Judicial Data Management Services

A Component of the
Integrated Trial Court Adjudication System

Project Plan

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Court Services

Contents

1 Overview

1.1 Project Context

Florida's State Courts System has begun the development of an Integrated Trial Court Adjudicatory System, a project that will optimize the ability of judges and case managers to electronically process and manage cases. The project is also designed to assist chief and administrative judges and court managers in the effective management of court operations and resources. The project has two major components: 1) Judicial Viewers[1], which focus on case management services for judges; and 2) Judicial Data Management Services (JDMS), which focuses on state level court activity data and analysis services for court managers and other stakeholders.

1.2 The Vision of the Judicial Data Management Services Project

The JDMS project will develop a computing environment to provide state-level data management services to all elements of the court system. Those services include:

- ➢ Data Consolidation and Standardization Services
- ➢ Reporting Services
- ➢ Processing Services
- ➢ Data Warehouse and Analytical Services

Specifically, the JDMS system will benefit judges, court managers and all users of the court system by providing meaningful data and analysis to: 1) improve adjudicatory outcomes through case management and program evaluation, 2) increase operational efficiency through efficient use of shared resources, and 3) support organizational priorities through legislative resource and budgetary requests. JDMS will additionally enhance the ability of the state courts system to provide court-related data to assist policymakers in evaluating policy and budget options.

Initial development will focus on consolidating existing data sources and establishing critical system infrastructure. This approach will keep the project grounded while providing initial successes from which to base future expansion. The real benefit of the JDMS, however, is in its long-term capability to satisfy the courts' and Legislature's information needs. Thus, the JDMS architecture will form the basis of an organizational business intelligence system. Initial development, while focused on today's needs, will reflect that premise. This approach is directly aligned with the court system's strategic goals and is in consonance with public and private sector organizational best practices.

The Judicial Data Management Services (JDMS) system provides a long-term vision and cohesive architecture for the direction of organizational data management. The JDMS project will be implemented in a series of small development cycles taken over one or two years. Each development

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[1] Judicial Viewers are also known as the Court Application Processing System (CAPS), which provides judges and case managers with basic tools and capabilities to manage and track case activity. This component is largely restricted to the local jurisdictions in which it is deployed.

cycle will focus on delivering a specific, achievable set of components that provide needed capabilities within the four JDMS service areas. Thus, each cycle will produce a production-ready component that can be used by the court system even if subsequent work on the JDMS project is postponed. This modularized approach will enable the JDMS project to focus on capabilities important to the court system long term while keeping the project relevant to the priorities of today.

As can be seen in section 4.1, the FY 2015-2017 JDMS development cycle identifies specific sub-projects within the larger data management service areas of Data Consolidation and Standardization, Data Warehouse and Analytics and Reporting. Each of the sub-projects, while not providing the full functionality expected for that service, will provide a level of production-grade capability within that service. The timing of the JDMS development cycles will coincide with state funding cycles and be flexible enough to ensure that the project remains relevant to the evolving needs of the court system.

Specific projects will be chosen for each development cycle depending on the needs of the court system at that point. Legislative budget requests will be structured to provide a consistent level of resources and material necessary over the development cycle. This structure will facilitate short-term project planning within the larger design framework of the JDMS system.

2　Goals and Scope

2.1　Project Goals for FY 2015-2017

The inaugural development cycle of the long-term JDMS project is set for the FY 2015-2017 period. It will address critical personnel and systems architecture elements necessary to support the incremental expansion of existing data management projects, such as mortgage foreclosure data collection, and to prepare for the development of more substantial data management capabilities.

The goals for this development cycle of the JDMS project are:

1. Establish a solid data management foundation capable of supporting court activity data management at the state level through the addition of new staff and support elements and the enhancement of existing infrastructure;

2. Expand case inventory and case aging statistics from the foreclosure case type to all case types; and

3. Identify projects and plans for the FY 2017-2018 development cycle.

This phase of the JDMS project will take two years to complete. While the current LBR request is focused on the 2015-2016 fiscal year only, several operational factors dictate a longer development period for this initial project cycle.

Primary among these factors is the critical need to hire, train and integrate four new staff. Depending on availability of necessary skills, hiring and integration may take several months and will impose significant workload on current staff. The need to upgrade existing data collection systems is also a factor. The project should not sacrifice existing data management capability.

2.2   Project Scope for FY 2015-2017

The scope of the sub-projects in this two-year cycle will focus on identifying and deploying the tools, processes and infrastructure necessary to accomplish the goals of this development cycle and to sustain the JDMS project long term. It is expected that several critical modernizations will be completed in the FY 2015-2016 period, including improvements to the data tracking and system logging subsystems, as well as enhancements to development and production server environments (Milestone 01). To ensure the JDMS project continues to move forward long term, this period will also include essential project management and planning tasks (Milestone 00).

Goal 1: Work will primarily focus on enhancing and extending existing data management subsystems including the Uniform Data Reporting (UDR) System and the Uniform Traffic Citation (UTC) System to make these older systems compatible with the JDMS system design and to take advantage of newer, more efficient technologies. Enhancements to the UDR system will result in more detailed data on the use of constitutionally mandated due process elements, which will enable the court system to more effectively manage these costly resources. Enhancements to the UTC system will include upgrades to make that system compatible with the Trial Court Data Model,[2] which will improve the courts' ability to monitor traffic fine data for budget management and resource allocation. Additional modernizations will improve usability for both systems, which will increase the courts' ability to more readily respond to public data requests and to prepare legislative analysis.

Goal 2: Additional work will focus on expanding the current FY 2013-2014 Foreclosure Initiative data collection project from foreclosure cases[3] to all case types under the Summary Reporting System (SRS). This expansion will improve the accuracy and reliability of the SRS statistics which form the basis for the Supreme Court's constitutionally mandated Annual Certification of Judgeships, workload and performance statistics, resource budgeting formulas, legislative analysis and public data requests.

Goal 3: Work will also include the evaluation and prioritization of needed capabilities in preparation for subsequent project cycles. This will include a comparative review of web-reporting frameworks and other tools related to the visual display of performance metrics and data and identification of "Next Step" sub-projects for the FY 2017-2018 development cycle based on evolving organizational priorities. Short- and long-term planning is a core competency of the JDMS project. Such planning will enable the project to focus on delivering specific capabilities on a timely schedule at minimal cost.

Court organization is a dynamic environment with several critical priorities pending at this time. As discussed in section 4.3, the Office of the State Courts Administrator (OSCA) strives to maintain a development environment adaptable enough to handle change while still advancing the organization's goal.

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[2] The Trial Court Data Model is a data element framework that identifies the essential information and data relationships necessary to advance a case through the adjudication process. The model was developed as part of the Trial Court Integrated Management Project. (See Appendix C of the linked document.)

[3] The FY 2013-2014 Foreclosure Initiative is a data driven case management effort to reduce the backlog of foreclosure cases in Florida. The Initiative defined a minimal set of data elements within the foreclosure case type that enabled the computation of meaningful statistics to guide backlog reduction efforts at both the local and state level.

3.   Organization

3.1   Project Organization

The project team and management structure may be modified depending on funding and FTE.

Table 1 JDMS Project Team (Tentative)

Role	Description	Name/Title
Committee Sponsor	Provides judicial oversight of the JDMS project.	Court Statistics and Workload Committee
Executive Sponsor	Provides executive support for the JDMS project including establishment and coordination of scope for sub-projects and liaison with the Supreme Court and associated judicial commissions.	Patricia (PK) Jameson, State Courts Administrator
Executive Liaison	Provides executive support and assistance for JDMS development.	Blan Teagle, Deputy State Courts Administrator; Eric Maclure, Deputy State Courts Administrator
Technology Support	Provides all technology support for the JDMS project.	Alan Neubauer, State Courts Technology Officer
Business Sponsor	Represents cross organizational elements of JDMS project such as policy, best practice and strategic elements.	Gregory Youchock, Chief of Court Services
Project Manager	Manages the JDMS business case and project team.	PJ Stockdale, Data Administration Supervisor
Software Support	Provides all software support for the JDMS project.	TBD
Data Management Services	Provides data management support including data dictionary preparation and maintenance, data model validation and meta-data integration.	TBD

4.   Scheduling and Budget

4.1   Milestones

Milestone	Description	Planned Tasks (not inclusive or expository)	Duration
00 Planning and Preparation	Tasks and sub-projects associated with planning and executing and closing the project	• Hiring, training and integration of new staff • Purchase of hardware and software • Standardization of tools and development methods • FY 2016-17 sub-project planning	Jul 2015 - Jun 2016
01 Data Management Foundation	Tasks and sub-projects necessary to develop a solid data management foundation capable of supporting court activity data management at the state level	• Implementation of a generalized data exchange service • Development of a generalized automated logging system • Development of a generalized data tracking system • Expansion of the Trial Court Data Model physical data base and associated programming interface • Enhancements to computer server environment • Modernization of existing data collection systems	Oct 2015 - Jun 2016 Jul 2016 - Jun 2017
02 Development Cycle Planning	Tasks and sub-projects necessary to identify projects and plans for the next JDMS development cycle	• A comparative review of web reporting frameworks and other tools related to the visual display of performance metrics and data • Identification of "Next Step" projects based on developing organizational priorities • Preparation of cost estimates and budget requests	Jan 2016 - Jun 2016

Milestone	Description	Planned Tasks (not inclusive or expository)	Duration
03 Expansion of case inventory and aging statistics	Tasks and sub-projects necessary to expand case age activity reporting from the mortgage foreclosure case type to all SRS case types	• Determination of case type implementation sequence • Software review of existing system for scalability • Preparation of appropriate documentation and directives • Implementation coordination with clerks of court and circuit court administration • Planning and execution of staff augmentation contract • Education and training for field staff	Jul 2015 - Jun 2016 Jul 2016 - Jun 2017

4.2   Budget

Budget estimates for FY 2016-2017 are somewhat variable. While the JDMS project is designed to result in a significant expansion of services and capabilities in the second year of development, the extent of that expansion depends on available resources in FY 2015-2016. Modifications to the FY 2016-2017 cost estimates will be made as the project progresses.

Requirement	LBR Category	FY 2015-16 LBR		FY 2016-17 LBR (Estimated)	
Personnel					

4.0 Staff FTE (note 1)
(Data Management Development and Support)
   (2) Court Statistics Consultant
   (1) Senior Court Analyst II
   (1) Senior Court Analyst I
		(R)	$341,679		$0

Contract Services (note 2)	100777	(NR)	$140,000	(NR)	$70,000
Software/Licenses (note 3, 6)					
Perl Licenses	040000	(NR)	$2,178	(R)	$1,888
Microsoft SQL Server	060000	(NR)	$1,880		$0
Microsoft Remote Access License	060000		$0	(NR)	$7,000
SAS Analytics Pro (5 User) (note 4)	100777	(NR)	$26,915	(R)	$7,600

Requirement	LBR Category	FY 2015-16 LBR		FY 2016-17 LBR (Estimated)	
Equipment/Hardware (note 3, 6)					
Workstations/Monitors (note 5)	060000	(NR)	$4,290		$0
Blade Server and Storage	060000			(NR)	$9,120
Total Non-Recurring			$175,263		$86,120
Total Recurring			$341,679		$9,488

Notes:

1. Requested FTEs will perform a variety of data management and development duties as necessary for the JDMS project. Costs are reported on FY 2015-2016 LBR and include expenses and human resource services amounts and initial training costs for reach position.

2. Contract services are computed at $125.00 per hour as per (Information Technology (IT) Consulting Services 973-561-10-1) and include SQL software development, ETL services and validation.

3. Software and hardware estimates include a one-time non-recurring expenditure to purchase followed by, and where required by the vendor, a recurring maintenance or upgrade fee in the second year following purchase.

4. Verified SAS contract costs (35F-0170K) as of July 18, 2014. SAS Analytics Pro software package includes both the base components of SAS applicable to data management and the analytical components. Due to SAS licensing structure, it is not possible to separately purchase the analytical component package without also purchasing the base data management components. Therefore, it is more cost effective to purchase the full analytical package at one time rather than purchasing the base components separately and then, later, repurchasing the analytic packages paying for the base components twice.

5. Workstation purchase includes units for use by contractors in addition to staff personnel.

6. As project priorities are solidified, it may be necessary to shift the order of software purchases. For example, it may be necessary to fund the Microsoft Remote Access licensing element in FY 2015-16 and the Microsoft SQL Server licensing element in FY 2016-2017.

4.3 Development Process

The Judicial Data Management Services (JDMS) project will use a variation of the Agile Scrum development methodology. Scrum is a management framework for completing complex projects using one or more cross functional teams including developers, business analysts, domain experts, etc. This methodology establishes a fixed set of business goals (milestones) and time frames but leaves the scheduling of the specific tasks necessary to achieve those goals to the development team. The team accomplishes tasks as a series of short, two- or three-week, "sprints" that focus on the needs of the project and the operational needs of the end user at a particular point in time. This methodology allows the development teams to be responsive to the needs of the end user of the system and fosters an environment where emergent opportunities can be quickly capitalized on and the occasional dead end minimized. This methodology is well suited to the dynamic court environment and has been employed successfully during past data management projects.

See Section 5.3 on the project's Change Management plan for more details on the quarterly feature releases and three-week sprint cycles.

4.4   Development Environment

The Judicial Data Management Services system project will use open source tools and applications to the maximum extent possible and where appropriate. This will help minimize project costs. It will also allow the project to take advantage of several related case management projects currently in work within the Eighth, Fifteenth and Seventeenth Judicial Circuits, all built upon open source platforms.

The OSCA's Data Administration unit supports the following development environments for use in this project: Perl or Python for application programming, Microsoft PowerShell and Unix tools for command scripting and control, Microsoft SQL Server and T-SQL for data base services and the commercial SAS data processing package for analysis and modeling. Additional software for project management (Redmine) and source control (git) will also be used.

4.5   Measurements Program

Specific metrics to determine success are under review and will be incorporated when finalized and approved.

5.   Management Plans

The respective management plans including risk, communication, quality, configuration and change are under development and will be incorporated in fact, or by reference, as each one is completed and approved.

5.1 Risk Management

Without proper planning, information technology projects can be subject to a number of risks, such as scope creep or unrealistic short-term expectations. This project plan attempts to guard against those inherent risks by adopting mitigation strategies as described in the table below.

Risk	Mitigation Strategy
Unrealistic short term expectations	• Planning extensively with sponsors and stakeholders to reach agreement on the scope for each development cycle • Set reasonable and achievable goals for each development cycle based on available resources, skills and manpower • Develop a reasonable Change Management Plan to ensure project remains responsive to evolving needs of the court system • Employ an enterprise data management strategy that supports agile development

Risk	Mitigation Strategy
The necessary additional skilled personnel are not available or allocated appropriately	• Clearly define the scope of the each development cycle within the context of the long term JDMS vision so that staffing needs are understood • Develop a succession plan to ensure needed skills are available as staff leave or advance in the organization • Use staff augmentation contracts where appropriate
Inadequate allocation of resources (hardware, software, funding)	• Clearly define the scope of each development cycle within the context of available resources • Establish a development environment that encourages the use of open source and inexpensive tools to minimize costs wherever practical • Encourage technical solutions that use the lowest-level technology that advances project goals efficiently and effectively with available resources
Overall JDMS project loses focus due to long development	• Clearly define the long-term vision of court data management (Court Data Management Framework) • Establish a comprehensive communications plan to keep stakeholders focused • Ensure project produces a steady stream of usable results
Short-term development cycle diverted to sub-projects not planned for (project creep)	• Establish comprehensive development cycle plans with agreement and commitment of sponsors and stakeholders to support plan schedule • Frequent meetings with stakeholder commissions to demonstrate progress
Short-term development cycle required to do more than planned (scope creep)	• Develop a clear and specific project plan with meaningful outcomes • Establish a comprehensive Communications Plan to ensure buy in and support from project sponsors and commission stakeholders • Establish a strong Change Management Plan that helps maintain project focus while remaining responsive to evolving needs
Additional data sources cannot be developed	• Encourage an organizational approach to data management • Clearly define data needs of the court (i.e., Trial Court Data Model, performance indicators) • Encourage a project governance structure that promotes the inclusion of organizational data into local projects
Field level systems do not evolve to capture necessary court activity data or to provide that data to JDMS in an efficient manner	• Encourage an organizational approach to data management • Clearly define data needs of the court (i.e., Trial Court Data Model, performance indicators) • Work with Florida Courts Technology Commission to ensure local data system specifications include the capacity to programmatically transmit data to JDMS.

5.2 Communications Management

Disseminating knowledge about the project is essential to the project's success. Project participants desire knowledge of what the status of the project is and how they are affected. Furthermore, they are anxious to participate. The more that people are educated about the progress of the project and how it will help them in the future, the more they are likely to participate and benefit.

This section identifies the responsibilities of the project team members defined in Section 3.1. The Project Manager will take a proactive role in ensuring effective communications on this project. The communications requirements are documented in the matrix below and will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it and to whom to communicate.

As with most project plans, updates or changes may be required as the project progresses or changes are approved. Changes or updates may be required due to changes in personnel, scope, budget, or other reasons. Additionally, updates may be required as the project matures and additional requirements are needed. The project manager is responsible for managing all proposed and approved changes to the communications management plan. Once the change is approved, the project manager will update the plan and supporting documentation and will distribute the updates to the project team and all stakeholders. This methodology is consistent with the project's Change Management plan and ensures that all project stakeholders remain aware and informed of any changes to communications management.

Type of Communication	Audience	Frequency/ Schedule	Purpose	Method/Tool
Internal Communication:				
Scrum Team Meetings	Project Development Team	Daily	Keep development team apprised of one another's work completed the previous day, and whether or not there are any roadblocks hindering one's work on assigned tasks.	5 minute face-to-face meeting
Sprint Wrap-Up and Subsequent Spring Planning Meetings	Project Development Team (or Full Project Team as appropriate) & Project Manager	Following every three-week sprint cycle	Wrap up the previous sprint and report to Project Manager the stories completed. Plan for the next 3-week sprint cycle, identifying stories and tasks the development team commits to undertake.	2-4 hour face-to-face meeting
Release Planning Meetings	Full Project Team & Project Manager	Quarterly	Assess the project's progress over the last quarter and prepare draft Progress Report about the release. Plan for the next release.	2-4 hour face-to-face meeting
Discussion of Draft Progress Report and the Direction of the Next Release	Executive Sponsor, Executive Liaisons, & Business Sponsor	Quarterly	Present the team's plans for the next release and discuss whether the planned tasks are aligned with the current needs of the project sponsor and stakeholders.	Either 2 hour face-to-face meeting or email distribution of draft Project Progress Report.

External Communication & Reporting:				
Project Progress Report	All stakeholders and interested parties, including agencies external to the court system and the general public.	Quarterly	Announce to all stakeholders and the details of the release, whether there were any deviations from the planned release objectives, and the project team's objectives for the next release cycle.	Progress Report prepared in a standard template. Made permanently available on the web and also emailed to all interested parties.
Court Committee Presentations	All stakeholder commissions and committees of the court. The Court Statistics & Workload Committee (CSWC) is the committee sponsor of this project.	• Quarterly for CSWC. • At least bi-annually for TCP&A. • As requested for all other committees. • As needed when a certain committee's guidance is needed.	Keep the court's commissions and committees apprised of the progress of the project, provide an opportunity for feedback, and seek policy guidance on issues that relate to a committee's jurisdiction.	Progress Report can serve as the material for each meeting. A member of the JDMS project team will attend the meeting (if requested) to present and discuss the project to the committee membership.
Emergent Communications:				
Ad Hoc Meetings	Project Manager, Business Sponsor, and then Executive Liaisons	As needed	Ensure sufficient and timely communication of issues, problems, or discoveries within project team and with the sponsors, if warranted. See section on the Communication Escalation Process.	Meetings, phone calls, or emails as appropriate.
Ad Hoc Briefings	Project Manager, and then Full Project Team	As needed	Ensure sufficient and timely communication of upcoming changes in the project direction. See section on the Communication Escalation Process.	Meetings, phone calls, or emails as appropriate.

Communication Escalation Process

As issues or complications arise with regards to project communications, it may become necessary to escalate the issue if a resolution cannot be achieved within the project team. Project stakeholders may have many different conflicting interests in a given project. While escalations are a normal part of project management, there must be a documented process that defines how those escalations will take place.

Efficient and timely communication is the key to successful project completion. As such, it is imperative that any disputes, conflicts, or discrepancies regarding project communications are resolved in a way that is conducive to maintaining the project schedule, ensuring the correct communications are distributed, and preventing any ongoing difficulties. In order to ensure projects stay on schedule and issues are resolved, the JDMS project team will use the following escalation model to provide a framework for escalating communication issues.

Issues that cannot be resolved at one level will be escalated to the next for possible resolution as follows:

- Project Development Team

- Project Manager

- Business Sponsor

- Executive Liaisons

- Executive Sponsor

The chain of communication should flow the opposite way as soon as the Executive Sponsor or Executive Liaisons become aware of emergent issues impacting the direction of the project, the needs of the stakeholders, or other factors likely to affect the project's schedule.

5.3 Change Management

The Agile Scrum development methodology is very well-suited to handling change and allows for necessary changes to be incorporated into the project without major disruption. As previously mentioned, this methodology plans for quarterly releases in which a set of deliverables will be complete, and leaves the scheduling of the specific tasks necessary to achieve these deliverables to the development team. The team accomplishes tasks as a series of short, three-week, "sprints" that focus on the needs of the project to accomplish the features committed to for the upcoming release.

Each quarterly release is planned by the entire project team in concert with the Business Sponsor, Executive Liaisons, and Executive Sponsor. Settling on the goals of the next release and communicating them via the Project Progress Report represents a mutual commitment process by the project team and the Business and Executive Sponsors. As the team commits to meeting the goals by the end of the release, the sponsors commit not to alter the goals during the middle of the quarter, and especially not in the middle of a three-week sprint period. However, when desired changes arise, the development methodology has a built-in change control process by design.

Quarterly release planning meetings afford everyone involved in the project the opportunity to request changes to the direction of the project or specific features to be accomplished next release. When a

change request comes in the middle of a release, the Project Manager will receive and log the change request, conduct preliminary risk, costs, schedule, and scope analysis prior to adding the change to the Product Backlog. The process is the same regardless of the source of the change request, and requests may come from the project team, the executive sponsors, or any of the project stakeholders.

The quarterly planning meeting(s) for the following release cycle are the appropriate venue for discussing the change and selecting the tasks new to the Product Backlog for the next quarterly release. As discussed in the Communications Management section, the Project Progress Report would then report on the change, how it impacts the goals of the two-year project cycle, and what the next release plans to accomplish.

The following are the roles and responsibilities for all change management efforts related to the JDMS Project:

Executive Sponsor:

- Approve all changes to budget/funding allocations
- Approve all changes to schedule to the two-year project cycle
- Approve any changes in project scope

Project Manager:

- Receive and log all change requests from project stakeholders
- Conduct preliminary risk, cost, schedule, scope analysis of change prior to adding it as a PBI
- Seek clarification from change requestors on any open issues or concerns
- Make documentation revisions/edits as necessary for all approved changes

Project Team / Stakeholders:

- Submit all change requests in writing
- Provide all applicable information and detail on the change(s)
- Be prepared to address questions regarding any submitted change requests
- Provide feedback as necessary on impact of proposed changes

The Change Management process has been designed to make sure this approach is followed for all changes. The Communication Escalation Process in Section 5.2 should always be used in accordance with emergency changes or apparent issues. By using this Change Management approach, the JDMS Project Team will prevent change from occurring abruptly and focus its resources on furthering the established business goals of the two-year project development cycle.

6. Document Revisions

Revision	Date	Responsible Primary
1.0.0	2014/12/10	PJ Stockdale
1.0.4	2014/12/15	PJ Stockdale
1.1.2	2014/12/18	PJ Stockdale
1.1.3	2015/01/05	PJ Stockdale
1.2.0	2015/09/02	Shelley Kaus