used for the system can be distributed, installed and configured in an unattended "silent" manner.	Х	Х		
Response	e: As mentioned previously, the only installation is the Twain plugin for eScan. When the user tries to eScan,	it will r	romnt	thom to	
	e. As mentioned previously, the only installation is the rivalli plught for escall. Which the user thes to escall,	it will b	nompt	tileili to	)
•	d the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface	•	•		)
•		•	•		)
•		•	•		
download	d the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface.  Current DHHS policies prevent users from making administrative changes and downloading software locally to their	cing wit	h scanı	ners.	
download	d the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of the plugin may also be pushed out by IT. It is an industry standard piece of the plugin may also be pushed out by IT. It is a	cing wit	h scanı	ners.	
download	d the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin. This plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of software for interface of the plugin may also be pushed out by IT. It is an industry standard piece of the plugin may also be pushed out by IT. It is an industry standard piece of the plugin may also be pushed out by IT. It is a	cing wit	h scanı	ners.	
STN-9 Response	Current DHHS policies prevent users from making administrative changes and downloading software locally to their PC. Describe how the system supports this policy.  e: Only the Twain plugin needs to be downloaded locally. DHHS IT can do this if the user is not allowed to do  Current DHHS policies recommend not storing any data locally in the event that a user's desktop PC needs to be	x so him	X or her s	ners.	
STN-9 Response	Current DHHS policies prevent users from making administrative changes and downloading software locally to their PC. Describe how the system supports this policy.  e: Only the Twain plugin needs to be downloaded locally. DHHS IT can do this if the user is not allowed to do  Current DHHS policies recommend not storing any data locally in the event that a user's desktop PC needs to be reimaged (which deletes locally stored data). Describe how the system supports this policy.	x so him	X or her s	ners.	

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
_					

Response: Entellitrak provides a set of pre-formatted reports that allow State personnel to provide senior staff and management with reports and statistical updates as necessary. In addition, State-specific reports can be configured within the application to support State needs.

Entellitrak also offers a robust report generation and design capability which provides users with the ability to generate and format ad hoc reports. The Entellitrak Report Builder module – included with the Entellitrak-Regulatory offering -- offers these ad hoc capabilities through a user-friendly interface and provides a variety of options for report output including HTML documents, Microsoft Word documents, Microsoft Excel spreadsheets, and PDF documents.

Describe how the system maintains licensed software, including all third-party software, no more than two supported versions behind the latest release, and updated with latest security patches.

Response: The Entellitrak core product is typically updated quarterly with major updates and upgrades. Included in the maintenance license is access to the online Connect website, where updates can be downloaded at the State's convenience. Typically our customers opt to upgrade once per year. Bug fixes and patches may release more frequently, and can be uploaded on the State's schedule.

### **Error Handling Requirements**

The management of the system requires that all occurrences of errors be logged for review and that critical errors be accompanied by appropriate alerts. Authorized users need to be able to query and review the error log and configure the alerts.

Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd		
		ply	е	om	Party		
ERR-1	Describe the error handling functionality.	Х	Х				
Response: Tyler has, in the design and development of Entellitrak, placed significant emphasis on controlling and reporting on data errors. These errors can damage data integrity and negatively impact the accuracy of searches, data retrievals, and reports generated by the system. Enhanced features such as drop-down menus enforce valid data choices and minimize the possibility of spelling errors, formatting errors, and incorrect data selections. Entellitrak also employs extensive data verification and error-checking capabilities to ensure that the entered data is correct and complete, according to specified parameters. Errors encountered during data verification generate intuitive messages that provide the user with information on the condition causing the error and how to correct it. Additionally, Entellitrak automatically tracks data entry, modifications, or update actions using audit logs that can be accessed by the system administrator.							
ERR-2	Describe how the system provides a comprehensive set of edits at the point of data entry to minimize data errors and provide immediate feedback in order for incorrect data to be corrected before further processing (e.g., spell check, zip codes, etc.).	х	х		х		
	In addition to what was stated above in response to ERR-1, the ETK Regulatory product validates responses	based	upon c	lata type	ė.		
Additional	ly, third party software performs address validation.						
ERR-3	Describe how the system ensures all errors are written and categorized to an error log. Describe how the system allows for a user to view, filter, sort, and search the error log.	Х		Х			
Response: Tyler's error log is designed for back-end Tyler developers. A custom one can be built at need. Please note that an audit log is							
internally p	part of the solution today.						
ERR-4	Describe how the system allows for user-defined alerts of errors, including those to external communication mechanisms (e.g., e-mail and text messaging).	Х	Х				

		(1)	(a)	(b)	(c)	
Req#	Requirement		Cor	Cust	3rd	
		ply	е	om	Party	
Response	:: The capability for on-screen error definition is core to ETK Regulatory, and can be configured to the Sta	te's prefer	ence. I	TK Regi	ulatory	
core noti	fication and workflow capability can address external communication via email and/or text messaging.					
ERR-5	Describe how the system provides for the generation of standard and customizable error reports.					
Response	e: Tyler provides a standard/canned report via Jasper.					
ERR-6	Describe how the system includes a comprehensive list of error messages with unique message identifiers.	Х	Х			
Response	e: As addressed in response to ERR-4, the capability for on-screen error definition is core to ETK Regulator	y, and can	be con	figured	to the	
State's p	reference.					
ERR-7	Describe how the system displays errors to the user/operator in real-time whenever an error is encountered.	Х	Х			
Response	: Once configured, the validation errors will pop up on the screen in real-time whenever an error is enco	untered.				
ERR-8	Describe how the system has the ability to suppress error messages based upon user-defined criteria.	Х	Х			
Response	: Tyler's ETK Regulatory solution allows for configurability of error messages, which can be suppressed by	ased upon	user's	role.	1	

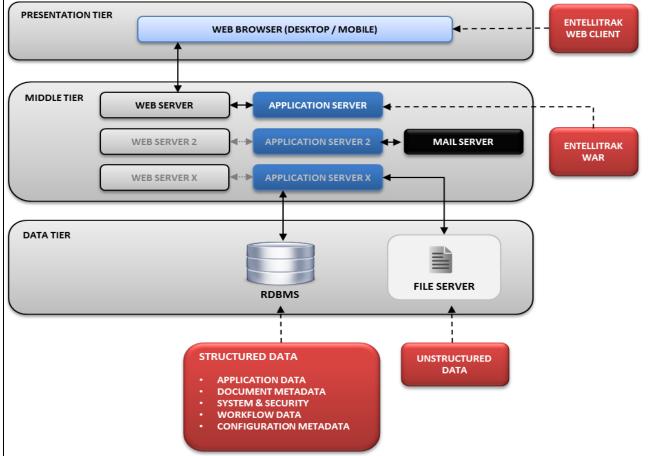
### Database/Data Management Requirements

DHHS requires the benefits inherent with a relational database management system (RDBMS). The accessibility, flexibility and maintainability achieved through normalized data structures are essential to achieving the business objectives outlined in this RFP.

Req#	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
DBM-1	Describe the database architecture, including the database software that is supported by the system.	Х	Χ		

Response: At its core, the Entellitrak platform is a Java application that runs inside any standard Java Enterprise Edition (EE) application server or lightweight Servlet container such as Apache Tomcat. Entellitrak is built in Java, making the system compatible with leading operating systems (such as Windows, Unix, Linux), database servers (such as Oracle, SQL Server), all J2EE Application servers, and capable of integration and interoperability across internal and external data sources.

Entellitrak employs a standard three-tier architecture. For Entellitrak's models and corresponding business services, Plain Old Java Objects (POJOs) are used to keep the Application Programming Interface (API) lightweight, reusable, extensible and not bound to any heavy technologies. Instead, industry-standard open source libraries and technologies from respected sources such as Apache and JBoss are used to provide common functionality.



In the presentation tier, the Entellitrak user interface is a pure thin client allowing all capabilities of the platform to be accessed through a standard Web browser. The Entellitrak Web client is developed to be cross-browser compliant as well as accessible in compliance with Section 508 accessibility standards.

On top of the system architecture, Entellitrak employs a standard Model 2 Model-View-Controller (MVC) design pattern for organizing the software components for presentation. MVC organizes an application into three (3) separate layers:

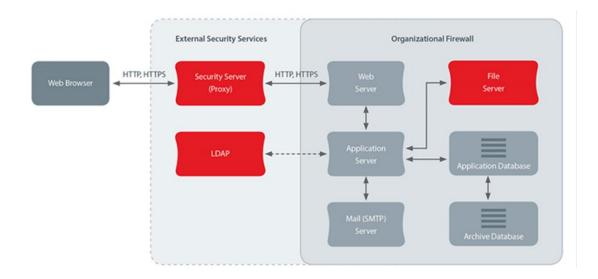
- 4. *Model:* The Application Model provides data representation and business logic; in other words, the model encapsulates core application data and functionality. It is represented by Services Layers, Business Layers, and the Data Layer.
- 5. Views: The Application Views provide data presentation and user input. Views obtain data

from the model and present it to the user. Represented by Java Server Page (JSP) and Servlets to generate the view.

6. Controller: The Application Controller provides request dispatching and control flow; in other words, the controller receives and translates input to requests on the model or the view. It is not limited to the solution, but can be extended to integrate with third-party tools, APIs, and Object Exchange Model (OEM).

In the middle tier, Entellitrak logically deploys to an application server and requires a database server. These elements of the logical deployment work together to process user/client requests. The Web server accepts Web requests and forwards to the application server to processes the client request. Depending upon the

nature of the request, the application server communicates with the database server for data transactions, the mail server for sending and receiving messages, and the file server for storing documents when the Entellitrak Document Management Module is enabled. If the application is configured to use external security services for authentication (as described in System Administration) then the Web server and application server will interact with the appropriate service as shown in the figure below.



LOGICAL DEPLOYMENT WITH EXTERNAL SYSTEM DEPENDENCIES.

In the data tier, standard relational database management systems (RDBMS) are used to store the structured data managed by Entellitrak for an application. Industry-standard database engines such as Oracle and Microsoft SQL Server are supported. Additional standard file storage technologies are used in conjunction with Entellitrak's native document management to provide flexible storage options for unstructured data.

From the ground up, Entellitrak is built upon a powerful and extendable execution environment that is platform independent. Both the architecture and deployment of the Entellitrak platform were designed to be lightweight to support both simple deployments from a single server to complex deployments for high availability and clustering.

			(a)	(b)	(c)				
Req#	Requirement		Cor	Cust	3rd				
	ply	е	om	Party					
DBM-2	Х	Х							
Response:	The ETK Regulatory system allows for many items to be available immediately on-line, such as changes to ι	isers/pe	ermissi	ons/role					
reference o	data, and workflow.								
		1	<u> </u>	I	T				
DBM-3	DBM-3 Describe how the system facilitates data structure changes to accommodate expanding scope, new services, X X changing requirements and legislative mandates.								
enterprise a	Response: The Entellitrak platform is designed to horizontally scale by employing industry standard clustering and load balancing techniques. Performance of enterprise applications are dependent on numerous factors including, but not limited to, user load, data density, integration points, network configuration, hardware specifications and application usage scenarios.								
The Entellitrak platform has been load tested for up to 20,000 concurrent users, and successfully deployed for multiple large-scale applications with a concurrent user load of 5,000 concurrent users. The Entellitrak platform can support increased number of users via proper architecture, deployment and tuning. The applications should leverage Entellitrak's open architecture, employ design principles such as bounded context and enterprise integration patterns. Proper sizing of hardware, schema design, data portioning, indexing and software tuning are the key factors for such large deployment success.									
The system is flexible through configuration for changes.									
DBM-4	Х	Х							

#### Response:

Tyler will utilize its proven **Regulatory Enforcement and Licensing Methodology (REALM)** for this project. Our approach incorporates specialized licensing domain knowledge and technical expertise, backed by industry proven methodologies. REALM is proprietary to Tyler Technologies and has been tweaked and adjusted over the many years of implementation experience leveraging our commercial-off-the-shelf (COTS) solutions. Our customers receive the most benefit from the data-first approach, business process focused involvement, and collaboration the methodology provides.

Traditionally, projects have been characterized as either 'Waterfall', which simply put, is a sequential, linear process of project management, or 'Agile' which is based on short development sprints and is highly effective when requirements are unclear or the dynamics of the business environment demand frequent change. In our experience, Agile is not as effective for regulatory agencies due to heavy staff participation requirement, a well defined set of project requirements and process, and the firm fixed price approach to State-based project delivery.

REALM is an iterative approach of implementing ETK Regulatory that blends and incorporates Agile practices and concepts with the predictability of a defined scope, and is delivered iteratively and with transparency, thus combining the best of both approaches. REALM allows for a more predictable release cycle, and enables frequent feedback loops and constant collaboration, which lowers the cost of change and helps organizations realize the benefits of their investment faster. Our project teams radiate information and encourage inclusion throughout to foster collaboration and offer adaption to feedback where appropriate and possible.

Figure 1: Regulatory Enforcement and Licensing Methodology (REALM) depicts the Phases, Major Tasks, and high-level Activities that occur throughout the project. The image provides a visual progression for the project tasks and will be expanded and elaborated upon throughout the remainder of this Statement of Work.

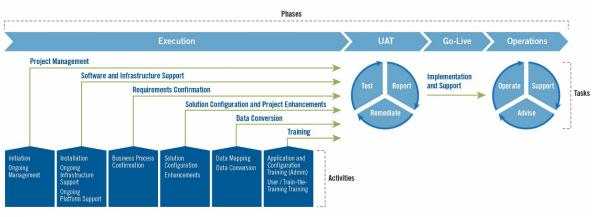


FIGURE 3 - REGULATORY ENFORCEMENT AND LICENSING METHODOLOGY (REALM)

	The key ta	keawavs	of c	our app	roach i	is that is:
--	------------	---------	------	---------	---------	-------------

•	Iterative	Show progress early and often, increasing visibility of the solution and opportunity for feedback early-on.
•	Tailored to the solution	Customized to the ETK Regulatory application, leveraging the power of a data-first mindset and highly configurable solution.
•	COTS focused	Benefiting from the highly-configurable solution and the continuous configuration opportunity to fine-tune configurations through iterations.
•	Adaptive	Able to adapt to customer priorities as they may change over time.
•	Defined Scope	This Statement of Work, and your requirements-baseline, form the definition of the scope of our delivery, eliminating ambiguity.
•	Inclusive	You are included in the process along the way, allowing exposure early and frequently so that your feedback is gained while there's time to adjust.

Tyler Technologies, and future customers, benefit from the lessons that we learn during, and following, our implementation projects as we appropriately adjust and fine-tune our model in the interest of continuous improvement. We will work diligently to equip customer project resources with the knowledge of the COTS solution so that they are informed and ready to collaborate on decisions related to configurations.

ETK Regulatory can be configured or re-configured as requirements and processes evolve over time. The options of the solution configurability will be leveraged during the implementation and continue to be available to the customer after go-live.

The Regulatory Enforcement and Licensing Methodology, at the core, prioritizes three characteristics:



Collaboration – our customer relationships are collaborative partnerships that focus on working closely and consistently together towards the common goal of successfully implementing a quality solution. Our experienced team members will guide the project team through the processes of the implementation, while the customer subject-matter-experts will contribute knowledge and perspectives related to the data, business processes, and requirements

Req#	Requirement			(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
		flowing knowledge trans upon project initiation. I approach, we seek to ob We review artifacts and publicly available inform customer subject-matte interactions will initially and "why" to confirm th begin to share knowledge to become aware of the the-shelf solution as soo We will not wait until transpage customer resour has proven, that engaging	ur methodology encourages and enforces free- sfer, both from and to the customer, immediately Leveraging the Tyler Technologies Data-First stain and begin evaluating legacy data immediately. documentation including statutes, rules, and any lation up-front leading into collaboration with the r-experts to confirm and gain valuable insights. Our focus on the questions of "who", "what", "when" le data, business processes, and requirements. We ge and encourage customer subject-matter-experts configuration capabilities of the commercial-off- long as we introduce the solution to the customer. Saining and user acceptance testing to expose and loces in the solution; we believe, and our experience long and sharing solution knowledge with the locess translates to a better experience and lovelyed				
		customer as efficiently a agile frameworks like SC and engagement with th without introducing imp day-jobs of our public se Business Analyst will wo	thodology aims to provide productive value to our is possible. We effectively leverage components of RUM and Kanban to best facilitate the interactions he business users and subject-matter-experts cossible demands of time away from the important ector customers. Our Project Manager and Lead rk closely with your Project Manager to align the ons, customizations, and data conversion with the second				
DBM-5	Describe how the system	n provides the flexibility to extract and load	d data into standard non-proprietary software	Х		Х	

		(1)	(a)	(b)	(c)				
Req#	Requirement	Com	Cor	Cust	3rd				
		ply	е	om	Party				
Response:	ETK Regulatory provides PDF, Excel, and Word out of the box. Other formats might require customization.			•	•				
DBM-6	Describe how the system maintains an automated history of all transactions, including, but not limited to: date and time of change, "before" and "after" data field contents, and operator identifier or source of the update.	Х	Х						
a complete a actions are t actions. The has the capa	Response: This history is maintained through the ETK Regulatory audit log. Entellitrak provides comprehensive system logging that collects and preserves a complete audit history on every action and record in the system. This read-only audit log tracks all data entry, modification, and update actions. These actions are tracked by user identification; the user's IP address, the actions taken, the data entered, accessed or modified; and the date and time of the actions. The administrator can manage and maintain audit logs that may be kept on the application for as long as required. Only the system administrator has the capability to archive audit logs. Archived audit logs are stored in a condensed format and can be retrieved at any time.  The Entellitrak data retention capability can be configured to match any record retention policies, and to archive and store any required records.								
DBM-7	Describe how the software database conforms to the Open Database Connectivity Standard (ODBC).	Х	Х						
Response: ETK Regulatory functions on either SQL server or Oracle Db, both of which conform to ODBC.									
DBM-8	Describe how the system provides utilities or other tools for administrative users to evaluate data relationships between tables.	Х	Х						
Response: ETK Regulatory provides advanced search and entelliSQL for this functionality.									
DBM-9	Describe how the system prevents corruption or loss of data already entered into the system in the event of failure.	Х	Х						

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party

Response: Tyler performs daily encrypted backups of each system, as well as offsite storage of data. All backed up data is only handled by cleared Tyler employees. Data is replicated offsite to a secure tertiary site. Both transmission and storage of the data is encrypted. Restores are tested on a regular basis, as requests for this occurs frequently. Backups occur nightly, Monday through Friday. Incremental backups occur during the week with a full backup occurring on Friday nights. Archiving occurs on a scheduled basis, and can be customized to meet State's compliance needs.

## Backup and System Recovery Requirements

The system must create backup copies of the software and restore and use those backup copies for the basic protection against system problems and data loss. This requirement refers to all application system files, data files, and database data files. The system should provide a comprehensive and easily manageable backup and recovery process.

The system must have a recovery plan that ensures component failures do not disrupt services. The plan should be completed, implemented, and tested prior to system implementation.

Req#	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
BKP-1	Describe the Backup and System Recovery plan and readiness. Describe the service level agreement on returning the system to service from a backup. Describe the backup retention schedules – daily, weekly, monthly, quarterly, etc.	Х	Х		

Response: Tyler's standard hosting package offers:

Recovery Point Objective (RPO) - Standard "Cold Site"	8 hours
Recovery Time Objective (RTO) - Standard "Cold Site"	24 hours

Tyler offers Warm Site and Hot Site hosting with commensurate RPO and RTO at additional cost as requested by customers.

For backup, Tyler performs daily encrypted backups of each system, as well as offsite storage of data. All backed up data is only handled by cleared Tyler employees. Data is replicated offsite to a secure tertiary site. Both transmission and storage of the data is encrypted. Restores are tested on a regular basis, as requests for this occurs frequently. Backups occur nightly, Monday through Friday. Incremental backups occur during the week with a full backup occurring on Friday nights. Archiving occurs on a scheduled basis, and can be customized to meet State's compliance needs.

				1
BKP-2	Describe all needed hardware, software, and tools, and define all roles, responsibilities, processes, and	\ \		
	procedures. The system should be sufficiently flexible to integrate with existing DHHS capabilities and	Х	Х	
	accommodate future changes.			

Response:

If hosted through Tyler, the only required hardware would be end user's CPU, plus the Tyler ETK Regulatory software and a standard web browser.

Req#	Requirement			(1) Com	(a) Cor	(b) Cust	(c) 3rd
				ply	е	om	Party
BKP-3	Describe the Disaster Recovery Plan. Describe the service level agreement on returning the system back to operational service.			Х	Х		
Response	: Tyler will provide a Disaster Recovery Plan u	ipon contract award. Tyler's standard hosting p	ackage offers:				•
Recovery	Point Objective (RPO) - Standard "Cold Site"	8 hours					
Recovery	Time Objective (RTO) - Standard "Cold Site"	24 hours					
						1	<u> </u>
BKP-4	Describe how backups of the system are able to the system.	b be scheduled without user intervention and without i	interruption to	Х	Х		
Response	: Back-ups are auto-scheduled as part of the s	system implementation.		I	I		
Database	backups are performed in the following man	ner. Incremental backups are scheduled daily ar	nd full backups a	are perf	formed	weekly.	. This
		iarter, a full database backup is taken and archiv	•	•			
this back-	up schedule does not adhere to state standar	rds, we will work with the State to align the back	k-ups as require	d.			

Req#	Requirement		(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party		
Response:	Testing and validation	n is established at the outset of the auto-scheduling at the time of implementation. T	his capa	ability i	s provid	ed via		
ArcServe as	s follows:							
Recovery Point Check								
		Tests for data corruption by mounting the recovery point and running the chkdsk command.  □ Daily Backups						
		Weekly Backups						
		Monthly Backups						
		☐ Custom / Manual Backups						
If validation is required as per contract agreements, the backup solution has the ability to mount the backup and check for consistency after each backup.								
BKP-5	If there is a backup fai	lure or downtime, describe the method and timing of communication to DHHS.	Х	Х				

Ī			(1)	(a)	(b)	(c)
	Req#	Requirement	Com	Cor	Cust	3rd
			ply	е	om	Party

# Response:

Communications typically occur via email, and on the schedule below.

Customer Notifications		
	Server Outage	< 15 minutes after discovery
	Application Outage (Entellitrak)	< 30 minutes after discovery
	Network Outage	< 30 minutes after discovery
	Security Incident Alert	< 30 minutes after discovery
	Security Upgrades/Patches	< 5 business days before scheduled change
	Software Upgrades/Patches/New Releases	< 5 business days before scheduled change
	Software License Renewals	< 30 days before expiration
	Planned Outages (e.g. system maintenance)	< 5 business days before scheduled change

# Security and Audit Requirements

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
SEC-1	Describe the security safeguards integrated into their application and how these safeguards address DHHS security.  Refer, for example, to DHHS Information Technology (IT) Access Control Standard ((DHHS-IT-2018-001B) for specific requirements: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>	Х	х		
ex en w	atform, and hosting environment have undergone and passed 325 separate security controls annually ceeds that of many software systems, and ensures safety and security of the solution. Security safety crypted in transit, and may be encrypted at rest for an additional fee. Robust role-based security is at left. For more information regarding FedRAMP certification, please go to the following Federal websps://www.fedramp.gov/about/	guards placed	includ	e: Data	ı is
SEC-2	The system must comply with Federal, State, and division-specific security requirements including but not limited to:  1. Health Insurance Portability and Accountability Act (HIPAA) of 1996  2. Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009  3. Nebraska Electronic Signature Statute <a href="http://www.nebraskalegislature.gov/laws/statutes.php?statute=86-611">http://www.nebraskalegislature.gov/laws/statutes.php?statute=86-611</a> 4. Privacy Act of 1974  5. 45 CFR 164 Security standards for PHI  6. Office of the National Coordinator's Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health information <a href="https://www.healthit.gov/sites/default/files/nationwide-ps-framework-5.pdf">https://www.healthit.gov/sites/default/files/nationwide-ps-framework-5.pdf</a> Refer to the Nebraska DHHS Information Systems and Technology Security Policies and Standards for more information ( <a href="https://dhhs.ne.gov/ITSecurity">https://dhhs.ne.gov/ITSecurity</a> )  Due to PHI, DHHS will not give access or demonstrate the current system. Our current data systems include System Automation's License 2000 and the federal government's Aspen Central Office.	X	X		

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party

Response: Tyler is HIPPA compliant and follows Federal Security standards via NIST 800-53 R4 and supplemental SPs associated, as well as FedRAMP standards and controls. Tyler undergoes several assessments annually, either at the FedRAMP level and/or State level. Further, Tyler complies with individual State security policies where applicable and contractually obligated.

Tyler is one of only a select few Platform as a Service and Software as a Service providers to receive a GSA FedRAMP accreditation for our internal and network security controls, the security of the Entellitrak product suite, and the physical security controls at the Tyler data center and headquarters -- our facility has a FISMA Moderate clearance as well. In addition to FedRAMP accreditation, Entellitrak has passed numerous certifications and accreditation (C&A) based on NIST 800-53<sup>1</sup>, DIACAP<sup>2</sup> and DCID 6/3<sup>3</sup> standards. These C&As, conducted at FISMA "low", "moderate", and "high security" levels, have resulted in ATO<sup>4</sup>s and Security Assessment Reports (SARs) from a wide variety of agencies, including the DoED. Finally, the Entellitrak platform has been deemed compliant with federal standards for Identity Credential Access Management (ICAM) (PIV and CAC cards).

					4
	Describe how the system meets the DHHS requirements for unique user ID access. Include:				
SEC-3	<ol> <li>Specification on configuration of the unique user ID.</li> <li>How the unique user ID is assigned and managed.</li> <li>How the unique user ID is used to log system activity.</li> </ol>	Х	X		
	4. How the system handles the creation of duplicate user ID accounts.				

<sup>&</sup>lt;sup>1</sup> A publication from the National Institute of Standards and Technology that recommends security controls for federal information systems and organizations.

<sup>&</sup>lt;sup>2</sup> The Department of Defense (DoD) Information Assurance Certification and Accreditation Process

<sup>&</sup>lt;sup>3</sup> The Director Of Central Intelligence Directive 6/3 titled, "Protecting Sensitive Compartmented Information Within Information Systems"

<sup>&</sup>lt;sup>4</sup> Such an ATO may be granted by an agency to a Cloud Server Provider, such as MicroPact, after an independent assessor completes a SAR that analyzes how the vendor has implemented the agency's security controls in its IT environment.

Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd
Neq #	Requirement	ply	e	om	Party
Response:	User ID and password are issued and managed by the State. ETK Regulatory takes in the list provided by the	ne State	. User	ID must	be
unique, ma	anaged via the user management screen, audit logs will log events by user id, no dupes allowed.				
	Describe how the system meets the DHHS standard for administering passwords:				
	Initial Password assignment.				
SEC-4	<ol> <li>Strong Password Requirements.</li> <li>Password reset process.</li> </ol>	x	X		
320-4	4. Password expiration policy.				
	<ol><li>Password controls for automatic lockout access to any user or user group after an administrator-defined number of unsuccessful log-on attempts.</li></ol>				
	ansaccessian log on attempts.				
Response:	User ID and password are issued and managed by the State. Can default password, can configure passwor	d requi	rement	s, passw	ords
can be reso	et via the login page and email, password expiration is configurable, 3 failed login attempts will lock.				
	Describe how the system meets the requirements for unique system administration access. Include:				
SEC-5	Specification on configuration of the unique system administration ID.	x	x		
	<ul><li>2. How the unique system administration ID is assigned and managed.</li><li>3. How the unique system administration ID is used to log system activity.</li></ul>				
Response:	Please see response to SEC-4.		•		•

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
	Describe how the system meets the requirements for unique database administration access. Include:				
SEC-6	<ol> <li>Specification on configuration of the unique database administration ID.</li> <li>How the unique database administration ID is assigned and managed.</li> <li>How the unique database administration ID is used to log system activity.</li> </ol>	х	X		
Response	<ul> <li>DBA access is generally only provided for clients that are hosting. It would be a security violation. Database</li> </ul>	logins	and ID:	s are har	ndled
•	MS, not ETK Regulatory.	Ü			
SEC-7	Describe how the system supports the use of multi-factor authentication.	Х	Х		
authenticat	Entellitrak supports SSO authentication. In addition to a strong user name/password authentication validation interface, the ion include Active Directory, Authentication Portals, Smart Cards, and Identity Credential Access Management (ICAM) – In (PIV) Cards and Common Access Cards (CAC).				
For Active	Directory authentication through Lightweight Directory Access Protocol (LDAP), Entellitrak supports several	l mecha	nisms	such as	
	/4, and Java Naming & Directory Interface, as a way to perform an LDAP bind using the supplied credentials				DAP
	ation can accept both Domain account and email address-based authentication.				
				1	
SEC-8	Describe any security processes for managing security updates, and integrated components subject to vulnerability, including anti-virus.	Х	X		
				on is ali	gned
Response	including anti-virus.	AMP cer	tificati		
Response with NIST	including anti-virus.  Tyler maintains Information Security compliance via independent client and FedRAMP assessments. FedRA	AMP cer	tificati		
Response with NIST	including anti-virus.  Tyler maintains Information Security compliance via independent client and FedRAMP assessments. FedRA 800-53 federal standards, which drive and inform Nebraska InfoSec policies. Included in maintaining this co	AMP cer	tificati		

Req#	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
Response:	Tyler's role-based user management solution allows for this capability.				
SEC-10	The State of Nebraska requires authentication and authorization of users through an enterprise directory known as the Nebraska Directory Services (NDS) to access web-based applications. Describe how the system will integrate NDS authentication.	x	X		
SEC-10	Refer to the Nebraska Information Technology Commission Security Architecture – Authentication and Authorization – Identity and Access Management Standard for State Government Agencies (8-303) for specific requirements: <a href="https://nitc.nebraska.gov/standards/8-303.pdf">https://nitc.nebraska.gov/standards/8-303.pdf</a>	,	,		

Response: Entellitrak supports SSO authentication. In addition to a strong user name/password authentication validation interface, the options available for 2 factor authentication include Active Directory, Authentication Portals, Smart Cards, and Identity Credential Access Management (ICAM) – both Personal Identification Verification (PIV) Cards and Common Access Cards (CAC).

For Active Directory authentication through Lightweight Directory Access Protocol (LDAP), Entellitrak supports several mechanisms such as Kerberos v4, and Java Naming & Directory Interface, as a way to perform an LDAP bind using the supplied credentials via a secure channel. LDAP Authentication can accept both Domain account and email address-based authentication.

Presuming that NDS authentication adheres to one of these standards, we will be able to integrate with NDS.

Describe how the system provides rule-based security and allows restricted access to system features, function, screens, fields, database, etc. Role authentication may occur at the directory level, application level, or database level (depending on database system). Describe the security administration functions integrated into the system that manage role-based access to system functions, features, and data. Include a description of:  1. How and where the system stores security attributes or roles (e.g., LDAP attributes, database tables, files).  2. The interface between the LDAP and the application, if roles are assigned in an LDAP directory.  3. How roles are created and security is applied to the role based on how and where security attributes are stored (if multiple options describe each).  4. How groups are defined and how roles and security are applied to each group.  5. How access limits are applied to screens and data on screens by role or group.  6. How users are created and assigned to one or more roles or groups.  7. How role and group creation and assignment activity is logged.  Response: Tyler is able to comply with these requirements through a combination of and configuration of the following: LDAP/AD, roles, groups.	Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd
screens, fields, database, etc. Role authentication may occur at the directory level, application level, or database level (depending on database system). Describe the security administration functions integrated into the system that manage role-based access to system functions, features, and data. Include a description of:  1. How and where the system stores security attributes or roles (e.g., LDAP attributes, database tables, files).  2. The interface between the LDAP and the application, if roles are assigned in an LDAP directory.  3. How roles are created and security is applied to the role based on how and where security attributes are stored (if multiple options describe each).  4. How groups are defined and how roles and security are applied to each group.  5. How access limits are applied to screens and data on screens by role or groups.  6. How users are created and assigned to one or more roles or groups.  7. How role and group creation and assignment activity is logged.			ply	е	om	Party
Response: Tyler is able to comply with these requirements through a combination of and configuration of the following: LDAP/AD, roles, group	SEC-11	screens, fields, database, etc. Role authentication may occur at the directory level, application level, or database level (depending on database system). Describe the security administration functions integrated into the system that manage role-based access to system functions, features, and data. Include a description of:  1. How and where the system stores security attributes or roles (e.g., LDAP attributes, database tables, files).  2. The interface between the LDAP and the application, if roles are assigned in an LDAP directory.  3. How roles are created and security is applied to the role based on how and where security attributes are stored (if multiple options describe each).  4. How groups are defined and how roles and security are applied to each group.  5. How access limits are applied to screens and data on screens by role or group.  6. How users are created and assigned to one or more roles or groups.	х	х		
hierarchy, user permissions, and system permissions.	•	, , , , , , , , , , , , , , , , , , , ,	ng: LDA	P/AD,	roles, gr	oups,

The system must automatically disconnect based upon inactivity, as required by DHHS Security Policies and Standards.

Describe how the feature is administered and what effect disconnect has on any activity or transaction in process at the time of disconnection.

Refer to DHHS Securing Hardware and Software Standard (DHHS-IT-2018-001A) for specific requirements: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>

Response: Tyler understands the State to require session timeout/inactivity settings. To accomplish this capability, inactivity timers are used; these timers are used at the application layer as well as the Tyler network layer. Once the timer is reached, a user's session is terminated and they would need to reconnect in order to establish a connection/session.

SEC-12

Χ

Req#	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
SEC-13	The system must protect confidential and highly restricted data from unauthorized access during transmission.  Describe transmission safeguards that are integrated into the proposed system to protect data during transmission, including any encryption technology.  Refer to DHHS Information Technology (IT) Security Policy (DHHS-IT-2018-001) for specific requirements:	x	х		
Entellitral	http://dhhs.ne.gov/ITSecurity  : All ETK Regulatory data is encrypted in transit. For data "on the wire" (in transit between the Web browse cuses Secure Sockets Layer (SSL). This data encryption is compliant with FIPS 140-2. Entellitrak is also config d method for recognizing and purging PII and other sensitive data from input.				server),
SEC-14 Response	The system must provide auditing functions for all data fields, including but not limited to:  1. The user ID of the person who made the change. 2. The date and time of the change. 3. The physical, software/hardware and/or network location of the person while making the change. 4. The information that was changed. 5. The outcome of the event. 6. The data before and after it was changed, and which screens were accessed and used.  Refer to DHHS Information Technology (IT) Audit Standard (DHHS-IT-2018-001F DHHS IT Audit Standard) for specific audit requirements: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a> Items 1,2, and 4 are provided through audit logs. Items 5 and 6 may require configuration. Item 3 is not ty	X pically I	X	ed.	
SEC-15	The system must provide auditing functions for confidential and highly restricted data that is accessed and viewed, regardless of whether the data was changed. Describe the auditing functions which should include but is not limited to:  1. The user ID of the person who viewed the data. 2. The date and time of the viewed data. 3. The physical, software/hardware and/or network location of the person viewing the data. 4. The information that was viewed.	X	X		

Req #	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
	Refer to DHHS Information Technology (IT) Audit Standard (DHHS-IT-2018-001F DHHS IT Audit Standard) for specific audit requirements: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>	P. 7		· · ·	· a.c,
Response:	Please see our response to SEC-14 above.			1	
SEC-16	If the system has the ability to override edits, describe how the system audits all overridden edits and identifies information including, but not limited to, the login ID, date, and time.	Х		Х	
Response:	Tyler's solution can dynamically lock down specific fields based on logic in the JavaScript.				
SEC-17	Describe how the system produces daily audit trail reports and allows inquiries, showing updates applied to the data.	X			
system. This address, the logs that ma are stored in	ETK Regulatory provides comprehensive system logging that collects and preserves a complete audit history on every a series read-only audit log tracks all data entry, modification, and update actions. These actions are tracked by user identificate actions taken, the data entered, accessed or modified; and the date and time of the actions. The administrator can marely be kept on the application for as long as required. Only the system administrator has the capability to archive audit logh a condensed format and can be retrieved at any time. The ETK Regulatory data retention capability can be configured licies, and to archive and store any required records.	ion; the nage and s. Archi	user's IF d mainta ved aud	o iin audit it logs	
SEC-18	Describe how the system provides an auto archive/purge of the log files to prevent uncontrolled growth of the log and historical records storage using administrator-set parameters.	Х		X	
Response: customizat	Users have the capability to archive at any time. If hard delete/purging is required, that can be accomplish ion.	ed thro	ough sy	stem	
SEC-19	Describe how the system supports encryption of data at rest or an equivalent alternative protection mechanism.  Describe the proposed encryption of data. If data is not encrypted, describe in detail compensating controls.	Х		Х	

Response: For data at rest (stored/archived in the database), Entellitrak uses common database encryption tools, such as those included in Oracle and SQL Server. Encryption at rest is standard for our AWS hosting, and optional at additional cost with Tyler hosting.  SEC-20  Describe how the system adheres to the principle of "Fail Safe" to ensure that a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks.  Response: At the application layer, error messages/failures are non-descriptive to users or attackers upon receipt and no actions are permitted within the application without authentication.  SEC-21  Describe how the system is configurable to prevent corruption or loss of data already entered into the system in the event of failure.  Response: Tyler's standard hosting package offers:  Recovery Point Objective (RPO) - Standard "Cold Site" 8 hours  Recovery Pime Objective (RTO) - Standard "Cold Site" 24 hours  Tyler offers Warm Site and Hot Site hosting with commensurate RPO and RTO at additional cost as requested by customers.  For backup, Tyler performs daily encrypted backups of each system, as well as offsite storage of data. All backed up data is only handled by cleared Tyler employees. Data is replicated offsite to a secure tertiary site. Both transmission and storage of the data is encrypted. Restores are tested on a regular basis, as requests for this occurs frequently. Backups occur nightly, Monday through Friday. Incremental backups occur during the week with a full backup occurring on Friday nights. Archiving occurs on a scheduled basis, and can be customized to meet State's compliance needs.  SEC-22  Describe how the system, upon access, displays a message banner indicating that this application is only to be accessed by those individuals who are authorized to use the system.				(1)	(a)	(b)	(c)
Response: For data at rest (stored/archived in the database), Entellitrak uses common database encryption tools, such as those included in Oracle and SQL Server. Encryption at rest is standard for our AWS hosting, and optional at additional cost with Tyler hosting.  SEC-20  Describe how the system adheres to the principle of "Fail Safe" to ensure that a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks.  Response: At the application layer, error messages/failures are non-descriptive to users or attackers upon receipt and no actions are permitted within the application without authentication.  SEC-21  Describe how the system is configurable to prevent corruption or loss of data already entered into the system in the event of failure.  Response: Tyler's standard hosting package offers:  Recovery Point Objective (RPO) - Standard "Cold Site"  8 hours  Recovery Time Objective (RTO) - Standard "Cold Site"  24 hours  Tyler offers Warm Site and tho Site hosting with commensurate RPO and RTO at additional cost as requested by customers.  For backup, Tyler performs daily encrypted backups of each system, as well as offsite storage of data. All backed up data is only handled by cleared Tyler employees. Data is replicated offsite to a secure tertiary site. Both transmission and storage of the data is encrypted. Restores are tested on a regular basis, as requests for this occurs frequently. Backups occur nightly, Monday through Friday. Incremental backups occur during the week with a full backup occurring on Friday nights. Archiving occurs on a scheduled basis, and can be customized to meet State's compliance needs.  Describe how the system, upon access, displays a message banner indicating that this application is only to be	Req#	Requirement		Com	Cor	Cust	3rd
and SQL Server. Encryption at rest is standard for our AWS hosting, and optional at additional cost with Tyler hosting.  SEC-20  Describe how the system adheres to the principle of "Fail Safe" to ensure that a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks.  Response: At the application layer, error messages/failures are non-descriptive to users or attackers upon receipt and no actions are permitted within the application without authentication.  SEC-21  Describe how the system is configurable to prevent corruption or loss of data already entered into the system in the event of failure.  Response: Tyler's standard hosting package offers:  Recovery Point Objective (RPO) - Standard "Cold Site" 8 hours  Recovery Time Objective (RTO) - Standard "Cold Site" 24 hours  Tyler offers Warm Site and Hot Site hosting with commensurate RPO and RTO at additional cost as requested by customers.  For backup, Tyler performs daily encrypted backups of each system, as well as offsite storage of data. All backed up data is only handled by cleared Tyler employees. Data is replicated offsite to a secure tertiary site. Both transmission and storage of the data is encrypted. Restores are tested on a regular basis, as requests for this occurs frequently. Backups occur nightly, Monday through Friday. Incremental backups occur during the week with a full backup occurring on Friday nights. Archiving occurs on a scheduled basis, and can be customized to meet State's compliance needs.				ply	е	om	Party
SEC-20 Describe how the system adheres to the principle of "Fail Safe" to ensure that a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks.  Response: At the application layer, error messages/failures are non-descriptive to users or attackers upon receipt and no actions are permitted within the application without authentication.  SEC-21 Describe how the system is configurable to prevent corruption or loss of data already entered into the system in the event of failure.  Response: Tyler's standard hosting package offers:  Recovery Point Objective (RPO) - Standard "Cold Site" 8 hours Recovery Time Objective (RTO) - Standard "Cold Site" 24 hours  Tyler offers Warm Site and Hot Site hosting with commensurate RPO and RTO at additional cost as requested by customers.  For backup, Tyler performs daily encrypted backups of each system, as well as offsite storage of data. All backed up data is only handled by cleared Tyler employees. Data is replicated offsite to a secure tertiary site. Both transmission and storage of the data is encrypted. Restores are tested on a regular basis, as requests for this occurs frequently. Backups occur nightly, Monday through Friday. Incremental backups occur during the week with a full backup occurring on Friday nights. Archiving occurs on a scheduled basis, and can be customized to meet State's compliance needs.  Describe how the system, upon access, displays a message banner indicating that this application is only to be	Response:	For data at rest (stored/archived in the dat	abase), Entellitrak uses common database encryption tools	, such as the	se incl	uded in	Oracle
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needs.  Describe how the system, upon access, displays a message banner indicating that this application is only to be  X X X		·	·		•		
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SEC 22 Describe how the system, upon access, displays a message banner indicating that this application is only to be	needs.						
		Describe how the system, upon access, displa	us a message banner indicating that this application is only to be	X	Х		
	SEC-22						

Reg# F		(1)	(a)	(b)	(c)
Rea# I				, ,	(0)
	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
Response: E1	K Regulatory can provide this capability with configuration of the dashboard page.	1	I		ı
[	Describe how the system, prior to access of any confidential or highly restricted data, displays a configurable		Х		
SEC-23	warning or login banner (e.g. "The system should only be accessed by authorized users"). In the event that the system does not support pre-login capabilities, describe how the system displays the banner immediately following authorization.				
Response: E1	K Regulatory can provide this capability with configuration of the login page.		l .	•	1
		1	1	_	
SEC-24	Describe how the system recognizes confidential and highly restricted data in screens, reports, and views (i.e. PHI and SSN), and restricts distribution and access based upon system security settings and roles. Include warnings on brinted and viewed reports.	X	X		
Response: E1	K Regulatory can provide this capability for the State via element level permissions.				
		X	<u> </u>	X	
SEC-25 i	The system or Contractor must alert DHHS of potential violations of security and privacy safeguards. Incidents that nvolve or could potentially involve confidential or highly restricted data must be reported immediately as defined in DHHS Policy DHHS-2018-IT-001E DHHS IT Incident Management Standard.	^			
Response: As	s a matter of policy, Tyler would alert all hosting customers as appropriate and in conformance with our h	nosting	policie	S.	1
		X	Х	<u> </u>	
	Describe how the system provides the capability to monitor events on the information system, detects attacks, and provides identification of unauthorized use of the system.				
Response: Ty	ler provides this capability internally as a core functionality for our hosting team. This capability is monit	tored b	y our h	osting to	eam,
	nternally within the Tyler team to maintain hosting. The capability is not provided externally to our hoste	d clien	ts		

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	e	om	Party
				OIII	rarty
	The system must provide a process for archiving or destroying data and sanitizing storage media in conformance	X	Χ		
SEC-27	with DHHS and Division data governance policies and subject to applicable HIPAA, and federal (e.g., Federal				
	Information Processing Standards (FIPS), National Institutes of Standards and Technology (NIST), and State laws.				
Response:	Tyler provides the ability for archiving and/or destroying data in conformance with NIST protocols. Should	the Sta	te hav	e differe	nt
-	nts, we can provide modification to meet those requirements.				
	,				
		Х	Х		
SEC-28	Describe how the system provides the capability to identify and report on unauthorized attempts to access information in the system, based on user-defined criteria.				
	Tyler provides this capability internally as a core functionality for our hosting team. This capability is moni		•	osting te	eam,
and shared	l internally within the Tyler team to maintain hosting. The capability is not provided externally to our hoste	ed clien	ts.		
	Describe how the system has defined and deployed strong controls (including access and query rights) to prevent	Х	Χ		
SEC-29	any data misuse, such as fraud, marketing or other purposes.				
Decree	Tulou nuovides this sanahility internally on a sana functionality for any heating to see. This sanahility is used	hawad la			
	Tyler provides this capability internally as a core functionality for our hosting team. This capability is moni		•	osting te	eam,
and shared	l internally within the Tyler team to maintain hosting. The capability is not provided externally to our hoste	ed clien	ts.		
		Lv	1	Tv	T
	The system must be able to export audit logs that can be used with a third party Log Management & Analysis tool.	X		X	
SEC-30	Describe how the system exports logs in such a manner as to allow correlation based on time (e.g. Universal Time				
	Coordinate (UTC) synchronization.				
Response:	Tyler can provide this capability with a system interface.				
	Describe how the gustem supports removed of a user's privileges without deleting the user from the system to appure	Х	Х		
SEC-31	Describe how the system supports removal of a user's privileges without deleting the user from the system to ensure a history of user's identity and actions.				
	a motory of door of domain, and dodono.				

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
Response:	Tyler provides this capability as an inherent function of role-based capability. Roles, permissions, groups, a	nd hier	archy c	an be	1

Response: Tyler provides this capability as an inherent function of role-based capability. Roles, permissions, groups, and hierarchy can be altered/changed without changing the record of activities.

# **Data Conversion Requirements**

Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd
		ply	е	om	Party
	Describe the process for converting all historical data from the Department's existing systems, spreadsheets, and other supporting applications that are required for ongoing operations of the system and the historical reporting needs of the department.				
DAC-1	There are approximately 94 microfilm rolls with up to 1500 pages of records on each roll, for up to 141,000 microfilm records that must be digitally converted. Additionally, approximately 25,000 pages of Board meeting minutes and associated files that should be digitized.	X		х	
	System Automation's License 2000 (Oracle) currently contains approximately 655 tables and 50 million records.				
	DHHS also has approximately twelve (12) Access/Excel databases. Some information in these databases does not tie to license information in L2K.				
	DHHS also uses the federal government's Aspen Central Office to import licensure data on a daily basis.				

Response: Converting historical data and other supporting applications that are required into the ETK Regulatory system is part of our standard data migration process as follows:

Tyler has a strong understanding of issues involved in system interconnectivity and extensive experience in data transfer, data import/export, and in data and legacy systems migration. Our experience in data import/export covers a wide variety of technologies, applications and formats.

A successful data migration requires the collaboration of Tyler and the State staff. This provides for data accuracy through automated data validation that may be rerun as often as needed and human validation by resources that are highly knowledgeable in the legacy system data. Data that passes the automated and human validations will be migrated successfully to new schema as it has been validated to conform to the required data mappings and relationships.

The following Deliverables are in scope:

- 4.1 Data Migration Plan
- 4.2 Data Migration Conversions

For the State Data will be migrated from the following system(s):

Electronic data will be migrated from Microsoft SQL Server based system and related file system based electronic document repository.

Tyler's standard practice for data migration follows the below, high-level task breakdown.

## **Extract Legacy Data**

Unless mutually negotiated otherwise, the State technical staff will access their legacy database(s) and extract data from the legacy system(s). For relational databases a database backup is preferred. For other sources of data, or where database backup is not available, an XML or Delimited Text Format (DTF) file can be used. A copy of the existing data with all available supporting data should be provided within two (2) weeks of project kickoff The State will confirm which data to convert if there are fields in the data extract that are not required in the new system through data mapping. If data contains PII or confidential information, then scrubbed data is acceptable.

## Map Legacy Data to New Schema

The data mapping document will be created by the State with the assistance of Tyler. The mapping document outlines the target formats for extracting data, and contain information regarding fields, data types, lengths, foreign key constraints, field descriptions and business rules for importing the data. The data mapping documents will be used to map legacy data to the Entellitrak application. The mappings will also identify the source and location of required and optional fields in the Entellitrak database and identify fields that are missing. The State will consult with Tyler to map legacy fields directly to the Entellitrak schema, list all orphan fields that are required to be converted, and list all fields that will be excluded from conversion. The State will consult with Tyler to map legacy lookup/reference values to the Entellitrak lookup/reference values, listing all orphan values that are required to be converted, and list all values that will be excluded from conversion. The final mapping documents will be jointly reviewed and approved by Tyler and the State during this stage.

#### **Run Data Validations**

The data conversion processes will produce run reports containing statistical counts of records processed and any errors found in the extracted data. Errors will point out any missing or invalid data that could not be migrated automatically. This validation will allow Tyler staff to assist the State in pinpointing the source of any errors and correcting the errors in the extract data files. Tyler will rerun the validation as often as required until an acceptable validation report is achieved.

### **Run Test Data Conversions**

Tyler will load the State data into a test instance and make it available for the State review. This step is performed iteratively until desired data quality is achieved and the conversion is ready for production.

## **Develop Data Validation Plan**

The State will develop a documented plan on how they are to confirm and validate that data has been converted from the legacy database(s) to the Entellitrak system. The validation plan is to be reviewed with the Tyler team for confirmation and acceptance of planned validation activities prior to validations beginning.

## **Review and Approve Converted Data**

The State will review, inquire, or report data from the test database using the Data Validation Plan, and report any missing or erroneous data so that it can be corrected before the next test conversion run. This step is performed iteratively until desired data quality is achieved and the conversion is ready for production.

## **Run Production Data Conversion**

If Tyler is hosting the Production site, Tyler will run the final production data conversion. If State is hosting the Production site, Tyler will provide assistance with the final production data conversion.

Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd			
		ply	e	om	Party			
Tyler recommendation the Staging	ceptance of Production Data er recommends running the Production Data Conversion in a Staging environment before go-live. The State staff will review and approve the production data staging environment for go-live. Data mapping will be performed concurrently with the Agile Sprints. Project managers from State and Tyler will coordinate forts to setup, configure and maintain the application concurrently with the Data Conversion stage.							
-	re of the microfilm rolls that require digital conversion, and our assumption is that the State will be responsible for digita vill migrate this data onto ETK Regulatory.	ally conv	erting a	all Microf	ilm			
	Describe the data conversion plan which includes data element mapping crosswalks, data cleansing, data synchronization for initial and interim conversion activities leading up to the final data conversion, and frequency of interim conversion events and final conversion execution.							
	Contractor will be responsible for all data standardization and cleansing.							
DAC-2	It is acceptable to migrate data and go live with license applications in incremental steps.	х		Х				
	For individual licensees, SSN is included in L2K. There is also an identifier called "Person ID" in L2K.							
	For establishments in L2K, there are unique license numbers by license type, and unique applicant numbers.							
	In ACO, establishments have unique license numbers by license type.							
Response:	Response: Please see the response to DAC-1.							

## Production, Test and Training Requirements

DHHS requires three separate environments (Production, Test, and Training) in order to operate and maintain the new software on an ongoing basis:

**Test Environment** – A test environment is required that mirrors the live production environment, including hardware and software. This test environment will be used to test application changes before deployed to production. This step is an important part of quality assurance, where all changes are tested to minimize the risk of adverse reactions in the production environment. While it is necessary to mirror all of the functions of the production environment, it is not necessary to maintain the same load capacity.

**Training Environment** – A training environment is also required that allows DHHS to provide hands-on training to users. This environment would allow DHHS to maintain unique data for use in training and conduct training without interference with the test or production environments. This environment will have occasional use.

Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd Party			
		ply	е	om	Party			
PTT-1	Describe how the system supports several environments, i.e., production environment, test environment, and training environment.	Х	Х					
•	Tyler offers multiple environments – generally 4 as a matter of standard practice. Typically, live data is o id any data security concerns.	nly plac	ced in t	he prodi	action			
PTT-2	Describe how the system supports non-production environments such as testing and training environments. Training environment should contain de-identified data and not include confidential or highly restricted data.	X	Х					
•	Response: Tyler offers multiple environments – generally 4 as a matter of standard practice. Typically, live data is only placed in the production site to avoid any data security concerns.							

		(1)	(a)	(b)	(c)			
Req#	Requirement	Com	Cor	Cust	3rd			
		ply	е	om	Party			
PTT-3	Describe how the system provides the ability to refresh any testing or training environment at the request of DHHS. Describe the refresh process and whether the refresh process can be completed using DHHS resources, or whether the process requires professional services from the Contractor.	х		х				
Response:	Tyler can meet this requirement, and it will require us to re-set rather than using DHHS resources.				•			
•	System refreshes can be accomplished through rebuilding an environment from scratch and applying configuration from backup to achieve, or restoring a system snapshot from database backup, or scripts can be executed to remove unwanted data from an environment.							
PTT-4	Describe the test procedures for any changes to the system. Describe user test planning including unit testing, end-to-end testing, stress testing, and readiness testing prior to "go live" date.	Х	Х					

## 1.1. Response: Testing Techniques, Tools and Best Practices

## **1.1.1.** Types Of Testing We Perform:

### 1.1.1.1.1. SYSTEM TESTING

**System Testing** is a level of software **testing** where a complete and integrated software is tested. The purpose of this **test** is to evaluate the **system's** compliance with the specified requirements.

#### 1.1.1.1.2. INTEGRATION TESTING

**Integration Testing** is a level of software **testing** where individual units are combined and **tested** as a group. The purpose of this level of **testing** is to expose faults in the interaction between **integrated** units. **Test** drivers and **test** stubs are used to assist in **Integration Testing**.

### 1.1.1.1.3. REGRESSION TESTING

Regression Testing is defined as a type of software testing to confirm that a recent program or code change has not adversely affected existing features. Regression Testing is nothing but a full or partial selection of already executed test cases which are re-executed to ensure existing functionalities work fine.

### 1.1.1.4. ACCEPTANCE TESTING

Acceptance Testing is a level of software testing where a system is tested for acceptability. The purpose of this test is to evaluate the system's compliance with the business requirements and assess whether it is acceptable for delivery.

#### **1.1.2.** Testing Tools:

Tyler's Quality organization utilizes variety testing tools and techniques to perform functional UI, cross browser, security and Section 508 web accessibility testing.

- Currently, we use Tricentis qTest for test planning, design, execution and reporting.
- For defects and requirements tracking we use Atlassian's Jira and Confluence tools.
- For Section 508 compliance verification we use Wave Chrome toolbar, Jaws screen reader, Web Accessibility Toolbar and Keyboard navigation techniques.

• For security testing we use FireBug and various browser plugins. Our Information Security teams perform detailed scans using Fortify WebInspect and Static Code Analyzer tools.

- For performance testing we use JMeter. Our goal is to continuously learn new tools and techniques and improve the test coverage, efficiency and accuracy of our products and processes.
- Tyler's Quality organization has developed multiple test automation solutions to meet variety of projects and product needs. MP-TAP (Tyler Test Automation Platform) is a reusable, fully customizable low code test automation platform built using Selenium and Cucumber framework and Entellitrak's public Java APIs and Service Bundles capabilities. Katalon Studio is a zero code test automation tool that uses drag and drop and data driven test automation techniques.

## **1.1.3.** Software Testing Process:

### 1.1.3.1.1. TEST DESIGN PROCESS

- All test cases are created in Tyler's test case management tool, Tricentis qTest Manager.
- The requirements and/or user stories are imported into the qTest Manager tool so that traceability matrices and coverage metrics can be easily provided and managed. The test cases are linked to the requirements or user stories that they cover.
  - Detailed test scenarios and test cases are designed by QA Engineers to meet all functional and non-functional story or use case requirements. The test cases are reviewed and approved by Project Managers and Business Analysts to ensure the completeness of test coverage.
- The goal is to have 100% requirement coverage including positive and negative scenarios. This approach includes functional test scenarios, role based security testing, 508 compliance and cross browser coverage. All of these tests form the regression test repository available as the project progresses, to be re-executed as needed.

## 1.1.3.1.2. TEST EXECUTION PROCESS

- Test execution is carefully planned and monitored for adherence to acceptance criteria, definition of done and exit criteria of each release phase.
- Tests are executed out of qTest Manager giving real time metrics on testing progress, defects for failed test cases and ensuring quality at each phase. Detailed test reports and Jira dashboards are maintained and shared with the project team for each test cycle.

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Part
•	During the development phase iterations or sprints, for each story detailed testing is performed to ensure requirements are satisfied. In addition to the functional testing, accessibility, cross platform compatibility testing is also done as needed. Defects are reported for failed acceptance criteria or test cases.		•		
•	Before deployment and delivery, hardening phase is planned. This is when QA Engineers perform end to testing of new stories and existing features to ensure the work product is functional, stable, usable, access			•	n
•	Internal and external stakeholders also perform User Acceptance Testing (UAT) during these phase. QA Engineers follow clear criteria) that must be met before exiting a phase and delivering for UAT.	rly defin	ed Defin	ition of D	one (e:
•	If there are any defects found during the hardening or UAT phase, depending on the severity or priority, these defects to meet the exit criteria of the release. Lower priority defects may be moved to the project and prioritization based on stakeholder feedback.				
1.1.3.1.3.	TEST REPORTING				
	sults are stored in Tyler's qTest repository. Each run is captured in the tool, and re-run, and the tool is config ct results stored. All results can be exported and included in key project reports.	gured so	o that e	each test	t phas
		gured so	o that e	each test	t phas

include changing licensure requirements, license type name changes, and scripts to replace data.

## Response:

**User Acceptance Testing** 

This task will give State the opportunity to verify that the new business solution is ready for implementation and deployment into production through UAT.

The following deliverables are related to UAT:

- 9.1. User Acceptance Test Plan and Test Scripts (State Deliverable)
- 9.2. User Acceptance Test Support

UAT validates that the system correctly handles State business processes, and the system is ready for go-live. Agencies that prepare and conduct thorough UAT have a smoother implementation and gain much faster acceptance than those that dedicate limited time or resources to this critical task.

To initiate the UAT task, Tyler will assist State in developing the first few test cases and scripts. These sample scenarios will cover a range of common business practices. The State Test Managers will then work with the agency's Subject Matter Experts to tailor these cases to any unique situations or requirements; and State will develop additional test cases and scripts for use by State UAT testers.

The State team developing the test cases will work independently of the software development process. The State team will produce function or process oriented tests, rather than technical oriented tests to demonstrate that the final solution meets State's requirements, laws, statutes and administrative rules. Preparing for these tests is an important component of validating that all workflows, both within and external to the system have been considered prior to go-live. State will perform these test cases in formal UAT sessions to verify operation of the Tyler solution. State may require engagement from 3<sup>rd</sup> Parties (such as schools boards) in order to best prepare these test scenarios. User Acceptance Tests should be developed and executed across the system, covering both back office and public-facing services.

State will assign an internal Test Manager that will coordinate the State UAT preparation and execution. The State Test Manager is responsible for the State UAT Test Plan, specific test cases, test scenarios and test data as required to validate the solution meets the necessary business requirements. The State Test Manager will ensure that the subject matter experts execute the Acceptance Test Plan and validate that the system meets the process requirements, rules and regulations, and that there are no significant issues that would prevent Go-live. Based on the project complexity the State UAT will be executed over 2 cycles. An initial cycle of 4 weeks, followed by a second cycle of 3 week duration.

Tyler	Res	por	rsik	oili	ties	,

1) Assist State in developing an initial set of test cases and scripts.

- 2) Review and provide feedback on the State test cases and test scripts.
- 3) Provide assistance and support to the State acceptance test team executing pre-defined test scripts.
- 4) Review and triage the issues list with the State Project Manager using the issues reporting template and issue management process.
- 5) Resolve any reported configuration issues that are in accordance with documented and accepted business requirements.
- 6) Resolve all Tyler Level 1 or 2 issues prior to go-live as per the severity table below.

## State Responsibilities:

- 1) Assign a UAT Test Manager at least 2 months prior to UAT start
- 2) Develop the User Acceptance Test Plan and provide to Tyler for feedback at least 1 month prior to UAT start. The Acceptance Test Plan outlines resources and roles required to execute in scope test scenarios. Test Plan will define exit criteria which will be used to determine when UAT is complete.
- 3) Develop Acceptance Test Cases and Test Scripts and provide to Tyler for review and feedback in advance of UAT. Test cases will cover scenarios for configuration as well as any in scope modifications. Test cases will be provided to Tyler a minimum of 2 weeks prior to UAT planned start date.
- 4) Collect representative test data required to validate the system.
- 5) Provide facilities for the UAT environment (same requirements as Training).
- 6) Schedule and monitor UAT participation. Coordinate any 3rd party involvement.
- 7) Resolve conflicts that prevent State subject matter experts from participating in scheduled UAT sessions.
- 8) Execute the acceptance test data and validate the test results within the scheduled UAT cycles.
- 9) Conduct regression testing for issues resolved prior to go-live.
- 10) Acceptance of system and certification for go-live.
- 11) Test manager will provide regular (weekly) reporting to Tyler on pass/fail statistics of test scripts.

#### Notes:

It is reasonable to expect that some defects will likely remain in the software and will be resolved after it is deployed. The presence of a reasonable level of defects that do not interrupt business or cause data corruption should not delay the decision to begin using the software in production.

The following is a table of defect levels and the quantity of each that is the assumed maximum acceptable number of defects.

SEVERITY	DEFINITION	GO-LIVE CRITERIA
Level 1 – Blocker	A problem with software or a component causing critical impact to State's business operation.  Compromises the integrity of data,  Loss of data  Does not leave an audit trail,  Impairs the ability of a function or process to carry out essential processing;  No reasonably acceptable work-around solution available to allow work to continue within the system.  This priority code is assigned to critical system defects that stop all or an essential part of the Tyler applications from working.	Zero (0) identified defects will remain open
Level 2 – High	A defect that adversely affects the ability of a function or process to carry out <u>critical</u> processing but for which there is an acceptable work-around solution in place while the responsible party repairs the defect.	Two (2) or fewer identified defects will remain open
Level 3 – Moderate	A defect that adversely affects the some of the ability of a function or process but a practical	Ten (10) or fewer identified defects will remain open

Req #	‡	Requirement			(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
	Leve	l 4 – Minor	workaround exists while the responsible party repairs the defect.  All other defects that do not reduce the integrity of the data or materially affect the ability of a function or process to carry out critical or non-critical processing.	Because processing is not substantially affected, defects of this type will not preclude acceptance.				

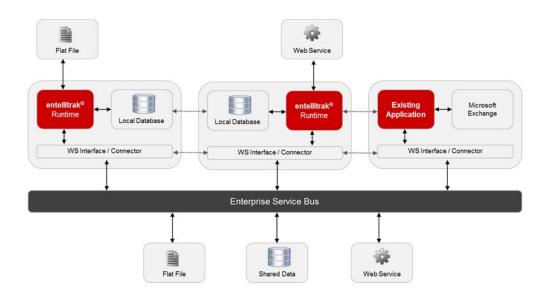
# Interfaces/Imports/Exports Requirements

The system is required to be able to interface with other computer systems as necessary.

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
INT-1	Describe the automated approach to managing interfaces.	Х	Х		
Response:	Tyler has rest endpoints to build out interfaces quickly.				
			I	1	
INT-2	Describe how the system interfaces secure and protect the data and the associated infrastructure from a confidentiality, integrity and availability perspective.	X	Х		
Response:	All data exchanged with ETK Regulatory is encrypted in transit.	•	•	•	•

Req#	Requirement	(1) Com	(a) Cor	(b) Cust	(c) 3rd
Req #	Requirement	ply	e	om	Party
INT-3	Describe how the system has the capability to notify system administrators/ system support staff if an interface is not available for any reason.	Х	Х		
Response	: Attempting to connect to the web service/interface will generally provide a response indicating connectivit	v issue	s. ETK F	Regulato	ry will
-		,		Ū	•
-	information.	,		Ü	•
-		.,	T		,
-		X	X		

Response: Tyler ETK Regulatory is designed based on open standards with all layers of the application fully exposed for simultaneous access and data exchange with other systems (Figure below). This allows the State to leverage investments in other technologies in their environment. The vast majority of ETK Regulatory implementations involve integration with other Government systems, some of which are Web-based, some client-server, and some mainframe such as existing interfaces. Tyler will work with the State. Tyler, will identify the detailed requirements and priorities concerning interfaces in the requirements phase which will be handled through the change control process. Those requirements, combined with open standards, will ensure Entellitrak and the end system can interface with all systems required to make our solution operate efficiently and effectively. ETK Regulatory's open architecture enables the ability to integrate with any SOAP/REST-based web service or Java EE API, including merchant APIs such as PayPal, VitalChek, or other merchant service providers. Additionally, Entellitrak may make remote calls directly to credit card payment providers in order to accept payments submitted through credit cards.



**Entellitrak API System Architecture** 

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
INT-5	Describe how the system supports data exchanges between components in real time so that data is always synchronous across the entire system, including any third-party components.	Х	Х		
Response	: Web services/interfaces can be triggered in real time to push and pull data.				
			T		
INT-6	Describe how the system has the ability to expand data access to additional systems that are consistent with current data standards.	X		X	
Response	: If additional interfaces are needed after the initial implementation, those can be built through the suppor	t of prof	ession	al servic	es.
		_		_	1

# System Performance Requirements

This section describes requirements related to the systems' on-line performance, response times, and sizing from a system architecture standpoint.

\*NOTE\*: If your system has specific high availability or redundancy requirements, the requirements should be defined below (see PER-5).

Req#	# Requirement		(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
PER-1	Describe the system performance functionality and monitoring tools	3.	Х	Х		
Response:	Tyler Hosting uses the following monitoring tools:			I	Į.	l
Monitori Tools	Application Performance  Application Availability	SolarWinds Alertra				
PER-2	Describe the minimum response times for the following functions, even a will be within two (2) seconds 95% of the time, and under five (5) second 1. Record Search Time 2. Record Retrieval Time 3. Transaction Response Time 4. Print Initiation Time 5. Subsequent Page Display Response Time 6. Document Availability  Note: These response times do not include network latency, which	s for 100% of the time.			х	

Req #	Requir	ement		(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
Response:	Tvler's s	tandard response times are as follows:		ріу		OIII	raity
• 9	0% of t	ransactions complete < 5.0 seconds ransactions complete < 7.5 seconds ransactions complete < 10.0 seconds					
PER-3		be how the system captures system downtimes, along wit be the method and timing of communication to DHHS on o		Х	Х		
Response: follows:	Tyler us	es internal monitoring tools to track system downt	imes. Method of communication is via email. Ti	ming of	comm	unicatio	n is as
Custome: Notificati							
		Server Outage	< 15 minutes after discovery				
		Application Outage (Entellitrak/iComplaints)	< 30 minutes after discovery				
		Network Outage	< 30 minutes after discovery				
		Security Incident Alert	< 30 minutes after discovery				
		Security Upgrades/Patches	< 5 business days before scheduled change				
		Software Upgrades/Patches/New Releases	< 5 business days before scheduled change				
		Software License Renewals	< 30 days before expiration				
		Planned Outages (e.g. system maintenance)	< 5 business days before scheduled change				
PER-4		be how the system supports concurrent users with miniman and on the system by 50% without modification to the so		Х	х		

		(1)	(a)	(b)	(c)			
Req#	Requirement	Com	Cor	Cust	3rd			
		ply	е	om	Party			
Performan	Response: The Entellitrak platform is designed to horizontally scale by employing industry standard clustering and load balancing techniques. Performance of enterprise applications are dependent on numerous factors including, but not limited to, user load, data density, integration points, network configuration, hardware specifications and application usage scenarios.							
PER-5	Describe how the system is available online 24 hours a day and 7 days a week. Describe any known timeframes where the system will be unavailable for use.	х	х					
facilities to	Tyler offers two hosting options – hosting with the Tyler data center, or via Amazon (AWS). With either operaximize uptime. With our Tyler hosting center, Tyler offers 99.9% uptime, regular maintenance notwith are provided at least 5 days in advance.		•		•			
PER-6	Describe how the system provides application performance monitoring and management capabilities, including any key performance indicators (KPI) or other metrics to measure and report system performance for the proposed system.	х	х					
Response:	Tyler tracks this information internally using SolarWinds.							

## System and User Documentation Requirements

DHHS requires the Contractor to develop, electronically store and distribute system documentation to include, at a minimum:

- 1. Reference Materials
- 2. System Documentation
- 3. A complete Data Dictionary

The Contractor must provide a complete Data Dictionary. The Data Dictionary is to include definitions of all data elements and tables where they reside.

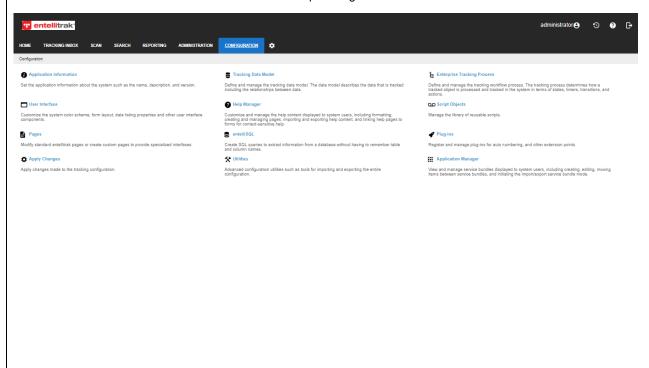
Req#	Requirement	(1) Com ply	(a) Cor e	(b) Cust om	(c) 3rd Party
DOC-1	Describe how the system provides <u>on-line help</u> for all features, functions, and data element fields, as well as descriptions and resolutions for error messages, using help features including indexing, searching, tool tips, and context-sensitive help topics. Provide a sample copy of five (5) screen shots with on-line help.	X	X		

## Response:

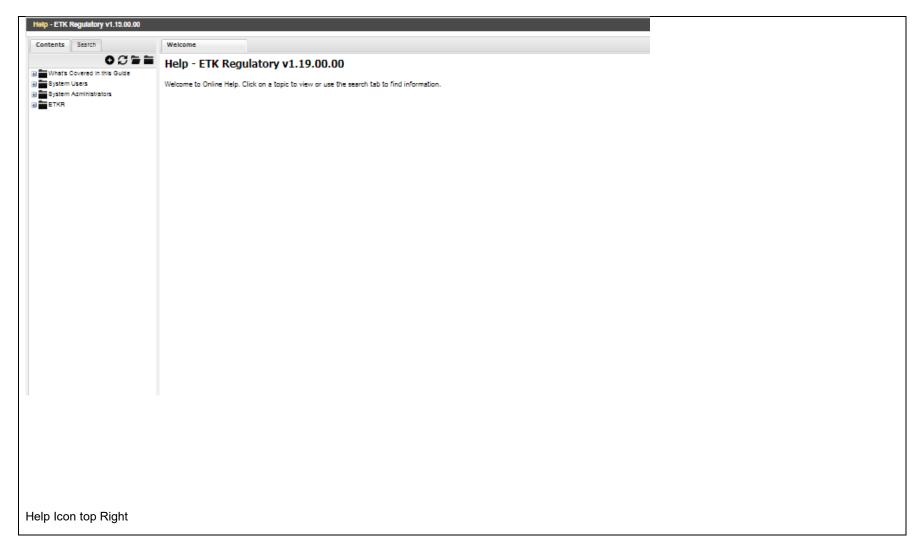
ETK Regulatory comes with an online Help Module that provides ongoing training and support to users of the application. This fully asynchronous rich internet module allows the State to publish, manage, and review help topics in customizable Web pages. Users can manage the hierarchy of topics, add pages to a topic, edit pages, and add graphics and screenshots to pages. Additionally, users can export and import pages, search for a page using full-text search, and manage pages nodes within the TOC (table of contents) tree with either drag-and-drop or cut/copy/paste operations. Users create pages using an integrated rich text editor. This editor provides the capability to format and create content such as defining headers, defining bulleted lists, inserting images, and linking to other help content. In addition to the Web-based user interface, all help content can be exported to a PDF document, allowing help content to be distributed and available offline.

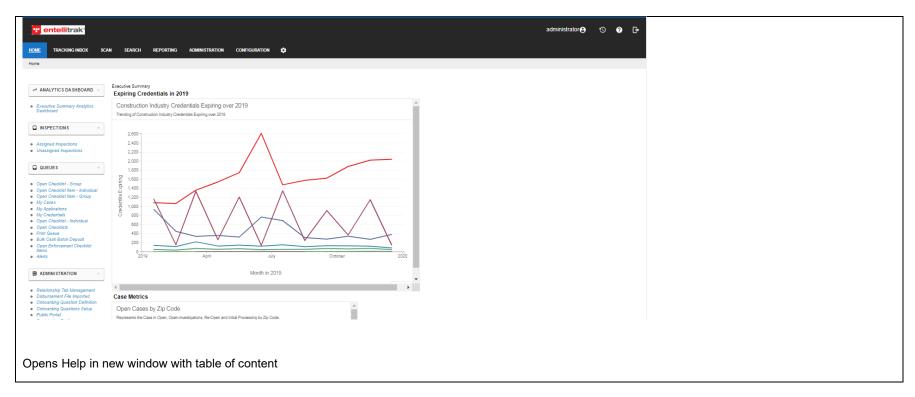
Please see the requested sample copy of five (5) screen shots below:

Administrative User with Permissions has access to Help Manager

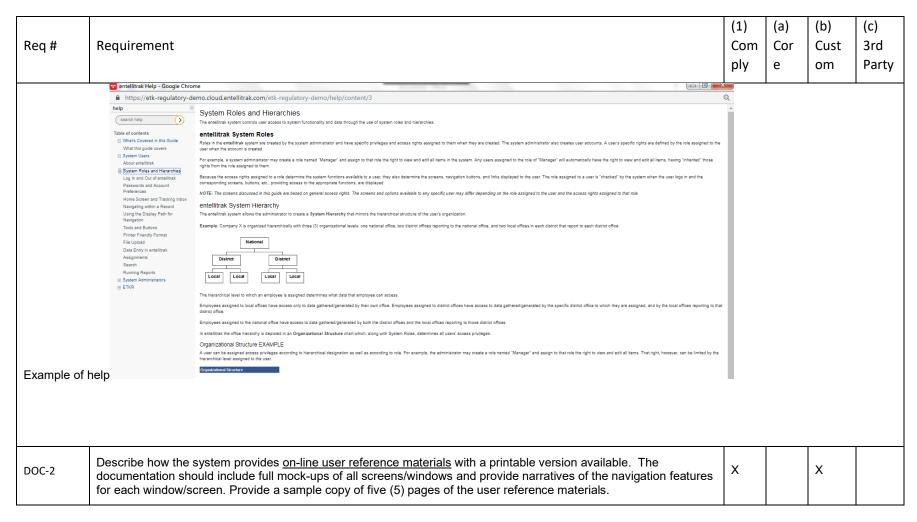


Volume 2: Technical Approach	Tyler Technologies, Inc.
Help Manager Content Editor	









Response: Typically the custom user guide is provided in hard copy; via custom work-up, this can be provided in an online fashion.

Sample pages follow:

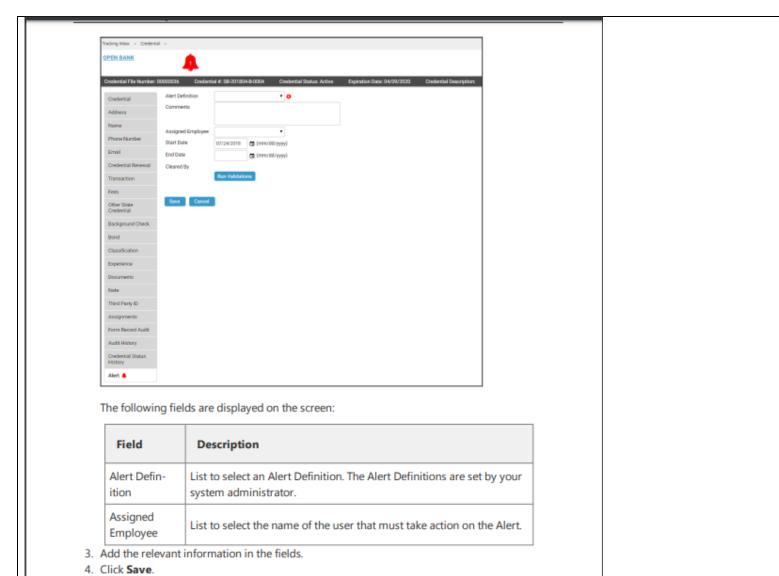
Sample of User Guide

Volume 2: Technical Approach

Tyler Technologies, Inc.

_		
MICROPACT'		
Think it > Track it > Done		
ETK Regulatory		
User Guide		
© 2018 MicroPact Inc.		
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no title the warrent winner military 70		
Details in User Manual		
Details in User Manual		

The State of Nebraska (State), Department of Administrative Services (DAS), Materiel Division, State Purchasing Bureau (SPB) Licensure Information System (LIS)



The Alert is saved.

		(1)	(a)	(b)	(c)
Req#	Requirement	Com	Cor	Cust	3rd
		ply	е	om	Party
DOC-3	Describe how the system will have <u>on-line reporting reference materials</u> with a printable version available that includes descriptions, definitions, and layouts for each standard report. Include definitions of all selection criteria parameters and each report item/data element, all field calculations defined in detail, and field and report titles. Provide a sample copy of five (5) pages of the reporting reference materials.	х		Х	
	: For the back office, all our standard reports that come out of the box with ETK Regulatory will also have a reference in the report shows and the possible search criteria used to generate the report. The User Guide is accessible online vi			describin	ig what
DOC-4	Describe how the system provides an entity-relationship model, class diagram, and a table of contents with data dictionary for report creation by the State that is regularly updated and includes table, field, and relationships.	Х		x	
DOC-4 Response by the St	dictionary for report creation by the State that is regularly updated and includes table, field, and relationships.  e: Tyler offers a dynamically created entity-relationship model and data dictionary. A class diagram can be contained as a second contained as a se		ia java		equirec