

Oakland County Department of Information Technology Project Scope and Approach

Project Name: Add replication Mugshot Database using DataGaurd Project ID: D49183MG

Leadership Group: CLEMIS			
Department: Information Technology		Division: CLEMIS	
Project Sponsor: Jeffrey Nesmith	Date Requested: October 1, 2018	PM Customer No. 183	
Request Type: <i>New Development</i>			
IT Team Name: Bio Metrics		IT Team No: F	
Project Manager/Leader: Stephen Beck; Supervisor: Rob Carroll			
Account Number: 63500	Account Description: CLEMIS Fund	Customer Name:	CLEMIS
Grant Funded? No	Mandate?	Mandate Source: No	

Project Goal

To provide infrastructure redundancy to the CLEMIS mugshot application so that law enforcement officers have continuous access to information in that application.

Business Objective

To ensure that database redundancy is built into the mugshot application.

Major Deliverables

- To build database redundancy in for the mugshot application.

Approach

- We will implement database redundancy consistent to Oakland County IT standards.
 - Develop and test a backup and restore strategy.
 - Script the replication topology.
 - Create thresholds and alerts.
 - Monitor the replication topology.

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- Validate data periodically.
- Adjust agent parameters through profiles.
- Adjust publication and distribution retention periods.
- Understand how to change article and publication properties if application requirements change.
- Understand how to make schema changes if application requirements change.

Research & Analysis

Gartner Research Recommendation

N/A

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users

7,000+ users

Divisions

CLEMIS

Leadership Groups

CLEMIS

Risk

Business Environment

Medium - Project will require some changes to existing business processes.

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Technical Environment

Low - Proven and previously implemented technologies.

Assumptions

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

Other Staffing: additional staffing will be available as follows:

<u>Role:</u>	<u>Name</u>	<u>Hours per Day</u>
Project Sponsor:	Jeff Nesmith	As needed

Facilities

- TBD

Technical

- TBD

Funding

- TBD

Other

- TBD

Priority 22

Constraints

- TBD

Exclusions

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- TBD

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PROJECT PHASE AUTHORIZATION

Phase(s):	
Total Estimated Application Services	Hours:
Total Estimated Technical Systems	Hours: 220 hours \$36,300
Total Estimated CLEMIS	Hours: 426 hours \$70,290
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: 646 hours \$106,590
Preliminary Estimated Development for Future Phases	Hours:
Grand Total Estimated Development	Hours: 646 Cost: \$106,590

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PROJECT COMPLETION AUTHORIZATION

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

Add replication Mugshot Database using DataGaurd - Size Estimate (+/- 10% to 50%) x				
Type	ID	Task Name	Estimated Hours	Estimate Notes
1	Phase	000100 <input type="checkbox"/> Project Management	163	
2	Phase	100000 <input type="checkbox"/> Development	445	
3	Phase	100900-0 <input type="checkbox"/> Post Implementation Production Support	38	
4				
1			646	

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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:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	106,590	0	0	0	0	0	106,590
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	0	0	0	0	0	0	0
Annual Total Costs	106,590	0	0	0	0	0	106,590
Annual Return on Investment	(106,590)						(106,590)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	106,590	106,590	106,590	106,590	106,590	106,590	106,590
Cumulative Return on Investment	(106,590)	(106,590)	(106,590)	(106,590)	(106,590)	(106,590)	(106,590)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor	_____			Date:	_____		
Costs (including IT Resources) Reviewed By Information Technology Project Manager	_____			Date:	_____		

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Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Enhance the availability to Mugshot application data.	Intangible Benefit					0	
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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:							
<i>Cost Avoidance Subtotal:</i>							
Intangible Benefit:							
Enhance the availability to Mugshot application data.							
Savings Total:							

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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?						Potential Cost		
								Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3
IT Hours - New Development	Development Svcs		HR	646	165	106,590		X						106,590.00		
IT Hours - System Maintenance	Development Svcs				128	0										
IT Hours - Customer Support	Development Svcs				128	0										
IT Hours - Planned Maintenance	Development Svcs				128	0										
User Hours - New Development	Development Svcs					0										
User Hours - PTNE/OT	Development Svcs					0										
Contractor Professional Services	Development Svcs					0										
PC System - Acquisition	Hardware				814	0										
PC System - Maintenance	Hardware				2,304	0										
Notebook - Acquisition	Hardware				1,223	0										
Notebook - Maintenance	Hardware				2,372	0										
Tablet Notebook - Acquisition	Hardware				2,012	0										
Tablet Notebook - Maintenance	Hardware					0										
Laserprinter - Acquisition	Hardware				1,432	0										
Laserprinter - Maintenance	Hardware				1,104	0										
Image Workstations - Acquisition	Hardware					0										
Image Workstations - Maintenance	Hardware				3,496	0										
PC Maintenance User Owned	Hardware				2,304	0										
Printer Maintenance User Owned	Hardware				1,072	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										
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure				4,725	0										
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure				946	0										
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure				19,693	0										
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure				3,939	0										

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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?						Potential Cost			
								Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0											
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											
Project Staff Training	Training					0											
User Training	Training					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											
File Space (100GB)	Hardware		ANN		173	0											
Internet Bandwidth per MB	Hardware		ANN		750	0											
DB Instance Setup	Infrastructure				976	0											
DBA MS SQL Database Creation on Existing Instance	Infrastructure				366	0											
DBA MS SQL Installation and Instance Creation (10hrs)	Infrastructure				1,220	0											
DBA MS SQL Instance Creation on Consolidated or Existing Server (8hrs)	Infrastructure				976	0											

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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?						Potential Cost			
								Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	
Server Admin App Code Virtual Directory Setup (1hr)	Infrastructure				122	0											
Server Admin Install Physical Server / Install OS (12hrs)	Infrastructure				1,464	0											
Server Admin Virtual Machine Creation (5hrs)	Infrastructure				610	0											

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Cost Detail

Cost Description	Project Cost Category	Cost Extensions		
		Y4	Y5	Y6
IT Hours - New Development	Development Svcs			
IT Hours - System Maintenance	Development Svcs			
IT Hours - Customer Support	Development Svcs			
IT Hours - Planned Maintenance	Development Svcs			
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			
Image Workstations - Acquisition	Hardware			
Image Workstations - Maintenance	Hardware			
PC Maintenance User Owned	Hardware			
Printer Maintenance User Owned	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			
MS SQL Server Standard Per Processor - Includes Year 1 Maintenance	Infrastructure			
MS SQL Server Standard Per Processor - Year 2 and Beyond	Infrastructure			
MS SQL Server Enterprise Per Processor - Includes Year 1 Maintenance	Infrastructure			
MS SQL Server Enterprise Per Processor - Year 2 and Beyond	Infrastructure			

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Cost Detail

Cost Description	Project Cost Category	Cost Extensions		
		Y4	Y5	Y6
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure			
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			
Project Staff Training	Training			
User Training	Training			
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			
File Space (100GB)	Hardware			
Internet Bandwidth per MB	Hardware			
DB Instance Setup	Infrastructure			
DBA MS SQL Database Creation on Existing Instance	Infrastructure			
DBA MS SQL Installation and Instance Creation (10hrs)	Infrastructure			
DBA MS SQL Instance Creation on Consolidated or Existing Server (8hrs)	Infrastructure			

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Cost Detail

Cost Description	Project Cost Category	Cost Extensions		
		Y4	Y5	Y6
Server Admin App Code Virtual				
Directory Setup (1hr)	Infrastructure			
Server Admin Install Physical Server / Install OS (12hrs)	Infrastructure			
Server Admin Virtual Machine Creation (5hrs)	Infrastructure			

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Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	106,590						106,590
IT Hours - System Maintenance							
IT Hours - Customer Support							
IT Hours - Planned Maintenance							
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
<i>Development Services Subtotal:</i>	106,590						106,590
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:	106,590						106,590

