Appellate Courts EDMS Feasibility Study ITG-45

Version 1.0

Document History

Author	Version	Date	Comments
Gary Guinotte & Bill Burke	1.0	08/4/2011	Final

Table of Contents

1 Executive Summary 5

2 Introduction 6

2.1 Purpose 7

2.2 Intended Audience 7

2.3 System Overview 7

3 ACORDS - EDMS Interface Proof of Concept 8

4 Proposed Solution 9

4.1 Solution Description 9

4.2 Anticipated Appellate Courts EDMS Benefits 12

4.3 Appellate Courts EDMS Solution Impact 13

4.3.1 AOC Organizational Impact 13
4.3.2 Appellate Courts Impact 14
4.3.3 Infrastructural Impact 14
4.3.4 AOC Application Portfolio Impact 15

5 EDMS Buy vs. Build Analysis 16

5.1 EDMS Buy 16

5.2 EDMS Build 16

5.3 EDMS Buy vs. Build Implementation Schedule 17

5.3 EDMS Buy vs. Build Risk Assessment 18

5.4 Total Cost of Ownership (TCO) Analysis 18

5.5 Recommendations & Rationale 19

Appendix A Appellate Courts EDMS Business Requirements 21

A.1 Appellate Courts EDMS Business Requirements 21

A.2 EDMS Vendor Evaluation Matrix 27

Appendix B EDMS – ACORDS Document Retrieval 31

Appendix C EDMS – ACORDS Metadata Interface 32

Appendix D Appellate Courts EDMS Implementation Planning 35

D.1 EDMS Buy Detailed Costs 36
D.2 EDMS Build Detailed Costs 38
D.3 Appellate Courts EDMS Risk Assessment – Buy Option 39
D.4 Total Cost of Ownership Data 44

1 Executive Summary

The Washington State Administrative Office of the Courts was requested by the Judicial Information Systems Committee (JISC) in work order ITG-45 to evaluate implementing a common Electronic Document Management System (EDMS) for the Appellate Courts (Courts of Appeal & Supreme Court). Currently, each of the (3) Courts of Appeal have their own EDMS that is a standalone document management system that does not interface to the Appellate Courts case management system (ACORDS). And, the Supreme Court currently uses a paper filing system for storing all court documents. The purpose of this study was to evaluate the feasibility and cost for implementing the following:

- A common EDMS that can be used by all Appellate Courts,
- Automated document workflow processing capability,
- A web interface that will support electronic court document filing and public record requests,
- An interface between the EDMS and ACORDS that will eliminate the need for dual data entry, and
- EDMS document retrieval capability when the ACORDS application is active.

As part of this feasibility study, the AOC completed the following:

- Documented the Appellate Courts EDMS business requirements,
- Documented the Appellate Courts automated document workflow processing requirements (Division 2 only),
- Evaluated EDMS vendor systems against Appellate Court EDMS business requirements,
- Performed a Buy vs. Build analysis to assess whether to buy or build the Appellate Courts EDMS,
- Completed a prototype to evaluate the feasibility of interfacing an EDMS to ACORDS,
- Evaluated network and server infrastructure to support an Appellate Courts EDMS,
- Completed project planning of EDMS implementation costs, and
- Developed a tentative EDMS implementation schedule.

The feasibility study team determined that there are vendor EDMS systems available in the market that can meet the Appellate Courts EDMS business requirements. The result of the feasibility study is a recommendation that the Appellate Courts buy, rather than build, an EDMS. The Buy approach has significantly less risk associated with it since this is a mature technology and has been around for many years. It also does not

commit critical AOC resources to develop a product that can be purchased. While the costs for building an EDMS was estimated at $632K, the risks associated with this approach could easily exceed the estimated costs of $979K for buying an EDMS.

Both approaches, whether it's building or buying a new EDMS system, will require the AOC to develop the interface between the EDMS and the ACORDS application. A prototype of this interface has been developed by the AOC Technical Team as a proof of concept to validate the viability of developing a working interface. As a result of the proof of concept, and to minimize the impacts to ACORDS, a middleware solution was chosen for this interface.

An evaluation of the network infrastructure indicated that the existing network has sufficient bandwidth to support the Appellate Courts EDMS. The feasibility study recommends that the Appellate Courts EDMS be installed centrally at the AOC computer center in Olympia so that this system is contained within a managed Data Center with off-site backup and disaster recovery planning.

2 Introduction

The feasibility study was conducted to identify the most cost effective and maintainable EDM application(s) that satisfy the Appellate Courts EDM requirements to improve the efficiency of document management for the courts. To achieve this objective, all Appellate Courts need to use the same EDM application(s). The Appellate Courts need "full service" electronic document management that includes, but is not limited to, the following:

- Accept documents electronically through a web portal from courts, attorneys and citizens,
- Efficiently manage data received electronically via a portal, email or in paper format,
- Provide concurrent access to documents for judges, court staff, case participants, and the public at the court or through remote electronic means,
- Electronically distribute court work,
- Electronically serve court documents, and
- Interface with the Appellate Court Records and Data Systems (ACORDS) application to eliminate the burden of duplicate data entry that is being done now.

2.1 Purpose

The purpose of the Appellate Courts Electronic Document Management Feasibility Study was to assess the feasibility and cost of implementing an EDMS application for the Appellate Courts. Some of the benefits that will be gained are:

- Reduce the need and cost of converting paper documents to electronic documents,
- Reduce the cost of storing hard copy official court documents,
- Reduce the time of receiving documents through mail or personal delivery,
- Reduce the misfiling of documents,
- Eliminate staff time for duplicate data entry,
- Reduce document distribution costs (mail, UPS, FedEx),
- Ability for cross court sharing/viewing of documents, and
- Reduce the time/cost of compiling documents since they will be digitally stored and will be searchable.

2.2 Intended Audience

This feasibility study is intended to be reviewed by key project stakeholders and the JISC to provide the necessary decision making information to determine whether to proceed with an Appellate Courts EDMS implementation. The following are the key stakeholder groups:

- AOC Information Services Division (ISD) Leadership,
- Clerks/Administrators for the Appellate Courts,
- Appellate Court Level Users Group (ACLUG), and
- Judicial Information Systems Committee (JISC).

2.3 System Overview

Currently the (3) divisions of the Court of Appeals have varying degrees of document management capabilities supplied by two different vendor products, and a custom developed in-house EDMS application. The Supreme Court currently does not have a document management system and uses manual processes and workflows. All four Appellate Courts use the ACORDS application to support court business functions. The Appellate Courts need a shared statewide enterprise level document management system that interfaces with the ACORDS application.

Existing Systems	
System Name	*ACORDS*
Business Owner	*Appellate Courts*
Description	*This application is used by the courts to manage information about cases before the courts.*
Type	*This application supports court business.*
Status	*This is an operational application under maintenance.*
Platform	*OS: ZOS ; Hardware: IBM business Class Server*
Other information	*Application is written in JAVA*
System Name	*DIV 1, DIV 2 , DIV 3 document management products.*
Business Owner	*Court of Appeals*
Description	*Various applications being used by the COAs to support document management processes.*
Type	*Business applications*
Status	*In production under maintenance*
Platform	*OS: windows server; Hardware: Intel servers*
Other information	*Applications are vendor proprietary languages, and Div3's application is written in PHP*

3 ACORDS - EDMS Interface Proof of Concept

The feasibility study engaged AOC development resources to perform a proof of concept to determine whether the ACORDS system could support an interface to an EDMS. To effectively support an EDMS interface, ACORDS must be able to support the transfer of the following data:

- From within the ACORDS application, provide screen data, specifically case and docket information, to an EDMS for the retrieval of associated EDMS documents, and
- Support the transfer from an EDMS to ACORDS of metadata that provide the transfer of case and docket information associated with an EDMS document.

AOC software developers modified ACORDS screens within an AOC development environment to confirm that case and docket information could be extracted from specific ACORDS screens and available to be passed to an

external system. This data could then be used to retrieve the associated EDMS document for display.

AOC developers added a button to an ACORDS screen to initiate the transfer of screen data. When the button was selected by an ACORDS user, case and docket data currently displayed on the screen was extracted and available for use by an external system. EDMS vendors have middleware software that can be used to access this data and retrieve the appropriate document for display at the ACORD user's workstation. This proof of concept was completed successfully.

The transfer of metadata from an EDMS to ACORDS can be accomplished using middleware software and is not expected to be an issue. Appendix C identifies potential solutions that can be used to implement this interface.

4 Proposed Solution

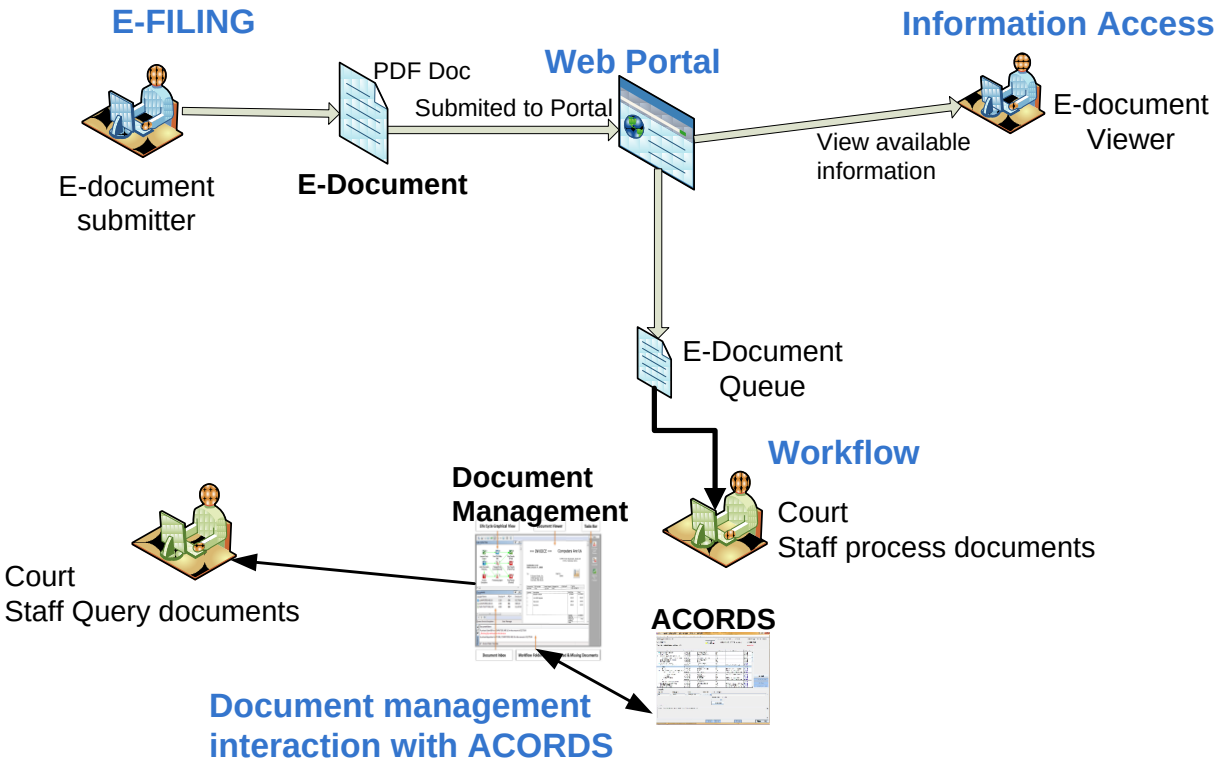
The proposed solution is to provide an Appellate Court Electronic Filing and Document Management System that interacts with ACORDS. The feasibility study analyzed if it is possible to integrate an EDMS with the existing ACORDS application or if the ACORDS application would need to be entirely replaced. Additionally the feasibility study looked at EDMS solution alternatives and whether or not they would meet the needs of the Appellate Courts.

4.1 Solution Description

The solution for the Appellate Courts system includes the following components that work together for a complete system:

- E-filing via a Web Portal,
- Document and Information Access,
- Workflow support for electronic document management, and
- Capability to interact with the ACORDS application without staff performing double data entry. Security will be managed via RACF ID, vendor product, and Microsoft active directory where appropriate.

Business Solution

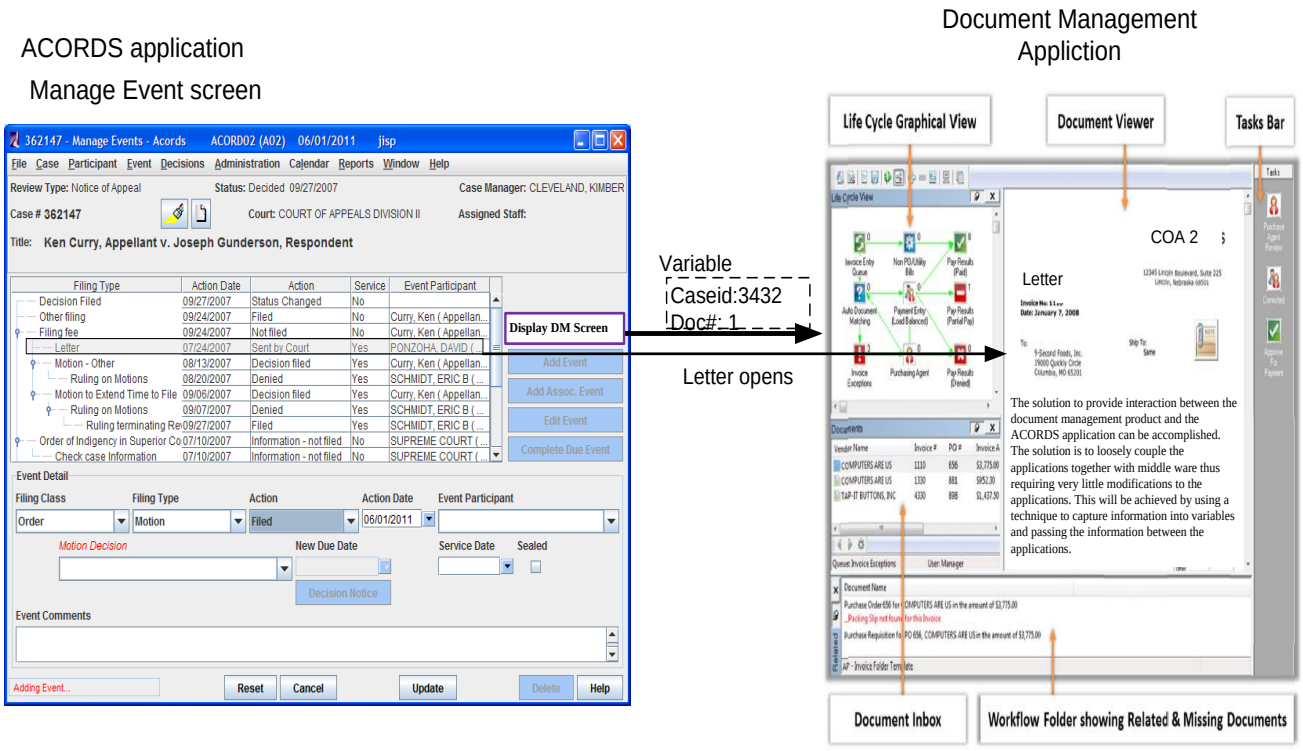


EDMS and ACORDS

The solution provides interaction between the ACORDS application and the EDMS and can be accomplished without significant application development in the ACORDS or EDMS application. This approach was successfully tested in the ACORDS development environment by the ACORDS technical staff. The solution will loosely couple the applications together with middleware programming, thus requiring very little modifications to either the EDMS or ACORDS applications. This will be achieved by using a technique to capture information into variables and passing the information between the EDMS and ACORDS applications

EDMS - ACORDS Document Retrieval

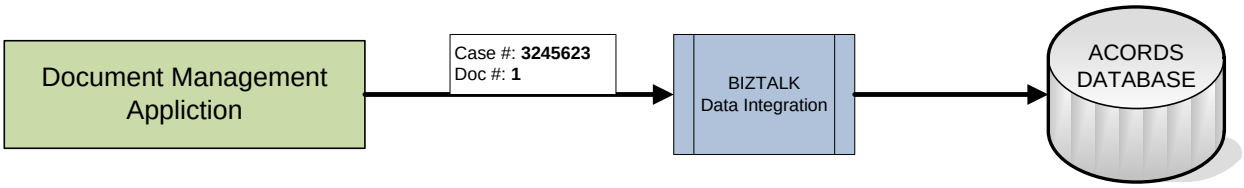
Example: On the ACORDS –"Manage Event" screen when the user selects a filing type of "Letter" and clicks on the "Display DM Screen" button, the information needed to retrieve the document from the EDMS is passed [via the variables] to the EDMS, and the system displays the requested document. In the example below .the Letter is displayed. See Appendix B for technical detail.



Example: Information that is entered into the Document Management System that needs to be referenced in ACORDS, for example Case # and Doc # for document retrieval.

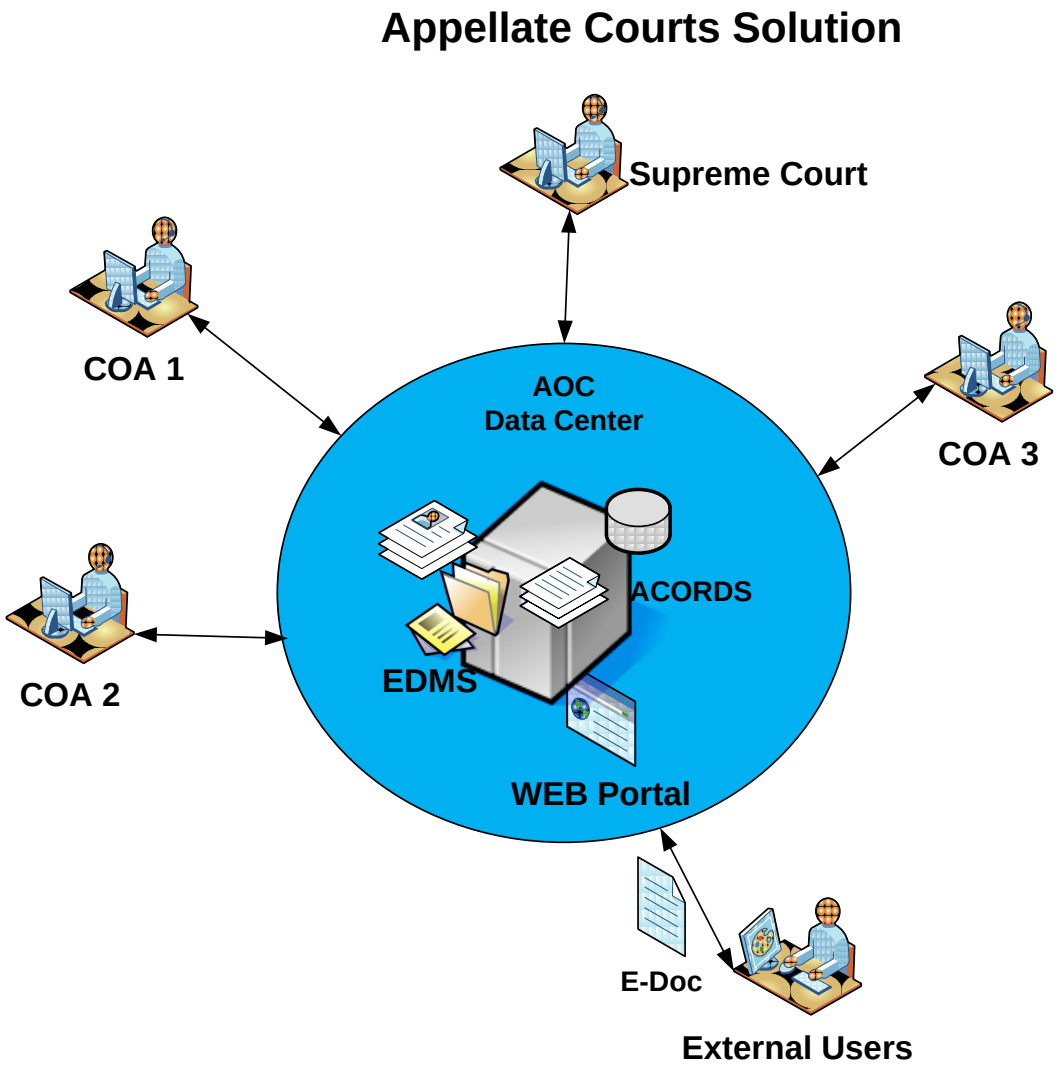
EDMS - ACORDS Metadata Interface

When the information is saved in the EDMS it will be processed via a BizTalk interface to the DB2 database in real-time to be accessed via ACORDS. When an electronic document is associated with an event in ACORDS, information about the case and document will be processed. See Appendix C for technical detail.



System Implementation

The EDMS will be centrally located at AOC's data center to provide backup support and disaster recovery services.



4.2 Anticipated Appellate Courts EDMS Benefits

The current (3) independent Courts of Appeal EDMS systems are inefficient. The Appellate Courts need an integrated solution to support their business needs. The proposed Appellate Courts EDMS will increase the efficiencies of court document management and services to the public. The Appellate Courts EDMS system will provide a secure shared system with centrally managed support services. The system will provide the security, support and disaster recovery services of an enterprise class product to all four courts. Providing support for E-filing as the primary intake of court papers reduces the need for physical storage of paper files. Court documents stored in the EDMS will be accessible from any device that has access to the EDMS. This will greatly reduce staff time needing to search through paper files to find information. The following application components will make up the Appellate Courts EDMS system:

- WEB Portal supporting E-filing,

- Document and Information Access,
- Workflow supporting document management, and
- Integration with the ACORDS application.

Projected Improvements	Steps to Achieve Improvements
• A common document management system • Integration with ACORDS • Common web portal for E-filing	• Deployment of a common EDMS • Development of the integration components • Deployment of the new web portal for E-filing

4.3 Appellate Courts EDMS Solution Impact

The Appellate Courts EDMS will require a significant amount of training for Court users and the AOC.

4.3.1 AOC Organizational Impact

The following changes will be necessary to enable the AOC to support the Appellate Courts EDMS:

- Service Desk: Service Desk personnel will need to be trained on EDMS application functionality and be able to assist Court users in resolving issues. In addition, Service Desk support scripts will be needed for issue escalation/resolution.

- Infrastructure Operations Team: The team will need to be trained in operating/maintaining the EDMS, performing backups & restores and to monitor system usage for capacity planning. A Database Administrator (DBA) will need to be trained on the EDMS to monitor storage usage for capacity planning.

- Application Team: Application team personnel will need to be trained on how to modify the automated workflow processes that were developed for each Court. In addition, the application team needs to receive sufficient training and documentation to support the custom software developed by the AOC to interface the EDMS to ACORDS.

- Court Education: Training material will need to be developed for Court end user training on the specific automated workflow processes each Court has established for managing their court document workflow.

4.3.2 Appellate Courts Impact

There will be a significant impact to Appellate Courts document management and automated workflow processes. Appellate Court personnel will need to be provided training for the following:

- Court User: Training will be required on EDMS application functionality & training on the automated workflow processes that each Court has uniquely defined. The operational changes on how each Court manages their court documents will be significant. In addition, the Courts will now have the ability to electronic file and electronic serve court documents, as well as, the ability to transfer documents electronically between Appellate Courts.
- Local EDMS Subject Matter Expert: Specialized training on modifying the EDMS automated workflow processes unique to each Court. This training will enable local Court personnel to modify their automated workflow processes without engaging the AOC or the EDMS vendor.

4.3.3 Infrastructural Impact

Based on the vendor products currently available in the market, the proposed solution to purchase an existing commercial EDMS will fit within the existing ISD infrastructure and meet the AOC technical standards.

- Network: ISD infrastructure has evaluated the internal ISD network and the Appellate Courts' local network bandwidth. The review showed that the existing bandwidth is adequate to support the additional load needed by the recommended solution. A contingency budget has been included in the estimate in the event that unforeseen bandwidth issues arise during implementation, which result in the need for additional performance mitigation.
- Servers: The proposed solution will follow ISD server standards and will deploy on IBM Intel-based servers supported centrally in AOC's Data Center.
- Operating system: The solution will run on Microsoft Windows 2008R2 server.
- Database: The database to be used to store data and to support the products needed to implement the solution will use Microsoft windows SQL Server 2008 platform.
- Disaster Recovery: Add the new applications and hardware to ISD DR contract.
- Security: Ensure Application complies with ISD security policy.

4.3.4 AOC Application Portfolio Impact

The implementation of an Appellate Courts EDMS will introduce several new vendor products to the AOC ISD application portfolio. These products include the following:

- Electronic Document Management application.
- EDMS Web Portal application
- EDMS Middleware application software to interface with ACORDS

The AOC will need to maintain annual software licenses for these applications.

Custom application software will need to be developed and maintained by the AOC to support the following:

- EDMS interface to ACORDS, and
- Customization for automated document workflow processing for each Court.

5 EDMS Buy vs. Build Analysis

5.1 EDMS Buy

AOC/ISD buys an EDMS product suite to be customized [customized or configured] by the vendor or third party contractor to meet the courts' document management processing needs. AOC\ISD will develop the middleware components and will modify the ACORDS application. AOC will develop a training program to support the courts on the new system. The solution includes the following components that work together for a complete system: E-filing via a web portal, document and information access; workflow support for electronic document management, and the ability to interact with the ACORDS application without staff performing double data entry. The following is a summary of the implementation costs associated with this approach:

Category			Cost
Purchase - Equipment & Services			$755,035
Sales Tax - 8.7%			$65,688
Contingency			$50,000
Total			$870,723
AOC Labor	**Hrs:**	1,426	$108,376
Grand Total			$979,099

Notes:

1) AOC Labor rate used is $76/Hr

2) EDMS Training labor rate is $120/Hr and assumes contractor staffing, for 693 Hrs with a total of $83,160 included in Purchase - Equipment & Services

3) Contingency is approximately 25% of project labor ($191,535)

For more details on implementation costs associated with the Buy option, see Appendix D.1.

5.2 EDMS Build

AOC/ISD builds the EDMS product suite to leverage as much of the existing EDMS components that vendors have already provided to the Appellate Courts individually to date. AOC will develop the middleware components and modify the ACORDS application. The solution includes the following components that work together for a complete system: E-filing via a Web Portal, Document and Information Access; Workflow support for electronic document management, and the ability to interact with the ACORDS application without staff performing double data entry. The following is a summary of the implementation costs associated with this approach:

Category			Cost
Purchase - Equipment & Services			$166,480
Sales Tax - 8.7%			$14,500
Contingency			$150,000
Total			$330,980
AOC Labor	**Hrs:**	3,966	$301,416
Grand Total			$632,396

Notes:

1) AOC Labor rate used is $76/Hr

2) EDMS Training labor rate is $120/Hr and assumes contractor staffing, for 1,029 Hrs with a total of $123,480 included in Purchase - Equipment & Services

3) Contingency is approximately 35% of project labor ($424,896)

For more details on implementation costs associated with the Build option, see Appendix D.2.

5.3 EDMS Buy vs. Build Implementation Schedule

The following is a tentative implementation schedule for the Appellate Courts EDMS. The Build schedule would complete 6 to 12 months after the Buy schedule due to the availability of AOC staff to perform this development.

Activity	Dates	
	Buiild	**Buy**
Project Start	8/15/2011	8/15/2011
QA Cmplt - EDM Application		3/26/2012
QA Cmplt - EDMS Web Portal		3/26/2012
QA Cmplt - Automated Workflow		3/26/2012
EDMS End User Training Cmplt		4/9/2012
Supreme Court EDMS Ready For Production		4/9/2012
COA Div 1 EDMS Ready For Production		4/16/2012
COA Div 2 EDMS Ready For Production		4/23/2012
COA Div 3 EDMS Ready For Production	+ 6 to 12 mos	4/30/2012

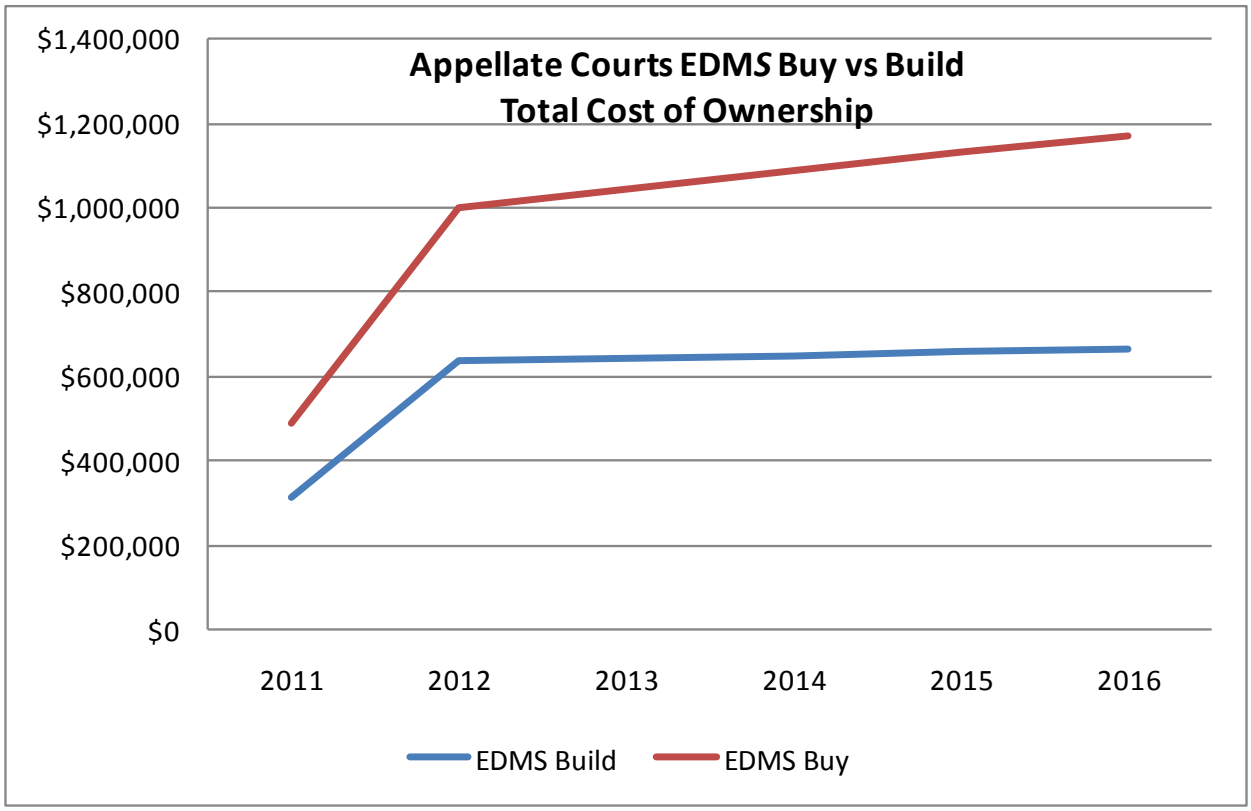
5.3 EDMS Buy vs. Build Risk Assessment

The following are the relative risks associated with Buy vs. Build options:

#	Risk	Range
1	EDMS Build option may require significantly more development hours than currently estimated to fully implement: >> Appellate Courts requirements >> Provide reliability / Stability / Performance >> Supportable & Maintainable >> Open architecture to support industry standard interfaces	High
2	AOC Developers not available to support an EDMS Build option. >> AOC Developers currently engaged in other development activities >> EDMS Build would require 2 - 3 developers committed to this effort >> AOC staffing limitations would delay the implementation of the EDMS Build option by at least 6 - 12 months beyond the EDMS Buy option.	Medium

5.4 Total Cost of Ownership (TCO) Analysis

The following chart identifies the Total Cost of Ownership for Appellate Courts EDMS Buy vs. Build options. All costs are in constant 2011 dollars. See Appendix D.4 for the data used to generate this graph:



5.5 Recommendations & Rationale

Objectives/Improvements	Recommended Solution **Buy**	Alternative Solution **Build**
High Risk		✓
Moderate Risk	✓	
Low Risk		
High Cost		
Moderate Cost	✓	
Low Cost		✓

The AOC recommends that the Appellate Courts EDMS Buy option based on the following:

- While the Build option has lower estimated cost, there is significant risk associated with this option that could easily result in significantly higher implementation costs.

- The developers required to implement the EDMS Build are engaged in other development activities which would delay implementation by 6 to 12 months beyond the Buy option schedule.
- The AOC does not recommend allocating critical resources to build a solution that is available for purchase. Those critical resources are better allocated implementing solutions not available in the commercial market.

As part of the feasibility study, a risk assessment was performed on the Appellate Courts EDMS Buy implementation, using the Washington State's Information Services Board (ISB) Severity & Risk criteria. Based upon the ISB criteria, this project would be classified as a Severity rating of High due to public visibility and state wide impact but with a Risk rating of Medium due to the EDMS being new technology for the AOC and the development required to interface the EDMS to ACORDS. See Appendix D.3 for the details associated with this Severity/Risk assessment.

Appendix A Appellate Courts EDMS Business Requirements

A.1 Appellate Courts EDMS Business Requirements

	Onbase		Docushare		Laserfiche		Div 3	
Ability of a solution to meet the business high level requirements		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**
Portal must provide ability to file documents electronically 24/7 except for scheduled maintenance		**Y**		**Y**		**Y**		**y**
The portal architecture is scalable to meet increased demand of the system.		**Y**		**Y**		**Y**		**y**
Portal must support Hyper Text Transfer Protocol Secure (HTTPS) transmissions		**Y**		**Y**		**Y**		**y**
Portal supports audit logging		**Y**		**Y**		**Y**		**y**
Virus checking (scanning) is applied to all documents transmitted through the system		**Y**		**Y**		**Y**		**y**
Portal must be accessible to paid subscribers (JIS Link users), public users and justice partners (County Clerks, Court Reporters, Office of Public Defense, Attorney General's Office, County Prosecutors)		**Y**		**Y**		**Y**		**y**
EDMS must be accessible to paid subscribers (JIS Link users), public users and justice partners (County Clerks, Court Reporters, Office of Public Defense, Attorney General's Office, County Prosecutors)		**Y**		**N**		**Y**		**y**
Portal must provide registration capability to individuals logging into the portal for EDMS submission		**Y**		**Y**		**N/Y**		**y**
All electronically filed documents shall be submitted through the portal [how are court-generated e-documents filed?]		**Y**		**Y**				**y**

	Onbase		Docushare		Laserfiche		Div 3	
Ability of a solution to meet the business high level requirements		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**
Portal must capture specified case information from the filer upon submission of documents. The information required will be based on the document being filed.		**Y**		**Y**				**y**
Court staff must have the ability to review and correct information provided by the filer on the document transmittal sheet and to provide additional data elements prior to the document being saved in the EDMS		**Y**		**Y**		**Y**		**y**
Upon saving a document that is related to a case in the EDMS, a system-generated docket entry [event] will be added to the ACORDS case. The data elements captured in the transmittal sheet will be utilized to eliminate the need for dual data entry.		**Y**		**Y**		**Y**		**y**
If a filer submits a “case initiation” document, the data elements captured in the transmittal sheet will be utilized to open a "skeletal" case (minimum data fields required on Initiate Case or Transfer Case screen) in ACORDS and will eliminate the need for manual data entry when the court staff officially files the case/appeal.		**Y**		**Y**				**y**
The EDMS shall support the storing and retrieval of non-case documents, such as [calendars, … ?]		**Y**		**Y**		**Y**		**y**
Multiple documents may be included in a single submission, as long as they pertain to a single case for a single court. Each document will have its own transmittal sheet and will be filed as a separate document		**Y**		**Y**		**Y**		**y**
Portal shall record the date and time of receipt of a document.		**Y**		**Y**		**Y**		**y**

	Onbase		Docushare		Laserfiche		Div 3	
Ability of a solution to meet the business high level requirements		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**
Portal supports holding documents in a queue if EDMS or ACORDS is not operational		**Y**		**Y**		**Y**		**y**
Portal/EDMS supports field validation (e.g., required fields, correct format, verification of appellate case #, trial court case#)		**Y**		**Y**		**Y**		**y**
Portal sends an acknowledgement of receipt to the filer. The filer will be provided the submission/receipt? date, which may be different than the filing date.		**Y**		**Y**		**Y**		**y**
Portal shall establish a means for accepting electronic payments		**Y**		**Y**		**N**		**y**
Portal/EDMS shall provide capability for internal and external users to electronically serve documents on case participants [do the Court Rules authorize this now, or will we need a change in Court Rules?]		**Y**		**Y/N**		**Y**		**y**
Portal/EDMS shall extract e-mail addresses of case participants from JIS database [it's the same database!] for electronic service of documents [do the Court Rules authorize this now, or will we need a change in Court Rules?]		**Y**		**N/Y**		**Y**		**y**
Portal/EDMS shall provide a manual process for providing e-mail addresses for electronic service of documents[do the Court Rules authorize this now, or will we need a change in Court Rules?] [when would they be serving someone who isn't a case participant, and for whom the court couldn't enter an e-mail address?]		**Y**		**Y**				**y**
Portal/EDMS shall notify court staff of the submission of a new document and, if service was made electronically via the portal, list which parties were electronically served with the document[do the Court Rules authorize		**X**		**Y**		**Y**		**y**

	Onbase		Docushare		Laserfiche		Div 3	
Ability of a solution to meet the business high level requirements		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**
this now, or will we need a change in Court Rules?]								
Documents submitted via the portal will not be viewable until processed by court staff.		**Y**		**Y**		**Y**		**y**
A Court staff's RACFID determines the default court when signing into the EDMS		**Y**		**Y**		**Y**		**y**
System allows registered users access to electronic documents based on role (access to sealed/confidential documents)		**Y**		**Y**		**Y**		**y**
System must allow documents to be identified with different types of access rights e.g.., sealed, confidential, internal only) to determine access rights by role (e.g., public view, attorneys on case, internal court users)		**Y**		**Y**		**Y**		**y**
System must provide capability to manage the documents at a group level (e.g.,, create a group with an access level of sealed and any documents put into that group will assume the access level of the group,[in this case sealed] with the ability to change the access level on an individual document level to confidential). [? Is this group for a set of documents within a case, for all documents for a single case, for all documents for a court, or…?]		**Y**		**Y**		**Y**		**y**
EDMS must have workflow support to automate court business processes (E.g., documents submitted on an existing case are routed to the appropriate/assigned case manager; internal confidential documents [e.g., draft opinions] are routed between chambers])		**Y**		**Y**		**Y**		**y**

	Onbase		Docushare		Laserfiche		Div 3	
Ability of a solution to meet the business high level requirements		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**
System must support the ability to scan a hardcopy document and to import it into the EDMS		**Y**		**Y**		**Y**		**y**
EDMS shall support the storage of internal documents (opinions, orders, rulings, letters) related to a case. The process of generating a docket entry in ACORDS and storing court-generated documents shall be supported without the need for dual data entry		**Y**		**Y**		**Y**		**y**
System provides a method for handling non-imaged data types involved in a case (e.g. transcript, multimedia presentations, oral argument recordings)		**Y**		**Y**		**Y**		**y**
EDMS must support the storage of hyperlinked documents in their original format [EDMS must support the storage of documents that contain hyperlinks and must maintain the functionality of the embedded hyperlinks?]		**Y**		**Y**		**Y**		**y**
System assigns a unique identifier (key) for each filing		**Y**		**Y**		**Y**		**y**
Case-related documents stored in the EDMS need to be accessible with minimum key strokes when working in ACORDS.		**Y**		**Y**		**Y**		**y**
Case-related documents stored in the EDMS need to be accessible to internal users both at the case-level and the document-level when working in ACORDS.		**Y**		**Y**		**Y**		**y**
When a case initiation document is accepted as “filed”, the case can be processed [initiated?] through either the EDMS or ACORDS, and a case number will be created (either automatically or manually) via the EDMS or ACORDS, and a [skeleton?] case will be created in both systems [is ACORDS currently generating case numbers, or is the court user assigning them?]		**Y**		**Y**		**Y**		**y**

	Onbase		Docushare		Laserfiche		Div 3	
Ability of a solution to meet the business high level requirements		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**		**Meet Reqs?**
A process for generating a docket entry in ACORDS for an opinion when it is filed (a two-screen process) and saving the document in the EDMS shall be supported without the need for dual data entry.		**Y**		**Y**		**Y**		**y**
EDMS must provide a robust document search capability (e.g. case #, case title, participant name, filer's name, date of filing, Boolean and word search in a document)		**Y**		**Y**		**Y**		**y**
System should support bar coding functionality		**Y**		**Y**		**Y**		**y**
EDMS shall maintain associated relationships between documents in ACORDS when EDMS is generating docket entries [? E.g., a motion will be associated with the decision on the motion.]		**Y**		**Y**		**Y**		**y**
EDMS needs to support a process for transferring a case between appellate courts and assigning a new case number thus providing access to the documents attached to the case.		**Y**		**Y**		**Y**		**y**
The EDMS shall support the archiving of documents		**Y**		**Y**		**Y**		**y**
Each division/court shall have the ability to customize [configure] the EDMS automated business processes. [clarify, or this is universal with no bounds]		**Y**		**Y**		**Y**		**y**

A.2 EDMS Vendor Evaluation Matrix

The feasibility study team submitted a questionnaire to EDMS Vendors to evaluate EDMS Vendor systems and EDMS Vendor ability to meet the Appellate Courts requirements. This scoring was performed for information only. An RFP will be released to formally evaluate EDMS Vendors and Vendor systems for Appellate Courts EDMS product selection. A Vendor Score of 3 is High and 1 is Low.

	Onbase		Docushare		Laser-fiche		Div 3	
Questions Sent to EDMS Vendors:.	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**
Vendor provided good and complete information and has experience deploying to multiple courts	**3**		**1**		**1**			
1. We will need to support information exchanges with the EDMS product to other data stores.								
a. Do you support a service layer to support a BizTalk adapter?	**3**	**Y**		**N**		**N**		**N**
b. If not what option do you support to accomplish this function?		**N/A**	**2**	**Y**	**2**	**Y**	**2**	**Y**
2. We need to support enter-actions with our other enterprise business applications.								
a. Do you support a screen scraping type functionality?	**3**	**Y**		**N**	**1**	**Y/?**	**2**	**Y**
b. Or how would you support this requirement?		**N/A**	**1**	**Y**		**NA**		**NA**
3. Retrieve documents stored in EDMS directly from a business application screen.	**3**	**Y**	**1**	**Y**	**3**	**Y**	**2**	**Y**
4. Index documents using information scraped directly from a business application's screen.	**3**	**Y**	**1**	**Y**	**1**	**Y**	**1**	**Y**

	Onbase		Docushare		Laser-fiche		Div 3	
Questions Sent to EDMS Vendors:.	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs ?**
5. Generate bar code sheets to automate the indexing of physical documents when scanned into EDMS.	**3**	**Y**	**1**	**Y**	**2**	**Y**	**2**	**y**
6. Create E-Forms using screen-scraped information to populate specific fields of the E-Form.	**3**	**Y**		**N**	**1**	**Y/?**	**1**	**Y**
7. Ability to populate Microsoft Word documents by applying information pulled from/ by a business application into a Word template, ensuring data consistency.	**3**	**Y**	**1**	**Y**		**N**	**1**	**Y**
8. Support Custom Queries to quickly display all associated content connected to a business transaction. Provide a robust document search capability (e.g. case #, case title, participant name, filer's name, etc..) (see additional info)	**3**	**Y**	**2**	**Y**	**3**	**Y**	**1**	**Y**
9. Support launching the EDMS Folder interface to view all or a single document(s) related to a business transaction in a contextually organized structure.	**3**	**Y**	**2**	**Y**	**3**	**Y**	**1**	**Y**
10. Do you support the archiving of documents to manage the document stores?	**3**	**Y**	**3**	**Y**	**2**	**Y**	**1**	**Y**
11. EDMS must support the storage of documents that have embedded hyperlinks in the documents and maintain the functionality of the hyperlink.	**3**	**X**	**3**	**Y**	**3**	**Y**	**1**	**Y**
12. EDMS must support the scanning of documents into the EDMS	**3**	**Y**	**3**	**Y**	**3**	**Y**	**1**	**Y**

	Onbase		Docushare		Laser-fiche		Div 3	
Questions Sent to EDMS Vendors:.	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**
13. Can your EDMS provide capability to manage the documents at a group level (e.g., create a group with an access level of sealed and any documents put into that group will assume the access level of the group, with the ability to change the access level on an individual document. [see notes where this was first stated above.]	**3**	**Y**	**1**	**Y**	**3**	**Y**	**1**	**Y**
14. Can your EDMS allow registered users access to electronic documents based on a role (access to sealed/confidential documents?)	**3**	**Y**	**1**	**Y**	**3**	**Y**	**2**	**Y**
15. What is your security model for login and managing user access to documents?	**2**	**Y**	**3**	**Y**	**3**	**Y**	**2**	**Y**
Misc.								
1. What platform do you recommend running your products on - operating system, hardware, database backend if needed?	**3**	**Y**	**3**	**Y**	**3**	**Y**	**2**	**Y**
2. Can your product be enhanced by the customer to meet their needs?	**3**	**Y**	**1**	**Y**	**1**	**Y**	**1**	**Y**
3. We will need to convert existing documents from other imaging vendors. Do you provide a way for document conversions into your product?	**3**	**Y**	**2**	**Y**	**3**	**Y**	**2**	**Y**
a. If yes what is the mechanism used for doing conversion?	**3**	**Y**	**1**	**Y**	**2**	**Y**		**Y/N**
4. What is your disaster recovery model?	**3**	**Y**	**1**	**Y**	**3**	**Y**	**3**	**Y AOC**
a. Are there any licensing issues / costs involved?		**N**		**N**		**N**		**N**

	Onbase		Docushare		Laser-fiche		Div 3	
Questions Sent to EDMS Vendors:.	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**	**Score 1 - 3**	**Meet Reqs?**
b. Are you licensed to any hardware that would be an issue for recovering your product?	**3**	**N**	**1**	**Y**	**3**	**N**	**3**	**N**
Total score for answers provided	**65**		**35**		**49**		**32**	

Appendix B EDMS – ACORDS Document Retrieval

There are two possible options for providing interaction with ACORDS to the EDMS. Option one would be to write custom code that enables the capture of ACORDS application data from a screen and then populate the data into the EDMS screen. The second option would be to purchase an application product that provides a user interface for developing the[what?] functionality we need. Option two is the preferred method and is offered by a vendor in the EDMS space for this purpose. Hyland software(onbase suite) has the following product and has demo-ed the product called Application Enabler.

Onbase Application Enabler –" **http://www.hyland.com/onbase-and-ecm/onbase-platform-modules/enterprise-and-** erp-integrations/application-enabler.aspx "

Your software applications are critical to getting work done across your organization. However, many times they don't "talk" with each other easily or include critical related documents. Application Enabler connects your business applications to OnBase, allowing employees to make use of shared data, documents and processes without leaving their familiar business application. And it does it without custom coding. When users need to index a document into OnBase or fill out an electronic form, that information often already exists in a different business application. Rather than the error-prone process of manually re-entering data, Application Enabler copies information directly from the business application screen to populate keyword fields.

Core Features

- Increases productivity by eliminating application switching and delivering double-click access to OnBase
- Improves data accuracy and reduces re-keying by pulling data directly from the business application
- Reduces training costs and accelerates user adoption by allowing users to remain in their familiar business application
- Eliminates integration pains through codeless, point-and-click integration and rapid deployment options

Appendix C EDMS – ACORDS Metadata Interface

There are three possible options for providing interaction with the EDMS and our ACORDS application. Option one would be to write custom code that enables the capture of EDMS application data then populates the data into the ACORDS application. The second option would be to purchase an application product that provides a user interface for developing the functionality we need. Option two is the preferred method and uses our standard data exchange standard and is offered by a vendor in the EDMS space for this purpose. Hyland software (onbase suite) has the following product MS BizTalk Integrator [redundant to content on previous page.]. A third option would be to use the ONBASE API interface if a more complex integration is necessary. This would be the second preferred option.

The two products are:

OnBase Integration for Microsoft BizTalk

The OnBase Integration for Microsoft BizTalk allows organizations to connect OnBase into their existing BizTalk environment. A set of OnBase-to-BizTalk services extends essential OnBase functionality to support business process automation solutions that go beyond standard data interchange, including enterprise content management capabilities. Organizations can leverage investments made in all of their BizTalk-integrated applications and gain increased operational efficiencies without OnBase custom development efforts.

 Leverages an organization's investments by connecting OnBase ECM to all of their enterprise applications integrated using Microsoft BizTalk.
 Increases operational efficiencies and data accuracy with a robust set of BizTalk-specific services that extend essential
OnBase ECM functions to easily automate standard business process tasks.
 Immediate, out-of-the-box integration with all of an organization's BizTalk-enabled applications.
 No OnBase custom development or respective ongoing maintenance efforts required.
 Data Integrity: Automating the exchange of data between OnBase and other line-of-business applications reduces the need for redundant data entry and increases accuracy. Moreover, the synchronization of OnBase keywords with metadata in other enterprise applications ensures that users have access to the most accurate, up-to-date data. Additionally, OnBase Auto-fill
Keysets can be automatically updated by other systems allowing users to access values updated in other systems almost
immediately.

 Streamline Data Verification: Data from disparate applications can be mapped together and used to create and index a single OnBase E-Form, which can then be routed through Workflow to provide users with a consolidated interface to verify the data from multiple systems. Once the Workflow is complete, the verified data can be automatically updated in all applicable systems across the enterprise.
 Reduce Costs: Business process automation frees labor from low value tasks, such as manually verifying that an application
includes supporting documents and up-to-date data. A set of OnBase to BizTalk services are installed on the OnBase Application Server and made easily accessible to BizTalk via either standard SOAP Adapter or OnBase Adapter.
PRODUCT OVERVIEW

OnBase-to-BizTalk services included:
 Archive Document - Provides the ability from BizTalk to post a document from another system directly into OnBase. Within
BizTalk, field values from disparate messaging formats can be mapped to the document keywords.
 Update Document Metadata - Provides the ability for BizTalk to gather data from another system and update the keywords on
an existing OnBase document. Much like “Archive Document”, field values from disparate messaging formats can be applied to
the document's keywords.
 Get Document Information - Provides the ability for a BizTalk system to query the status of an OnBase document including its
keyword information, workflow queues, and document history and perform actions or decisions based on these values.
 Update Keyset - Provides the ability for another system to update an OnBase keyset. Within BizTalk, field values from disparate
messaging formats can be mapped to keywords within the keyset.
 Create E-Form - This adaptor allows BizTalk messages to map fields to form fields and keyword fields when creating the
OnBase electronic form.
 Save InfoPath Document - This adaptor allows for the storage of an InfoPath form into OnBase. Fields from the InfoPath form
can be mapped to keywords much like in the XML Connector for InfoPath module.

Microsoft Visual Studio® interface with a BizTalk Orchestration displayed.
OnBase-to-BizTalk specific services are made accessible to developers using Microsoft Visual Studio to create BizTalk
Orchestrations that automate data interchange and business processes.

OnBase - Application Programming Interfaces (APIs)

http://www.hyland.com/onbase-and-ecm/onbase-platform-modules/enterprise-and-erp-integrations/onbase-apis.aspx.

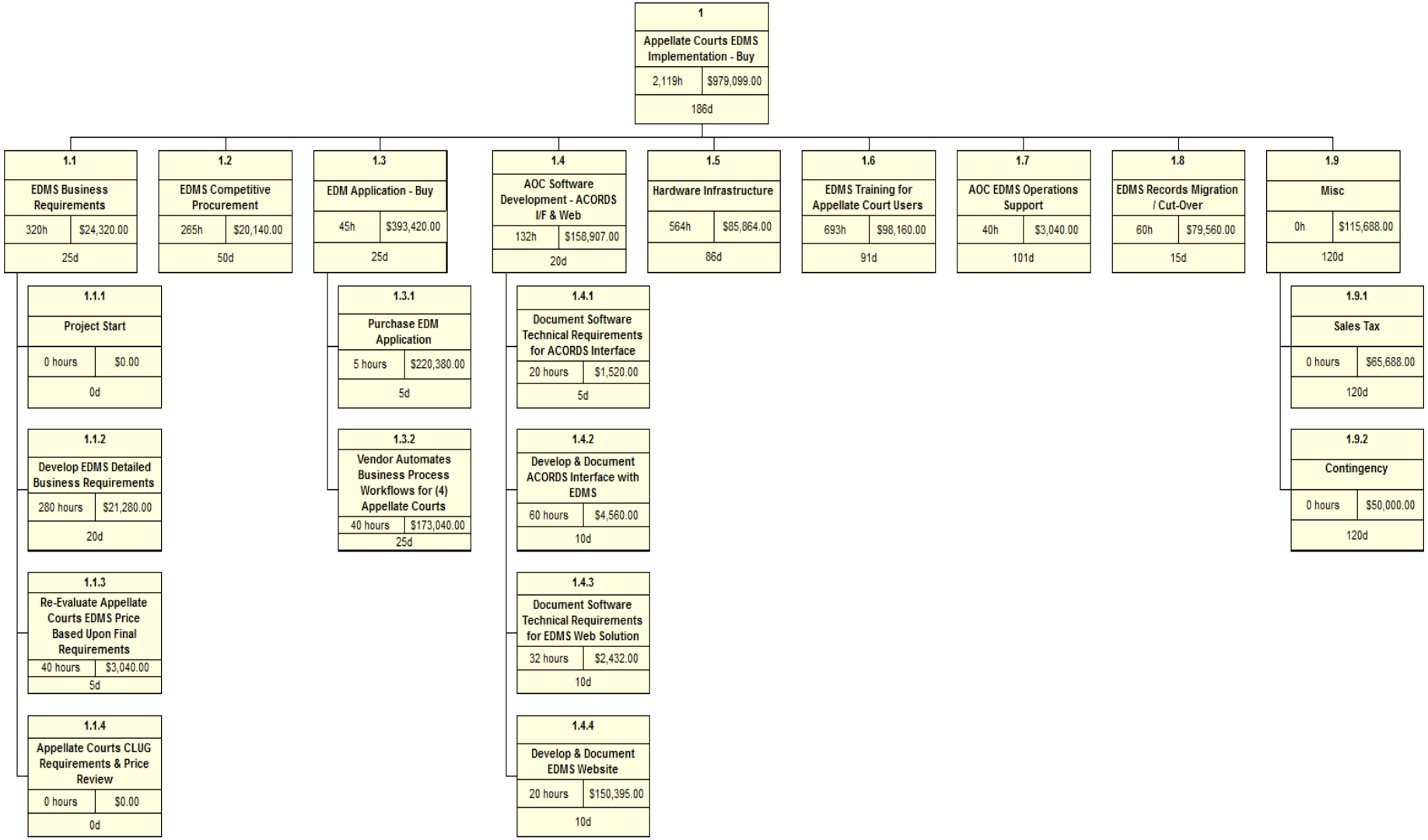
OnBase APIs let organizations create more complex integrations with enterprise, Web and legacy applications. APIs form tight integrations with line-of-business applications across the enterprise so users easily access OnBase content without leaving their everyday software. Often, users don't even realize they are also using OnBase. They just see it as a new feature of their existing software. APIs also create custom interfaces that meet the specific needs of organizations and users. APIs are often used to create custom Web applications, especially as online access to content becomes more and more important to customers in nearly every industry.

Core Features

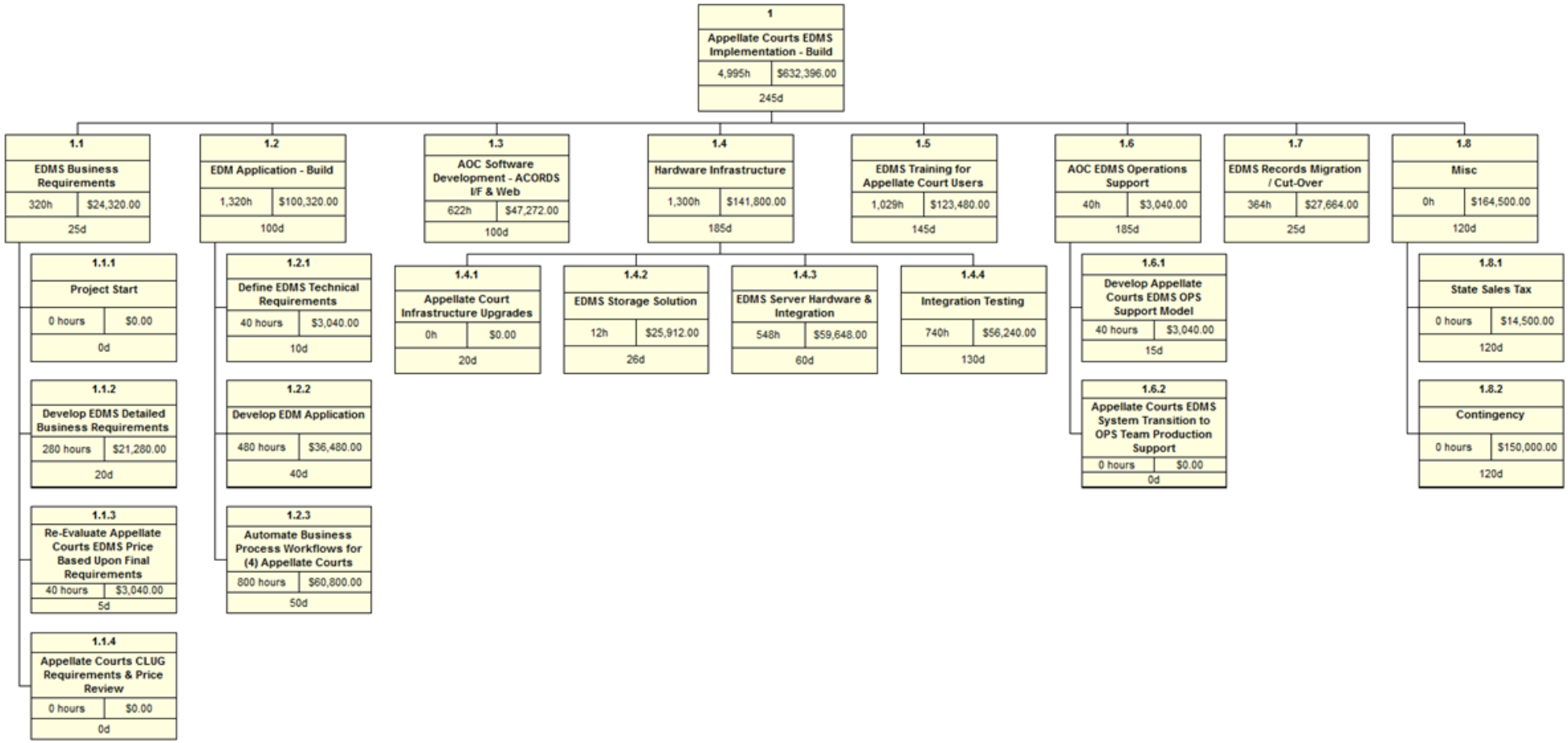
- Creates tight integrations and custom Web portals for specific documents to improve the user experience
- Allows for ad-hoc archival of documents
- Extends Workflow to communicate more closely with applications or perform custom functionality

Appendix D Appellate Courts EDMS Implementation Planning

D.1 EDMS Buy Detailed Costs


1
Appellate Courts EDMS Implementation - Buy
2,119h
$979,099.00
186d
1.1
EDMS Business Requirements
320h
$24,320.00
25d
1.2
EDMS Competitive Procurement
265h
$20,140.00
50d
1.3
EDM Application - Buy
45h
$393,420.00
25d
1.4
AOC Software Development - ACORDS I/F & Web
132h
$158,907.00
20d
1.5
Hardware Infrastructure
564h
$85,864.00
86d
1.6
EDMS Training for Appellate Court Users
693h
$98,160.00
91d
1.7
AOC EDMS Operations Support
40h
$3,040.00
101d
1.8
EDMS Records Migration / Cut-Over
60h
$79,560.00
15d
1.9
Misc
0h
$115,688.00
120d
1.1.1
Project Start
0 hours
$0.00
0d
1.1.2
Develop EDMS Detailed Business Requirements
280 hours
$21,280.00
20d
1.1.3
Re-Evaluate Appellate Courts EDMS Price Based Upon Final Requirements
40 hours
$3,040.00
5d
1.1.4
Appellate Courts CLUG Requirements & Price Review
0 hours
$0.00
0d
1.3.1
Purchase EDM Application
5 hours
$220,380.00
5d
1.3.2
Vendor Automates Business Process Workflows for (4) Appellate Courts
40 hours
$173,040.00
25d
1.4.1
Document Software Technical Requirements for ACORDS Interface
20 hours
$1,520.00
5d
1.4.2
Develop & Document ACORDS Interface with EDMS
60 hours
$4,560.00
10d
1.4.3
Document Software Technical Requirements for EDMS Web Solution
32 hours
$2,432.00
10d
1.4.4
Develop & Document EDMS Website
20 hours
$150,395.00
10d
1.9.1
Sales Tax
0 hours
$65,688.00
120d
1.9.2
Contingency
0 hours
$50,000.00
120d

D.2 EDMS Build Detailed Costs



D.3 Appellate Courts EDMS Risk Assessment – Buy Option

Severity Level Criteria
The severity matrix assesses the project's impact on citizens and state operations, its visibility to stakeholders, and the consequences of project failure.

Severity Level Criteria Categories				
Levels	Impact on Clients	Visibility	Impact on State Operations	Failure or Nil Consequences
High	☐ Direct contact with citizens, political subdivisions, and service providers – including benefits payments and transactions.	☒ Highly visible to public, trading partners, political subdivisions and Legislature. ☐ Likely subject to hearings. ☒ **System processes control access to Confidential & Sealed court records.**	☒ Statewide or multiple agency involvement / impact. ☐ Initial mainframe acquisitions or network acquisitions.	☐ Inability to meet legislative mandate or agency mission. ☐ Loss of significant federal funding.
Medium	☒ Indirect impacts on citizens through management systems that support decisions that are viewed as important by the public. ☒ Access by citizens for information and research purposes.	☐ Some visibility to the Legislature, trading partners, or public the system / program supports. ☐ May be subject to legislative hearing.	☐ Multiple divisions or programs within agency.	☐ Potential failure of aging systems.
Low	☐ Agency operations only.	☐ Internal agency only.	☐ Single division. ☐ Improve or expand existing networks or mainframes with similar technology.	☒ Loss of opportunity for improved service delivery or efficiency. ☒ Failure to resolve customer service complaints or requests.

Risk Level Criteria

The risk matrix below measures the impact of the project on the organization, the effort needed to complete the project, the stability of the proposed technology, and agency preparedness.

Risk Level Criteria Categories				
Levels	Functional Impact on Business Processes or Rules	Development Effort & Resources	Technology	Capability & Management
High	☐ Significant change to business rules. ☐ Replacement of a mission critical system. ☐ Multiple organizations involved. ☐ Requires extensive and substantial job training for work groups.	☐ Over $5 million. ☐ Development and implementation exceeds 24 months.* ☐ Requires a second decision package. * Clock starts after feasibility study or project approval and release of funding.	☐ Emerging. ☐ Unproven. ☐ Two or more of the following are new for agency technology staff or integrator, or are new to the agency architecture: programming language; operating systems; database products; development tools; data communications technology. ☐ Requires PKI certificate. ☐ Complex architecture – greater than 2 tier.	☐ Minimal executive sponsorship. ☐ Agency uses ad-hoc processes. ☐ Agency and/or vendor track record suggests inability to mitigate risk on project requiring a given level of development effort.
Medium	☒ Moderate change to business rules. ☒ Major enhancement or moderate change of mission critical system. ☒ Medium complexity business process(es). ☒ Requires moderate job training.	☒ Under $5 million but over agency delegated authority. ☒ 12 to 24 months for development and implementation. * * Clock starts after feasibility study or project approval and release of funding.	☒ New in agency with 3rd party expertise and knowledge transfer. ☒ One of the technologies listed above is new for agency development staff.	☒ **Executive sponsors knowledgeable but sponsors represent multiple organization with varying requirements** ☐ System integrator under contract with agency technical participation. ☒ Agency and/or vendor record indicates good level of success but without the structure for repeatability. **ACORDS I/F**
Low	☐ Insignificant or no change to business rules. ☐ Low complexity business process(es). ☐ Some job training could be required. (technical)	☐ Within agency delegated authority. ☐ Under 12 months for development and implementation.* * Clock starts after feasibility study or project approval and release of funding.	☐ Standard, proven agency technology.	☐ Strong executive sponsorship. ☐ Agency and vendor have strong ability to mitigate risk on a development project. ☐ Project staff uses documented and repeatable processes for tracking status, problems, and change. ☐ Agency or vendor is CMM Level 3 equivalent or above.

Overall Risk Matrix

Project Approval and Oversight Matrix			
High Severity	Level 2	**Level 2**	**Level 3**
Medium Severity	Level 1	Level 2	Level 2
Low Severity	Level 1	Level 1	Level 1
	Low Risk	**Medium Risk**	High Risk

D.4 Total Cost of Ownership Data

Appellate Courts EDMS Implementation Options	2011	2012	2013	2014	2015	2016	Total
EDMS Implementation - Build	$316,198	$316,198					$632,396
AOC S/W Maintenance		$3,690	$7,380	$7,380	$7,380	$7,380	$33,210
EDMS Build Totals	$316,198	$319,888	$7,380	$7,380	$7,380	$7,380	$665,606

EDMS Implementation - Buy	$489,549	$489,550					$979,099
EDMS Annual S/W License		$13,765	$27,530	$27,530	$27,530	$27,530	$123,885
Web Portal Annual S/W License		$7,800	$15,600	$15,600	$15,600	$15,600	$70,200
EDMS Buy Totals	$489,549	$511,115	$43,130	$43,130	$43,130	$43,130	$1,173,184

	2011	2012	2013	2014	2015	2016	
EDMS Build (CTD)	$316,198	$636,086	$643,466	$650,846	$658,226	$665,606	
EDMS Buy (CTD)	$489,549	$1,000,664	$1,043,794	$1,086,924	$1,130,054	$1,173,184	

Notes:

1) No escalation used for S/W licenses or AOC labor rate

2) Assumes development is completed in mid 2012
3) AOC software maintenance is based upon 5% annually of AOC development costs