

Oakland County Department of Information Technology Project Scope and Approach

Project Name: CSTAR Appointment Scheduler

Project ID: DB1174AS

Leadership Group: Courts/Justice Administration					
Department: Public Services			Division: Community Corrections		
Project Sponsor: Barb Hankey		Date Requested: 3/2/2020		PM Customer No. 174	
Request Type: New Development					
IT Team Name: Courts			IT Team No: B		
Project Manager/Leader: Clark Toohy					
Account Number:	52200	Account Description:	Comm Corr Adm (County)	Customer Name:	Community Corrections
Grant Funded? No			Mandate? No		
			Mandate Source:		

Project Goal

To integrate a vendor appointment scheduling tool or API within the Community Corrections CSTAR application so that duplicate entry is eliminated, therefore reducing input errors.

Business Objective

The community corrections staff currently enter appointments into two separate systems. Maintaining one appointment scheduler that is integrated within the CSTAR application will eliminate the need for duplicate entry.

Maintaining the relationship with the current vendor makes sense since there are no additional costs related to the use of the API. Further, the calendar views and communications to the clients currently in use are meeting requirements.

Major Deliverables

- Integration between vendor scheduling tool and Oakland County built CSTAR application.
- Detailed Project Plan
- Application and/or System Requirements
- Technical Design Document
- Technical Architecture Diagram
- Application Configuration
- User Acceptance Test Plan
- Implementation Plan
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

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Approach

- Review the existing vendors API to determine the feasibility of integrating it within the Community Corrections CSTAR application
- Perform security assessment
- Work with Vendor to complete the integration
- Develop Detailed Project Plan
- Document system requirements
- Determine and document system architecture and diagram
- Conduct Tech Review
- Develop Implementation Plan
- Configure Application Integration
- Develop User Acceptance Test Plan
- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop Disaster Recovery Toolkit, Service Center Knowledge Documents
- Release new system into production

Research & Analysis

N/A

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users ~30

Divisions Community Corrections

Leadership Groups Courts/Justice Administration

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Risk

Business Environment

Low - little or no impact to existing business processes

Technical Environment

Low – proven and previously implemented technologies.

Assumptions

Staffing IT Staffing: resources will be available for the hours indicated within the project plan.

Other Staffing: additional staffing will be available as follows:

<u>Role:</u>	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor:	Barbara Hankey	As Needed

Facilities

-
-

Technical

-
-

Funding

-

Other

-

Priority

-

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Constraints

-
-

Exclusions

-
-

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PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours: 545
Total Estimated Technical Systems	Hours: 89
Total Estimated CLEMIS	Hours:
Total Estimated Internal Services	Hours:
IT Application Services Division Manager Approval:	Date:
IT Technical Systems Division Manager Approval:	Date:
IT CLEMIS Division Manager Approval:	Date:
IT Internal Services Division Manager Approval:	Date:
IT Management Approval:	
Approved: Yes No	Date:
Reason:	
Project Sponsor Approval:	
Title:	Date:

PROJECT SUMMARY

Authorized Development (see above)	Hours:	
Preliminary Estimated Development for Future Phases	Hours:	
Grand Total Estimated Development	Hours: 634	Cost: \$104,610

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PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:	
Title:	Date:
Project Office Review:	Date:

CSTAR Appointment Scheduler - Size Estimate (+/- 10% to 50%)

1	Type	ID	Task Name	Estimated
2				Hours
3	Phase	000000	PROJECT MANAGEMENT	150
4	Phase	030000	BUSINESS AREA REQUIREMENTS	96
5	Phase	050000	TECHNICAL DESIGN	38
6	Phase	060000-0	DEVELOP APPLICATION	277
7	Phase	070000	IMPLEMENTATION	51
8	Phase	080000	POST IMPLEMENTATION SUPPORT	22
9				634

Oakland County -- CSTAR Appointment Scheduler

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	2,600	2,626	2,652	2,679	2,706	2,733	15,995
Costs:							
Development Services Subtotal:	106,260	5,000	3,366	5,100	3,434	5,203	128,362
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal:	0	0	0	0	0	0	0
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	2,600	2,626	2,652	2,679	2,706	2,733	15,995
Annual Total Costs	106,260	5,000	3,366	5,100	3,434	5,203	128,362
Annual Return on Investment	(103,660)	(2,374)	(714)	(2,421)	(728)	(2,470)	(112,367)
Annual Costs/Savings Ratio	4086.92%	190.38%	126.92%	190.38%	126.92%	190.38%	
Project Cumulative Statistics:							
Cumulative Total Savings	2,600	5,226	7,878	10,557	13,263	15,995	15,995
Cumulative Total Costs	106,260	111,260	114,626	119,726	123,160	128,362	128,362
Cumulative Return on Investment	(103,660)	(106,034)	(106,748)	(109,169)	(109,897)	(112,367)	(112,367)
Cumulative Cost/Savings Ratio	4086.92%	2128.96%	1454.96%	1134.09%	928.62%	802.50%	802.50%
Year Positive Payback Achieved State or Federal Mandate?							NO PAYBACK
Signatures:							
Benefits Reviewed By Project Sponsor	_____			Date:	_____		
Costs (including IT Resources) Reviewed By Information Technology Project Manager	_____			Date:	_____		

Oakland County -- CSTAR Appointment Scheduler

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
<i>Tangible Benefits Subtotal:</i>							
Cost Avoidance:							
Reduce staff time as a result of duplication of entries into dual systems	2,600	2,626	2,652	2,679	2,706	2,733	15,995
<i>Cost Avoidance Subtotal:</i>	2,600	2,626	2,652	2,679	2,706	2,733	15,995
Intangible Benefit:							
Eliminate the need for IT development hours to create an appointment scheduler, current vendor now has an API available with no additional related costs.							
Savings Total:	2,600	2,626	2,652	2,679	2,706	2,733	15,995

Oakland County -- CSTAR Appointment Scheduler
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?						
								Y1	Y2	Y3	Y4	Y5	Y6	
IT Hours - New Development	Development Svcs		EA	634	165	104,610	1.010	x						
IT Hours - System Maintenance	Development Svcs		ANN	10	165	1,650	1.010	x	x	x	x	x	x	
IT Hours - Customer Support	Development Svcs		ANN	10	165	1,650	1.010	x	x	x	x	x	x	
IT Hours - Planned Maintenance	Development Svcs		ANN	10	165	1,650	1.010	x		x				x
User Hours - New Development	Development Svcs					0								
User Hours - PTNE/OT	Development Svcs					0								
Contractor Professional Services	Development Svcs					0								
PC System - Acquisition	Hardware				687	0								
PC System - Maintenance	Hardware				2,936	0								
Notebook - Acquisition	Hardware				1,115	0								
Notebook - Maintenance	Hardware				3,024	0								
Tablet Notebook - Acquisition	Hardware				1,421	0								
Tablet Notebook - Maintenance	Hardware				2,800	0								
Laserprinter - Acquisition	Hardware				1,432	0								
Laserprinter - Maintenance	Hardware				1,408	0								
PC Maintenance User Owned	Hardware				2,720	0								
Printer Maintenance User Owned	Hardware				1,264	0								
File Space (100GB)	Hardware		ANN		23	0								
Package Software - Acquisition	Software					0								
Package Software - Maintenance	Software					0								
Business Objects Access	Software					0								
Term Emulation SFTW-Acquisition	Software					0								
Term Emulation SFTW-Maintenance	Software					0								
Server - Acquisition/Upgrade	Infrastructure				8,000	0								
Server - Maintenance	Infrastructure				360	0								
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0								
Server Sftwre - Maintenance	Infrastructure					0								
Server Rack Mount	Infrastructure				400	0								
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				21,372	0								
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,432	0								

Oakland County -- CSTAR Appointment Scheduler
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?						
								Y1	Y2	Y3	Y4	Y5	Y6	
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				24,533	0								
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				20,759	0								
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				16,985	0								
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				4,218	0								
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure				6,398	0								
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure				5,414	0								
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure				4,429	0								
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure				1,100	0								
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0								

Oakland County -- CSTAR Appointment Scheduler
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Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?							
								Y1	Y2	Y3	Y4	Y5	Y6		
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0									
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				13,180	0									
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,635	0									
SSL Certificate	Infrastructure				845	0									
Internet Access	Infrastructure				180	0									
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0									
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		415	0									
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure		ANN		930	0									
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure		ANN		2,395	0									
Database SQL Maint Server	Infrastructure		ANN		834	0									
Database SQL Server Physical	Infrastructure		ANN		19,158	0									
DB Maintenance (Annual Cycle \$610)	Infrastructure		ANN		610	0									
DB Maintenance (Semi-Annual Cycle \$1220)	Infrastructure		ANN		1,220	0									
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure		ANN		2,440	0									
Dedicated Virtual Server	Infrastructure		ANN		4,150	0									
DB Instance Setup	Infrastructure				976	0									
DBA MS SQL Database Creation on Existing Instance	Infrastructure				366	0									
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = N/A	Infrastructure		ANN			0									

Oakland County -- CSTAR Appointment Scheduler
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Cost	Annual Multiplier	Affects Project ROI?							
								Y1	Y2	Y3	Y4	Y5	Y6		
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	Infrastructure		ANN			0									
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure		ANN			0									
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,446	Infrastructure		ANN			0									
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	Infrastructure		ANN			0									

Oakland County -- CSTAR Appointment Scheduler
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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	104,610.00					
IT Hours - System Maintenance	Development Svcs	1,650.00	1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
IT Hours - Customer Support	Development Svcs		1,666.50	1,683.17	1,700.00	1,717.00	1,734.17
IT Hours - Planned Maintenance	Development Svcs		1,666.50		1,700.00		1,734.17
User Hours - New Development	Development Svcs						
User Hours - PTNE/OT	Development Svcs						
Contractor Professional Services	Development Svcs						
PC System - Acquisition	Hardware						
PC System - Maintenance	Hardware						
Notebook - Acquisition	Hardware						
Notebook - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	Hardware						
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (100GB)	Hardware						
Package Software - Acquisition	Software						
Package Software - Maintenance	Software						
Business Objects Access	Software						
Term Emulation SFTW-Acquisition	Software						
Term Emulation SFTW-Maintenance	Software						
Server - Acquisition/Upgrade	Infrastructure						
Server - Maintenance	Infrastructure						
Server Sftwre - Acquisition/Upgrade	Infrastructure						
Server Sftwre - Maintenance	Infrastructure						
Server Rack Mount	Infrastructure						
Oracle Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure						
Oracle Enterprise Per Processor - Year 2 and Beyond	Infrastructure						

Oakland County -- CSTAR Appointment Scheduler
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Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Enterprise - Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2016-Aug 2017 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2017-Aug 2018 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server Standard - Per Processor (4 cores) - Purchased Sept 2018-Aug 2019 - Includes Maintenance thru Aug 2019	Infrastructure						
SQL Server - Standard Maintenance, Per Processor (4 cores) - Sept 2019 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure						
SSL Certificate	Infrastructure						
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Database (5 GB) on Consolidated SQL Instance Server	Infrastructure						
Database Instance (125 GB DB) on Consolidated SQL Server	Infrastructure						
Database SQL Maint Server	Infrastructure						
Database SQL Server Physical	Infrastructure						
DB Maintenance (Annual Cycle \$610)	Infrastructure						
DB Maintenance (Semi-Annual Cycle \$1220)	Infrastructure						
DB Maintenance (Semi-Annual Cycle \$2440)	Infrastructure						
Dedicated Virtual Server	Infrastructure						
DB Instance Setup	Infrastructure						
DBA MS SQL Database Creation on Existing Instance	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = N/A	Infrastructure						

Oakland County -- CSTAR Appointment Scheduler
Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$9,288	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$9,751	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,446	Infrastructure						
Extra Large - 40 Core 160GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$12,906	Infrastructure						

Oakland County -- CSTAR Appointment Scheduler
Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	104,610	0	0	0	0	0	104,610
IT Hours - System Maintenance	1,650	1,667	1,683	1,700	1,717	1,734	10,151
IT Hours - Customer Support	0	1,667	1,683	1,700	1,717	1,734	8,501
IT Hours - Planned Maintenance	0	1,667	0	1,700	0	1,734	5,101
User Hours - New Development	0	0	0	0	0	0	
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	106,260	5,000	3,366	5,100	3,434	5,203	128,362
Hardware:							
<i>Hardware Subtotal:</i>							
Software:							
<i>Software Subtotal:</i>							
Infrastructure:							
<i>Infrastructure Subtotal</i>							
Training:							
<i>Training Subtotal:</i>							
Other:							
<i>Other Subtotal:</i>							
Costs Total:	106,260	5,000	3,366	5,100	3,434	5,203	128,362

