Courts of Limited Jurisdiction
Case Management System Integration
Feasibility and Cost Analysis

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I. Executive Summary

The CLJ-CMS Project Steering Committee is requesting to integrate locally implemented court applications with the Tyler Technologies base applications being implemented by the CLJ-CMS project. The CLJ-CMS project is scheduled to implement Odyssey, Tyler Supervision, and Odyssey File & Serve in 2022 through 2026.

The CLJ-CMS Project Steering Committee raised a concern regarding unmet capabilities by the Tyler suite of applications and the loss of specific business capabilities and efficiencies currently provided by locally implemented applications. The unmet capabilities include virtual/remote courts, real-time forms management and signatures, scheduling hearings by clients, financial collections, and access by various devices (smart phones, tablets, etc.). Examples of locally implemented court applications include OCourt, LINX, Laserfiche, Legal Atoms, OnBase, Application Xtender, and Truefiling.

If these local capabilities are unmet by the Tyler applications, the courts will lose efficiencies that may result in manual workarounds and the need for additional staff resources. There are roughly 36 CLJ courts (10 District Courts and 26 Municipal Courts) that have implemented and use other court applications that may have a potential need to integrate with the Tyler applications.

To meet this need, to support other future integration requests, to protect the data and securely maintain the integrations, AOC is proposing utilizing Tyler's Application Programming Interfaces (APIs) and building an enterprise-grade integration platform and all associated services to expose the APIs to the courts and their application vendors. The proposed integration approach is designed to create a platform for which the courts and their vendors can connect with the Tyler applications to exchange data in a secure, standardized, repeatable, and organized manner regardless of the application. This will allow the local court applications to continue getting data from the enterprise Tyler applications and keep functioning as they do today while also sending data to the Tyler applications to keep the court records/data intact and complete.

Initial analysis of the effort will require four major phases to be completed:

- **AOC Enterprise Integration Platform Readiness**: All policies, standards and processes for operating the integration platform will need to be developed. Key foundational pieces in the AOC Azure tenant will be established.
- **External AOC API (EAA) Proof of Concept (POC) Completed**: Validate 3rd Party authentication and make a successful basic call to the EAA service retrieving a basic set of information from the service.
- **AOC Enterprise Integration Platform Live**: The enterprise integration platform has a secure and independent channel to the AOC data center, all core components of the platform are online and all existing internal web service API's are published through the proper API Management instances within the platform.
- **EAA Live**: All phase 1 endpoint methods have been developed, pushed into production and verifiably accessed by a 3rd party.

Further description of the phases and associated tasks are included in *Appendix A - External AOC API Roadmap.*

This proposed integration approach is not in scope of the CLJ-CMS implementation project. An integration of such large scale and impact was not contemplated nor planned during the initiation of the project and therefore there are no provisions for this work in the contract with Tyler Technologies. While there are integration requirements included in the scope of the CLJ-CMS implementation project, those requirements are limited in scope for simple transactions with known systems and judicial partner agencies such as the Enterprise Data Repository, JIS, and DOL respectively.

Completing the phases described above will require additional funds for staffing and software. Additional cost is also anticipated for any development work associated with the APIs by Tyler Technologies and development work by the court application vendors to connect to their system to the integration platform.

It is also important to note that the proposed approach necessitates the creation of a new service/capability to be provided by the AOC for the courts now and into the future.

For the purposes of this feasibility and costs study, the project steering committee requested a focus on OCourt as a proof of concept.

Cost Summary:
The following are assumptions considered during the analysis of the cost estimate:

- Cost does not include on-going maintenance and operational costs after completion of the initial proof of concept with OCourt.
- Cost estimates were provided by Omiga Solutions for OCourt and by Tyler Technologies for their anticipated tasks articulated in this paper.
- There will be additional costs for on-boarding other courts/vendors after the proof of concept with OCourt.
- The cost for the local court application integration to the AOC integration platform is the responsibility of the court and/or their vendor.

Integration Platform and OCourt Integration Cost Estimates (one-time cost, see section IX Cost Analysis for details):

Category	Description	Cost
Software Subscriptions	Microsoft Azure Integration Platform Subscriptions	$450,000
Contracted Integration and Development Services	Requirements analysis, Integration platform build, External API Authorization Service, API proof of concept, External API support, Testing, and deployment.	$1,106,108- $1,266,608
Tyler Technologies	Consultation and API gaps	$226,608
OCourt (Omiga Solutions) integration buildout	Build integrations to connect to AOC integration platform to access endpoints	$130,000
	Total	**$1,912,716 - $2,073,212**

On-boarding Cost Estimates (on-going cost):

On-going cost for on-boarding other court application vendors is dependent upon the scope of integrations. The following are assumptions considered during the analysis of the on-boarding cost estimate:

- The goal is to have a standard set of processes, task, and activities for any court and their vendor wanting to connect to the platform.
- The goal is to not modify or customize any APIs if at all possible. Any customizations will drive higher costs.
- The cost for the local court application integration is the responsibility of the court and/or their vendor.
- Cost for a court and their vendor is unknown and difficult to estimate due to the dependency on the scope of their requirements.

AOC Estimated On-Boarding Cost

Category	Description	Est Cost
Software Subscriptions	Azure Integration Platform	$100/month
AOC	On-boarding oversight	$85/hr.
Tyler	Consultation and potential development work to add, update or enhance APIs if needed	$188/hr.

Court Estimated On-Boarding Cost

Category	Description	Est Cost
Court Application Vendor	Build integrations to connect to AOC integration platform to access endpoints	$125 - $150/hr.

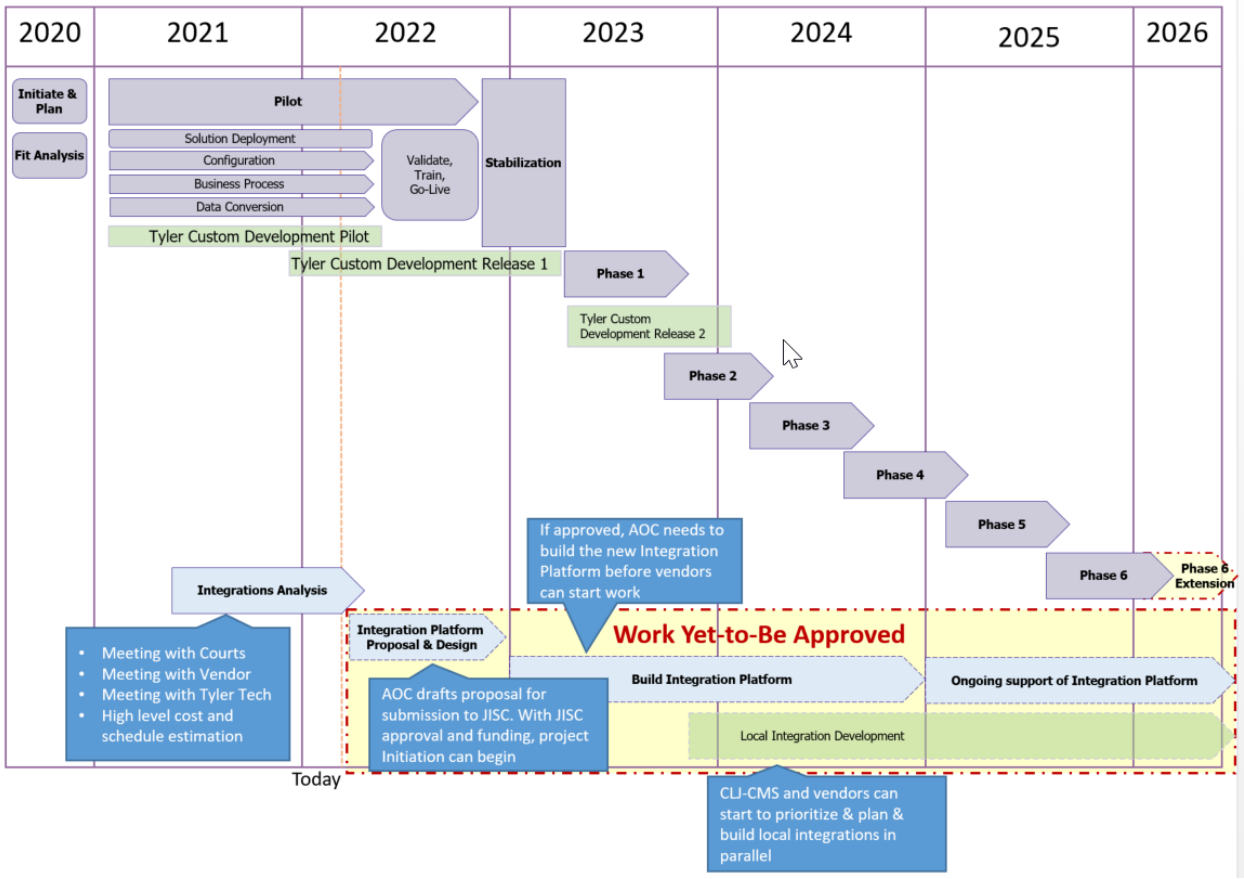
Draft Project Schedule Summary:
A project schedule for the integration work will need to be fully developed and related with the main CLJ-CMS implementation project identifying the inter-dependent tasks and milestones. It is also anticipated that the CLJ-CMS project schedule will need to be extended to accommodate the additional scope of integration development and onboarding for the courts who have a need to integrate other applications.

Below is a draft schedule for the integration project incorporated with the CLJ-CMS implementation schedule. A high-level schedule for the proposed integration project is available in section VI Proposed Schedule.

The following assumptions were used for the draft integrations schedule:

- The draft schedule visualizes a “happy path” scenario only. Further detailed planning will need to occur when the proposal is officially approved and underway.
- The draft schedule assumes funding will be made available in 2022.
- The draft schedule assumes Tyler and Omiga Solutions will make resources available to work on the project during the expected timeframes.

- Contracting resources carry additional and potentially significant time for recruitment and/or procurement processes.
- Due to the additional integration scope, the courts currently identified in the phases will need to be re-organized according to their integration needs and will require additional time.



II. Overview

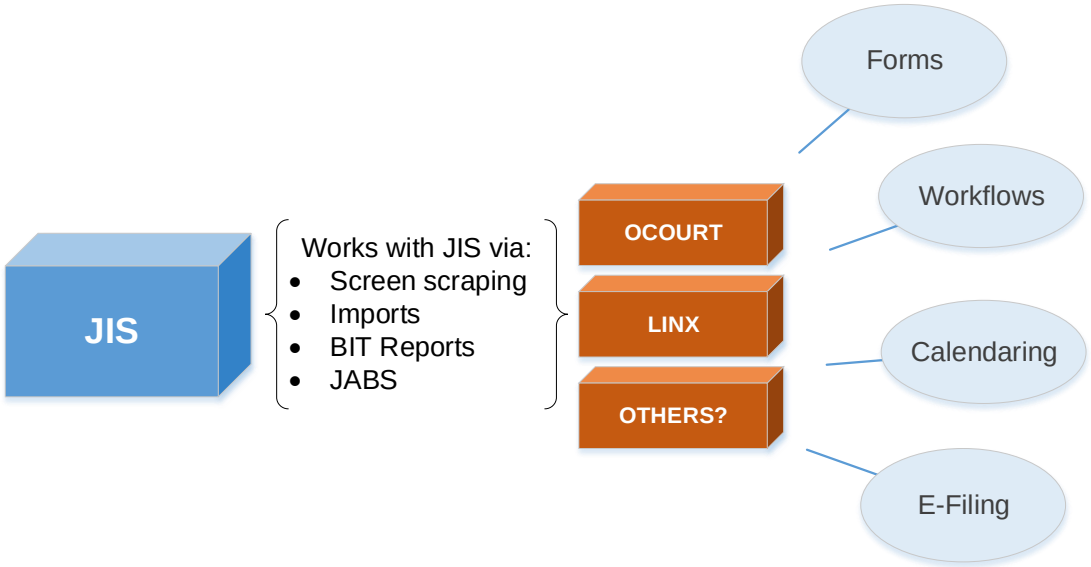
The AOC, at the request of the Court of Limited Jurisdiction, probation departments, and under the direction of the Judicial Information System Committee (JISC), is implementing a new commercial off-the-shelf (COTS) case management application to replace the aging JIS/DISCIS legacy application. Included in the COTS implementation is a case management application, an eFiling application, and a probation application from Tyler Technologies. Tyler in partnership with the AOC and the CLJ courts will implement the applications under the CLJ-CMS project and is scheduled to begin rollout in the fall of 2022 through the spring of 2026.

The current scope of the project expect courts and probation departments to implement and use the suite of Tyler applications with limited modifications as identified during the gap analysis. The Tyler applications were evaluated against 1,557 court business requirements. These requirements were assembled and written for the purposes of acquiring a COTS application. During the gap analysis activities, 297 requirements were identified as gaps. Out of the 297 identified gaps, the CLJ- CMS Court User Work Group narrowed the gap requirements down

to 64 requirements for which development projects were created and are currently in progress to be delivered before and after the pilot implementation.

With the project underway, some of the courts raised concerns pertaining to locally implemented court applications that support various functions such as forms generation, document management, calendaring, collections, and workflow functions that are not currently met by the contracted Tyler applications.

Fig. 1 - CLJ Courts with Locally Implemented Court Applications



Upon review and discussion with some of the courts, it was determined that the locally implemented court applications highlight some gaps against the Tyler applications in the areas of remote/virtual courts, real-time forms management, electronic signatures, and scheduling hearings by clients. These capabilities provide efficiencies and value to the courts especially in the current pandemic situation.

The locally implemented court applications are reliant on data from JIS/DISCIS for which there are several methods being used including but not limited to imports via screen scraping technology and through reports created in the AOC provided Business Intelligence Tool (BIT) reporting tool or via local custom reports. With the replacement of JIS/DISCIS by the Tyler applications, the local court applications as they are implemented and configured today will no longer work. The data needed by the local applications will transition over to the Tyler applications via conversion and new data entry input will begin there as the CLJ courts install the new application.

There are a variety of locally implemented court applications currently used by some of the courts. The list below highlights some of the applications that were received from a survey that was completed in November of 2020 asking the CLJ courts about other systems/technologies used. See *Appendix C – CLJ-CMS Courts with Other Systems* for the survey results.

Application/System	Description
Multi-function Systems	
OCourt	OCourt is a suite of applications designed to support court operations in the areas of electronic forms/document preparation and distribution, scheduling proceedings, collections, jury management, and calendar display.
LINX	LINX is the Legal Information Network Exchange System developed and implemented by Pierce County providing an integrated justice solution for the county that includes case management for the Pierce County Superior Court, Jail roster and booking information, and eFiling.
Document Management Systems	
Laserfiche	Laserfiche a suite of document and record management tools enabling digital document storage, distribution, access, and workflow automation.
OnBase	OnBase is an enterprise platform for managing content.
Application Xtender	Application Xtender is a document management system.
E-Filing Systems	
LegalAtoms	LegalAtoms is a legal and court forms preparation application that helps users navigate court processes.
Truefiling	Truefiling is an eFiling system
Interpreter	
1Lingua	1Lingua is an interpreter resource scheduling/calendaring.

To address the concern regarding gaps in functionality and preserving the efficiencies gained by courts from their locally implemented support applications, the following options were considered:

1. Address the functional gaps between the local applications and Odyssey via custom development.
2. Allow the courts and their application vendors to integrate with Odyssey using Application Programming Interfaces (APIs).

After further examination of the above options, the project team determined the first option to be insupportable for the following reasons:

- The scope of functions to be examined is unknown. An in-depth analysis will need to be performed in order to establish an inventory of functions provided by the different local applications currently in place today and then perform a comprehensive comparative analysis with Odyssey's functions.
- The potential variability of functions between the known systems requiring one-off solutions will increase scope, complexity, and maintenance.

- Major overhaul of the contract, project schedule, and staffing to support potentially large custom development projects which also begins to erode the benefits and advantages of a COTS strategy.
- The potential of duplicating or extending functions that are not aligned with the vendor's roadmap will result in a dead-end.
- Updates to the functions will need to be supported by AOC, Tyler, the court and their vendor, creating more complexity to the support and maintenance of the overall system.

The second option of integrating via APIs is outlined in this document. The idea of integrating systems via APIs is not a new concept. It is a method widely used for connecting disparate systems to deliver a desired outcome or value. The benefits of this method are the following:

- Relative simplification of integrating systems. APIs provide a standard for systems to communicate.
- Shifts the focus from functions to the data needed by the local applications.
- Minimizes restrictions or decision making regarding which functions are necessary.
- Allows for easy management and security of future local court needs to complement the Odyssey solution.

III. High-level Requirements and Integration Scope w/OCourt

A high-level capability analysis was conducted by AOC with the courts utilizing OCourt provided by Omiga Solutions. The intent of the analysis was to determine the preliminary data points needed to be exchanged between the two systems so that cost and level of effort can be estimated. See *Appendix B – OCourt Capability Analysis* for the full details of the study. Additional analysis provided by OCourt regarding their current data mappings with JIS is included as *Appendix E – OCourt JIS Data Mapping.*

Application	Key Capabilities and Features	In Scope?
Schedule R	Calendar and hearing management.	Yes
EDocs and ESignatures	Forms creation, management, and signature capabilities.	Yes
Lobby Calendar Display	Ability to display the daily hearing schedule on a monitor at the courthouse, court's lobby, front counter area, or court website.	No. Calendar information is provided through ScheduleR. Further, Odyssey can also provide a calendar report that can be consumed by the lobby display applications.
Public Access Module – E-Filing	Provides public access to court forms and to file electronically.	Yes
Public Access Module – E-Hearings	Provides an electronic hearing process for infractions.	Yes

Collect R	Provides an automated receipting capability for collection payments.	TBD. Extensive custom CLJ-CMS development in progress to support collection requirements developed by the CUWG.
Vehicle Related Violations (VRV)	Provides a website for court sub-contractors to transfer files that are to be sent to JINDEX.	Yes. VRV will continue to interact with JINDEX in the same way as today. The CLJ-CMS project has a plan/integration project to intercept the messages received from JINDEX and route to Odyssey. It is included with the project's eCitation integration project.
Jury Management	Standalone application for jury management. Provides the ability to maintain and organize an accurate and up-to-date jury list, management summoning, qualification, and selection processes.	No. There is no reliance on data from the CMS.

OCourt User Clients and their Sub Jurisdictions
OCourt systems are currently implemented in the following courts: (Chart provided by OCourt).

Client	Sub Jurisdictions	Other Product
Bellingham	None	Collect R
Black Diamond	None	
Bonney Lake	Sumner, Eatonville, South Prairie	
Bremerton	None	VRV
Buckley	None	
Des Moines	Normandy Park	OSummons, nCourt, Collect R
Enumclaw	None	
Federal Way	None	
Fife	None	Collect R
Issaquah	North Bend, Snoqualmie, Duval	Public Access Module
Kent	Maple Valley	Collect R

Kirkland	Hunt's Point, Medina, Clyde Hill, Yarrow Point	VRV, nCourt, Collect R
Lakewood	University Place, Steilacoom, DuPont	Collect R,
Lake Forest Park	None	Public Access Module, OSummons, Collect R
Lynnwood	None	Collect R
Marysville	Lake Stevens	
Milton	None	Collect R, nCourt
Olympia	None	
Puyallup	None	Collect R, nCourt
Renton	None	OSummons, Collect R
SeaTac	None	Collect R, Public Access Module
Tukwila	None	Public Access Module
Yakima	None	
Yelm	None	

Other Clients and their Product Use

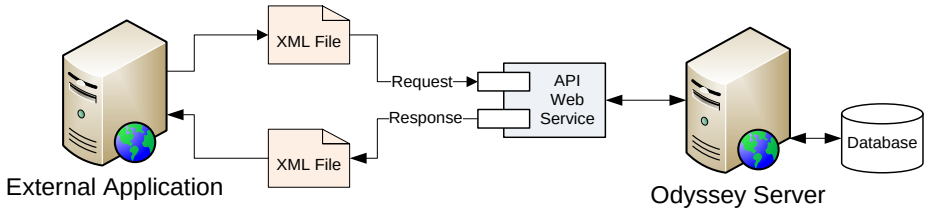
Benton County	Collect R
Clark County (Vancouver)	Probation, Collect R
East Klickitat County	nCourt
Everett	VRV, Collect R
Pierce County	nCourt
Thurston County	Collect R, nCourt

IV. Tyler Technologies and Odyssey APIs

Application Programming Interfaces or APIs are implemented as web services, called with a properly formatted XML message. APIs may be called in one of two ways, either as a single message, or as a compound transactional message with several component messages chained together as a single unit of work. This allows an external customer application to perform integration requests directly against the Odyssey system, in a synchronous manner.

Messages may be executed individually (using the "Message" operation), or concatenated together in an aggregate unit of work (using the "Transaction" operation).

Fig. 2 - API



Odyssey File & Serve (eFiling system) - Odyssey File & Serve (eFiling system) – The Tyler eFiling system is comprised of two components: The Electronic Filing Service Provider (EFSP) and Electronic Filing Manager (EFM). Each component has its own set of APIs. The eFiling system is typically integrated with Odyssey, but is a stand-alone system that can be integrated with any court case management system using the appropriate set of APIs.

Electronic Filing Service Provider (EFSP)

An EFSP is an organization that builds a public web portal for the purpose of soliciting eFiling business from public attorneys. During certification Tyler Technologies will use the EFSP's portal to execute a variety of test cases while observing for correct behavior within the EFSP application, the EFM (for clerk review), as well as evaluation of EFM logs and database tables.

Electronic File Manager (EFM)

A Limited Service EFSP is an organization that integrates an internal case management system to the EFM. For instance, a Prosecutor's case management system, a Public Defender's case management system, or even a large law firm's case management system. Such integrations require a hybrid model of certification because they do not include a public facing portal whereby new users register, but rather, are more of a "closed system" with a finite number of named users.

Tyler certifies 3rd party integrations with OFS. Prior to requesting to initiate certification testing, each integrating organization must develop and self-test their integration. This is to reduce the possibility of failure. Also, each organization that integrates with the EFSP component must execute an EFSP Agreement with Tyler as well as any state specific agreements/SLAs/document prior to the completion of certification.

It is important to note that initial criminal filings are not in scope for Odyssey File and Serve implementation and contract.

Odyssey Navigator (Case Management System) – Tyler provides user guides and pertinent documentation (known as the API Toolkit) regarding available APIs for client-led integration development with the Odyssey case management system.

Tyler Supervision (Probation System) – Tyler Supervision is a newly acquired application by Tyler and therefore does not have the same level of API documentation available for client-led integration development. There are APIs available for Tyler Supervision integration work but will require involvement with Tyler Technologies

V. Technical Options Analysis

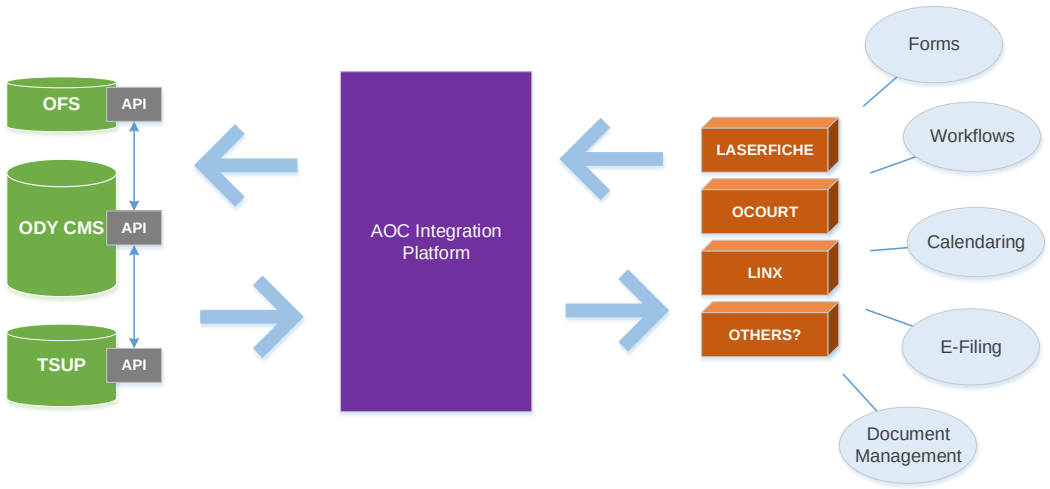
To bridge the functional gaps, the project steering committee directed the project team to explore the feasibility and costs for integrating Tyler applications and locally implemented court applications. The idea of integrating the applications was formulated due to the availability of Application Programming Interfaces (APIs) with the Tyler applications. An API is a method for allowing two applications to talk to each other and is a widely practiced approach. By using this integration methodology, the locally implemented court applications ca get data from the Tyler applications and courts can continue to use the local functions. Further, the locally implemented court applications will have the ability to send data back to the Tyler applications to keep the court case record intact in the official application of record. Further details are included in *Appendix A - External AOC API Roadmap.*

Service Oriented Architecture Integration Model

The API integration approach may seem like a simple solution to address functional gaps between systems. However, it carries some long-term impacts and a significant technical shift for the AOC. To reduce one-off integrations and to centralize and organize into a reusable and scalable framework, the AOC must establish and formalize **an integration platform**.

The long-term AOC enterprise system architectural direction is an integration-based Service Oriented Architecture. Taking this approach allows AOC to be more responsive to the evolving needs of the courts and make the enterprise architecture business focused. The diagram below is from the current enterprise reference architectural plan for the organization and it outlines the system architecture being shifted towards over the next 5-6 years. The centerpiece of this plan is a common integration platform that links all systems – internal and external – together.

Fig. 2 – Proposed Integration Approach (Service Oriented Architecture)



Pros

1. **Simplified architecture**: This approach provides a common pathway and support process for all requests, all vendors and all courts.

2. **De-coupling**: This approach decouples changes made by the vendor and/or the managed CMS system for a given court. AOC becomes responsible for ensuring

backwards compatibility to accessing vendor solutions with a long lead time before migrations must take place. This also provides a stable platform for all vendors to access the same court systems within their allowed security permissions.

3. **Granular control:** This allows for AOC to work with each individual court to manage the exact level of access a given vendor has to their court management system.

4. **Security**: This approach allows for an audit trail and more robust security around access to a court's CMS system. Further, it allows for access to be granted to vendor systems on a least privileged principle with active monitoring for if an attempt is made to exceed those privileges or abnormal/potentially disruptive behavior is being performed with those privileges.

5. **Standardization**: By providing a generic set of industry standardized API's any vendor can rapidly extend their automations for courts beyond initial set-ups without needing to involve AOC or its vendors as long as the extensions do not require increased security permissions. In the event that increased permissions are required, this becomes a relatively simple support task that can be accomplished within days as opposed to a development project to establish new connection pathways that can take months. It also provides for new vendors to quickly integrate into court systems since the provided API's will likely match up to automation interfaces the vendor already has.

6. **Easier to support:** All support falls to the AOC team who with a standardized and simplified architecture should not only be able to respond to emerging issues quickly, be better able to take a proactive stance and prevent such issues before they become impactful to court operations. To that end, this approach allows for improved monitoring techniques to allow AOC support staff to stay ahead of emerging issues that may impact court operations.

7. **Easier to scale:** As courts leverage vendor solutions to extend AOC managed CMS offerings, the demand on the AOC CMS API system will increase. This approach allows AOC to scale the integration solution to match increasing demand in hours or days as opposed to weeks or months. It also provides monitoring mechanisms to predict the need to scale the system long before existing deployments negatively impact court operations.

Cons

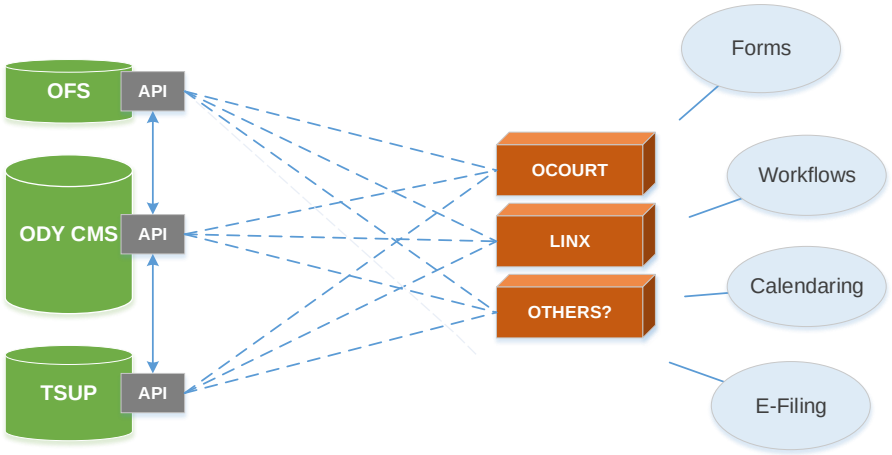
1. **Initial investment**: This approach requires development of API's with a broader array of requirements than may be needed by initial use cases in order to provide a robust and reliable set of API's that are ready to be consumed by more than just the initial vendor.

2. **Data sharing agreements:** As vendors work to increase feature set offerings to courts and/or courts look to leverage new vendors, an onboarding process will need to be in place to make sure the vendor integration team understands the API offered by AOC and agrees to adhere to strict security and data protection standards to ensure the safety of court systems and data.

Point-to-Point Integration Model

The AOC also considered point-to-point integrations between the Tyler base applications and 3rd party court applications. However, the landscape for a point-to-point integration is not ideal due to the multiple applications to be integrated and the known cons such as lack of scalability, higher security risk, and the constant need to monitor the individual applications.

Fig 3 – Point-to-point Integrations



Pros:

1. **Slightly Shorter Timeline**: While firewalls and network portals to allow direct access to court CMS systems from vendors will need to be established. The need to develop AOC routers and security for those calls does not exist in a point-to-point approach. This likely shaves 6-9 months off of implementation timelines.

Cons:

1. **Tightly Coupled Systems**: Tightly coupled systems are strongly discouraged as a best practice in modern IT systems. Additionally, AOC System Architecture Principles are also against tightly coupled systems. This tightly coupled approach will increase costs to the courts and slow down feature additions/system improvements in the following ways:
    a. Whenever the court vendor or AOC vendor makes a change to their system AOC will need to make adjustments to the firewalls and network portals.
    b. All of the court vendors will need to make changes to their systems at the same time and pace as the vendors of AOC managed CMS solutions.
    c. It will also slow down timelines for updates in court vendor systems and AOC managed CMS system dramatically since all parties involved will need to upgrade at the same time.
    d. Makes court vendors susceptible to AOC vendor's software changes with no ability for AOC to provide work-arounds.

2. **Increased Onboarding Time**: Long term increases the time for a court to onboard a new vendor and/or a new feature set of an existing vendor since AOC would have to build out new dedicated point-to-point endpoints.

3. **Increased Risk of Security Breach**: Increases the complexity in keeping the court applications secure. This likely will lead to slower throughputs and an elevated security risk profile. Even with additional security protocols put in place at the network level, this more complicated approach is more difficult to monitor increasing the likelihood of inadvertent data exposures and other security breaches which may cause an interruption to court operations.

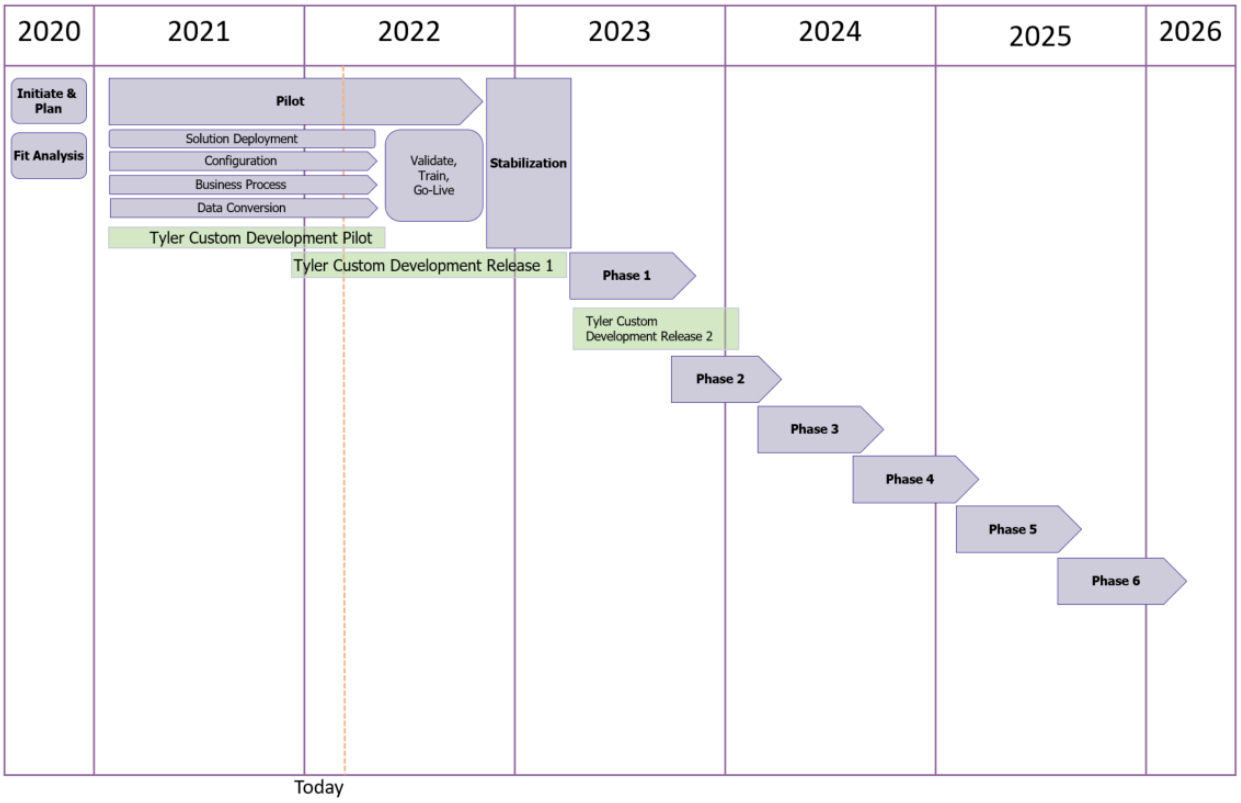
4. **Difficult to Scale**: When demand on the managed CMS API's outpaces the current infrastructures ability to support it in this approach it will require the AOC vendor either to implement software changes and/or AOC to procure additional IT infrastructure and implement it. Both of these processes takes weeks if not months. Additionally, it will be difficult to know when scaling must occur until the limits of the deployed infrastructure has a negative impact on court operations.

5. **Diverse IT Environment**: Instead of having a single interface to monitor, maintain and support this approach will generate a separate interface solution for every court vendor and court combination. This will require a significantly larger number of resources to achieve thereby reducing the number of resources available for AOC to leverage in meeting new challenges and needs of the courts

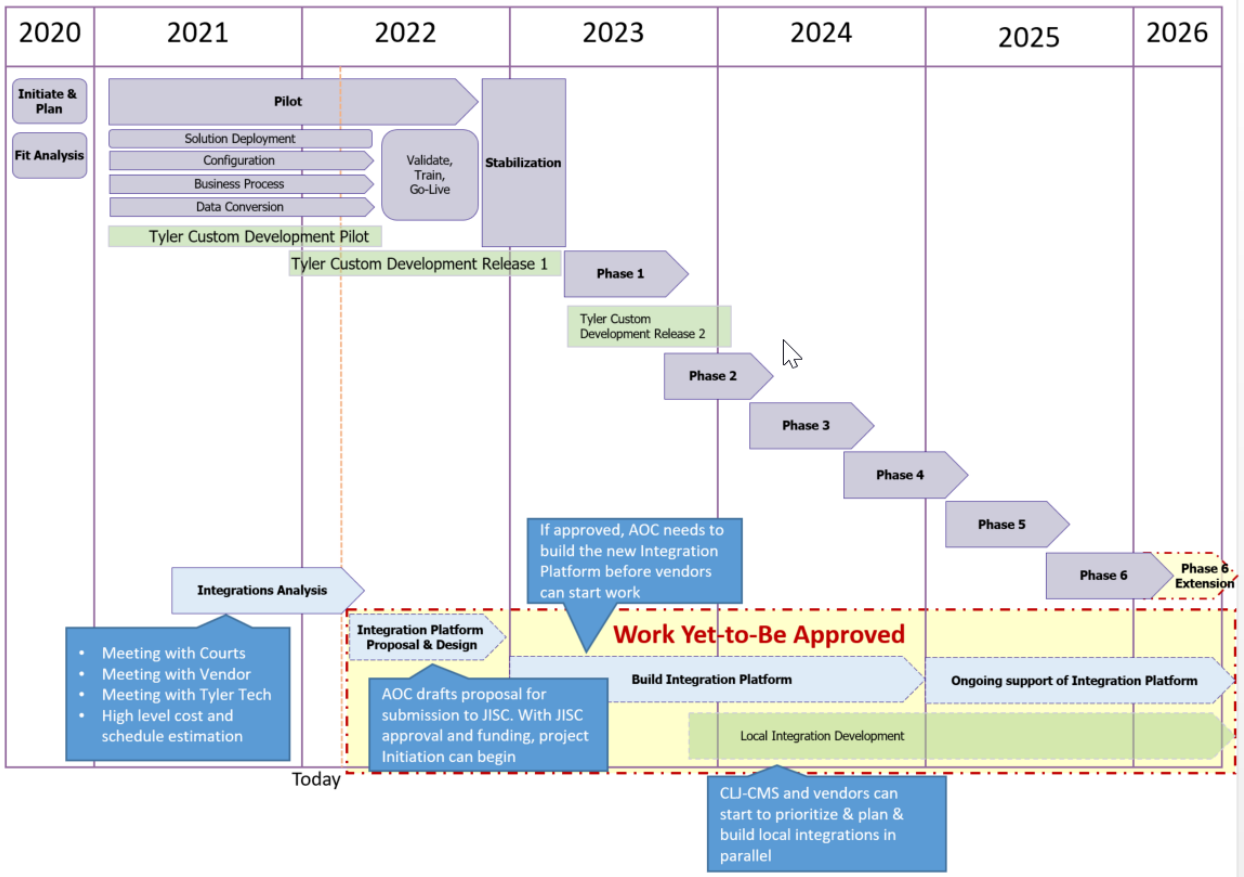
VI. Proposed Schedule

To provide context regarding the CLJ-CMS implementation, below is a high-level schedule that has been shared with the CLJ-CMS PSC and the JISC for status reporting purposes. See *Appendix D – CLJ-CMS Project Schedule PPT* for the full size graphics.

CLJ-CMS Implementation Schedule – current



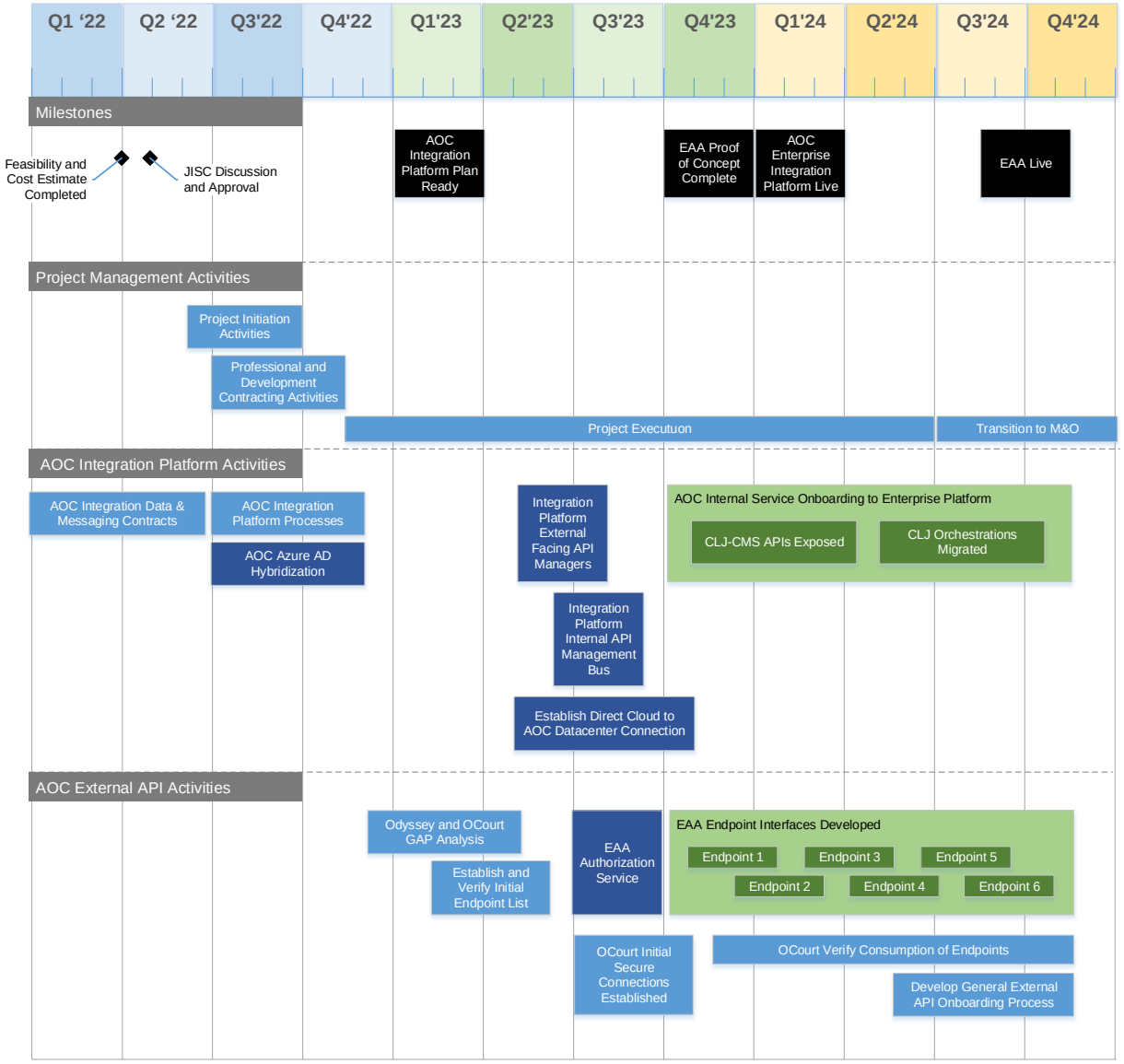
CLJ-CMS Implementation Schedule – modified to highlight the addition of the integration scope



Integrations Draft Roadmap and Schedule

Below is a draft roadmap and schedule for the proposed integration project. The following assumptions were contemplated during the drafting of the integrations roadmap and schedule:

- The draft schedule visualizes a “happy path” scenario only. Further detailed planning will need to occur when the proposal is officially approved and initiated.
- The draft schedule assumes funding will be made available in 2022.
- The draft schedule assumes Tyler and Omiga Solutions will make resources available to work on the project during the expected timeframes.
- Contracting resources carry additional and potentially significant time for the recruitment and/or procurement processes.
- Any renegotiation or amendments to the existing project with Tyler will also add additional time.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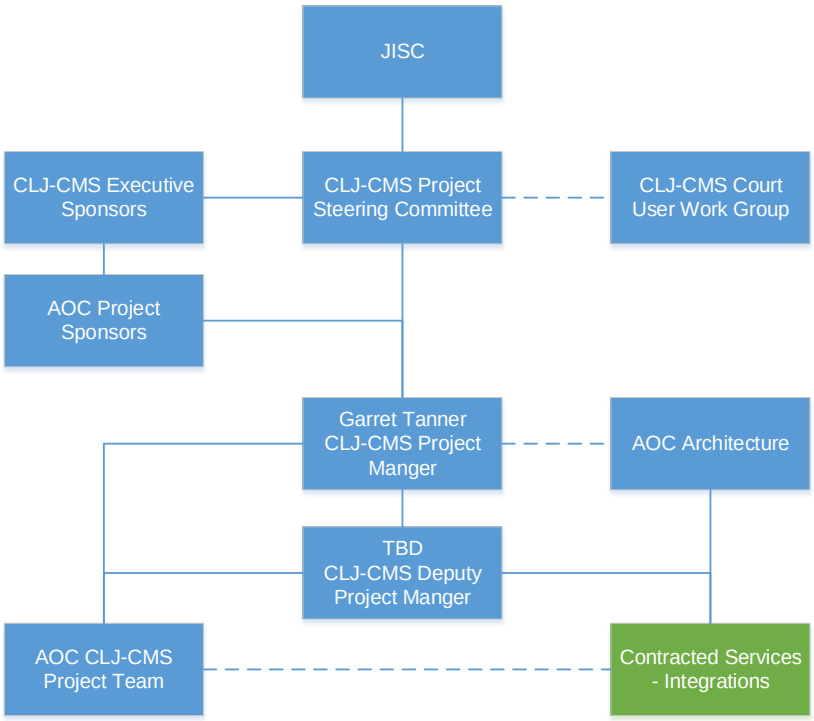
Q2 '22
Q3'22
Q4'22
Q1'23
Q2'23
Q3'23
Q4'23
Q1'24
Q2'24
Q3'24
Q4'24
Milestones
Feasibility and Cost Estimate Completed
JISC Discussion and Approval
AOC Integration Platform Plan Ready
EAA Proof of Concept Complete
AOC Enterprise Integration Platform Live
EAA Live
Project Management Activities
Project Initiation Activities
Professional and Development Contracting Activities
Project Executuon
Transition to M&O
AOC Integration Platform Activities
AOC Integration Data & Messaging Contracts
AOC Integration Platform Processes
AOC Azure AD Hybridization
Integration Platform External Facing API Managers
AOC Internal Service Onboarding to Enterprise Platform
CLJ-CMS APIs Exposed
CLJ Orchestrations Migrated
Integration Platform Internal API Management Bus
Establish Direct Cloud to AOC Datacenter Connection
AOC External API Activities
Odyssey and OCourt GAP Analysis
Establish and Verify Initial Endpoint List
EAA Authorization Service
EAA Endpoint Interfaces Developed
Endpoint 1
Endpoint 3
Endpoint 5
Endpoint 2
Endpoint 4
Endpoint 6
OCourt Initial Secure Connections Established
OCourt Verify Consumption of Endpoints
Develop General External API Onboarding Process

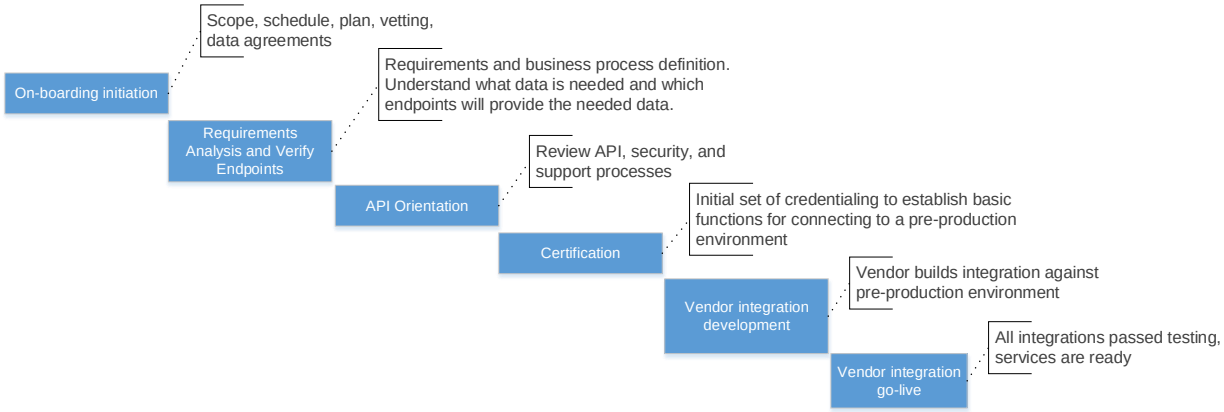
VII. Integrations Project Structure and Organization

It is highly recommended that the integration effort, if approved, be managed as a partner project to the CLJ-CMS project. The integration project will still remain under the purview of the current project governance structure, however a different team of resources will be assembled with a focus on completing the integration tasks. The chart below depicts the recommended project structure with the added scope of integrations.



VIII. On-boarding framework

After completing the build-out of the integration platform, the new service will be ready. The diagram below depicts the general process for on-boarding courts with integration requirements. On-boarding process details and documentation will be developed during the integration project's timeline.



IX. Cost Analysis

At the present time, AOC does not have the needed resources to develop the proposed integration platform. Recruiting the necessary resources will add significant time to the schedule due to the recruiting challenges currently faced by many organizations. As such, it is recommended to contract development and professional services to work on the integration project.

Assumptions:

- Cost estimates based on contracted services
- Cost analysis does not include on-going support and on-boarding costs after the OCourt proof of concept and readiness
- Cost analysis does not include CLJ-CMS project schedule extensions

Totals

Task	Hours	Est Cost
Integration platform build, OCourt integrations	8,716	$1,912,716 - $2,073,212

Phase 1 – Integration Platform Build

	Task	Est Hours	Rate	Est Cost
1	Azure Integration Platform Subscription	First 2 years		$450,000
2	Establish AOC Data & Messaging Contracts	200	$125 - $150/hr.	$25,000 - $30,000
3	Establish Integration Platform Processes	400	$125 - $150/hr.	$50,000 - $60,000
3	Establish Primary API Managers	240	$125 - $150/hr.	$30,000 - $36,000
4	Enterprise Data Services APIs	240	$125 - $150/hr.	$30,000 - $36,000
5	Migrate CLJ BizTalk	240	$125 - $150/hr.	$30,000 - $36,000
6	CLJ Managed CMS APIs	120	$125 - $150/hr.	$15,000 - $18,000
7	Routing Services	400	$125 - $150/hr.	$50,000 - $60,000
8	Project Management Tasks	300	$85 - $100/hr.	$25,500 - $30,000
9	Enterprise Oversight Tasks (Architecture, Infrastructure, Security)	200	$85 - $100/hr.	$17,000 - $20,000
	Total	**2,340 hrs.**		**$732,500 - $776,000**

Phase 2 – External API Build

	Task	Est Hours	Rate	Est Cost
1	Requirements and Gap Analysis	180	$125 - $150/hr.	$22,500 - $27,000
2	External AOC API (EAA) Authorization Services	620	$125 - $150/hr.	$77,500 - $93,000
3	EAA Node Set - Case	620	$125 - $150/hr.	$77,500 - $93,000
4	EAA Node Set - Object Details	620	$125 - $150/hr.	$77,500 - $93,000
5	EAA Node Set - Accounting	960	$125 - $150/hr.	$120,000 - $144,000
6	EAA Node Set - Calendar	960	$125 - $150/hr.	$120,000 - $144,000
7	Odyssey API Extensions	1,216	$188/hr.	$226,608
8	Omiga Solutions integration tasks	Not provided	Not provided	$130,000
9	Project Management Tasks	600	$85 - $100/hr.	$51,000 - $60,000
10	Enterprise Oversight Tasks (Architecture, Infrastructure, Security)	600	$85 - $100/hr.	$51,000 - $60,000
	Total	**6,376 hrs.**		**$953,608 - $1,070,608**

X. Risks

- Impact to the CLJ Odyssey implementation project timelines. This is being mitigated by working in concert with that project team to have courts needing this integration to be on boarded towards the end of the CLJ Odyssey project.
- May draw too much on limited CLJ development resources. This will be mitigated by bringing on an independent team of contractors to do most of the work related to this project.
- Odyssey's API's may not provide sufficient functionality to meet the initial needs of this external API. We will work with Tyler to identify potential gaps and include with this project Tyler enhancements to Odyssey to close those gaps.
- Vendors may potentially have access to sensitive court data, and could retain data beyond retention schedules or use it in ways that are either unanticipated or not permitted. This will be mitigated by having accurate records of data access requests, strict data sharing agreements and strong security controls. Security controls will include rapid off-boarding of vendor access when a court no longer requires it.
- Skill sets required for integration development may not be available at the court or from the vendor. This project will work to mitigate this by ensuring that the API's are based on industry standards.

The risks in not taking on this project include:

- Not being able to support local court operations that leverage 3rd party solutions not currently covered by the Odyssey solution.
- Fewer CLJ courts adopting the AOC managed CMS solution (Odyssey) since it does not meet all of their needs.

- Courts will have to implement workarounds and/or may need to secure additional resources to support the workload as a result from loss of functionalities.

XI. Decision Point – CLJ-CMS Integrations

MOTION:

- I move that the JISC approve and authorize AOC to build an integration platform to enable the exchange of data between the Tyler applications to be implemented by the CLJ-CMS project and the court's locally implemented court applications.

1. BACKGROUND

DISCIS has served the case management needs of the CLJs for almost four decades. Over time and to support the growing and changing needs of efficiently managing court cases, courts implemented supporting applications at the local level. These applications and their capabilities range from document management including document signing, routing, workflows, and public access, eFiling, financial collections management, lobby display of court calendars, and court participant (i.e., Interpreters, Pro Se) scheduling.

The court implemented local applications provide additional capabilities outside of DISCIS and in support of enhancing specific court processes currently not provided by the State system. The local applications are reliant on data from DISCIS to operate.

AOC is in progress to replace DISCIS with a suite of modern applications that include eFiling, probation case tracking, and court case management. Tyler Technologies is contracted to provide Odyssey File & Serve, Odyssey Navigator, and Tyler Supervision to the CLJ and Probation departments in a statewide implementation project.

With the replacement of DISCIS by the Odyssey suite, the local applications and associated processes as they are constructed or configured today will no longer work. The data needed by the local applications will transition over to Odyssey via conversion and new data entry input will begin in Odyssey as the CLJ courts install the new system. Further, there are some gaps in functionality between Odyssey and the local court applications. If those gaps are not mitigated, the impact on the court will be significant.

As such, the agency recommends constructing an enterprise integration platform and using Application Programming Interfaces (API) available from Tyler, to allow the courts and their vendors to connect their local court systems in a standardized way with the Odyssey suite to exchange specific data points and enabling the continued use of the local court applications while using Odyssey as the new case management system for the Courts of Limited Jurisdiction.

2. OUTCOME IF NOT PASSED

If the proposed integration platform build and proof of concept integration with OCourt and Tyler is not approved, the courts using local court applications will lose value-added capabilities not currently available in the Odyssey suite and will have to create work-arounds and/or secure additional personnel to support the loss of functionalities. This may also result in some courts not participating in the statewide case management system implementation.