Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: District-Court AV Backup Enhancement   **Project ID: DB2321BD**

Leadership Group: Courts	
Department: District Court	**Division: District Court**
Project Sponsor: Brett Dery	**Date Requested: 2/1/2022** **PM Customer No. 321**
Request Type: Enhancement	
IT Team Name: Courts	**IT Team No: B**
Project Manager/Leader: Beth Gleason	
Account Number: 95517 **Account Description:** District Ct Support 25%	**Customer Name:** District Court
Grant Funded? No	**Mandate? No** **Mandate Source:**

Project Goal

To create an automated backup process for District Court JAVS and BIS audio files to an automated storage location so that data backups will be automatically stored daily in a central repository rather than locally hosted.

Business Objective

To automate the critical backup process that will be securely stored at a central location. This will eliminate potential for any loss of records. The records will also be stored in a safe location where records cannot be destroyed.

Major Deliverables
- Detailed Project Plan
- Application and/or System Requirements
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Application Code
- Service Center Knowledge Documents

Approach
- Develop Detailed Project Plan
- Document system requirements
- Conduct Tech Review
- Develop Implementation Plan(s)
- Develop User Acceptance Test Plan(s)

Project Name: District-Court AV Backup Enhancement   **Project ID: DB2321BD**

- Test new system
- Acquire User Acceptance Sign off
- Conduct Change Control
- Create Service Center Knowledge Documents
- Release new system into production

Research & Analysis

Research Recommendation

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users	NA
Divisions	District (52-1, 52-2, 52-3, 52-4)
Leadership Groups	Courts

Risk

Business Environment	Low - Project will require some changes to existing business processes.
Technical Environment	Medium - Previously implemented technologies with new aspects and/or new requirements.

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:

Role:	Name	Hours per Day
Project Sponsor	Brett Dery	As Needed
District Tester	TBD	As Needed

Project Name: District-Court AV Backup Enhancement   **Project ID: DB2321BD**

Facilities

District Courts:

- 52-1 Novi

- 52-2 Clarkston

- 52-3 Rochester

- 52-4 Troy

Technical

- There are currently about 20 devices that need to be backed up.

Funding

- Information Technology

Other

-

Priority

Constraints

-

-

Exclusions

-

-

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: District-Court AV Backup Enhancement   **Project ID: DB2321BD**

PROJECT PHASE AUTHORIZATION

Phase(s): All		
Total Estimated Application Services	**Hours: 462**	
Total Estimated Technical Systems	**Hours: 50**	
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: 512**	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 512**	**Cost: $84,480**

Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: District-Court AV Backup Enhancement   **Project ID: DB2321BD**

PROJECT COMPLETION AUTHORIZATION

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

District-Court AV Backup Enhancement - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated	Estimate Notes
1					
2				Hours	
3	Phase	000000	PROJECT MANAGEMENT	166	
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	41	
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	50	
6	Phase	500000	DEVELOP APPLICATION	189	
7	Phase	600000	IMPLEMENTATION PHASE	44	
8	Phase	800000	POST IMPLEMENTATION SUPPORT	22	
9				512	

Oakland County -- District-Court AV Backup Enhancement

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:	300	300	300	300	300	300	1,799
Cost Avoidance Subtotal:	72,800	73,528	74,263	75,006	75,756	76,514	447,867
Costs:							
Development Services Subtotal:	84,480	8,374	5,100	8,627	5,254	8,888	120,722
Hardware Subtotal:	22,884	17,200	17,200	17,200	17,200	17,200	108,884
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	73,100	73,828	74,563	75,306	76,056	76,813	449,666
Annual Total Costs	107,364	25,574	22,300	25,827	22,454	26,088	229,606
Annual Return on Investment	(34,264)	48,254	52,264	49,479	53,602	50,726	220,061
Annual Costs/Savings Ratio	146.87%	34.64%	29.91%	34.30%	29.52%	33.96%	
Project Cumulative Statistics:							
Cumulative Total Savings	73,100	146,928	221,491	296,797	372,853	449,666	449,666
Cumulative Total Costs	107,364	132,938	155,237	181,064	203,518	229,606	229,606
Cumulative Return on Investment	(34,264)	13,990	66,254	115,733	169,335	220,061	220,061
Cumulative Cost/Savings Ratio	146.87%	90.48%	70.09%	61.01%	54.58%	51.06%	51.06%
Year Positive Payback Achieved		Year 2					Year 2
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

Oakland County -- District-Court AV Backup Enhancement

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
Reduction of employee hours in doing manual backups	Cost Avoidance	Account: 702010	ANN	2,080	35	72,800	1.010
Eliminate purchase of backup CDs	Tangible Benefit	Account: 750399	ANN	10	30	300	
Storage space saved in courts	Intangible Benefit					0	
Protection of critical data that cannot be recreated	Intangible Benefit					0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

Oakland County -- District-Court AV Backup Enhancement

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI?						Potential Savings Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
Reduction of employee hours in doing manual backups	Cost Avoidance	x	x	x	x	x	x	72,800.00	73,528.00	74,263.28	75,005.91	75,755.97	76,514
Eliminate purchase of backup CDs	Tangible Benefit	x	x	x	x	x	x	299.90	299.90	299.90	299.90	299.90	300
Storage space saved in courts	Intangible Benefit												
Protection of critical data that cannot be recreated	Intangible Benefit												

Oakland County -- District-Court AV Backup Enhancement

Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Eliminate purchase of backup CDs	300	300	300	300	300	300	1,799
Tangible Benefits Subtotal:	*300*	*300*	*300*	*300*	*300*	*300*	*1,799*
Cost Avoidance:							
Reduction of employee hours in doing manual backups	72,800	73,528	74,263	75,006	75,756	76,514	447,867
Cost Avoidance Subtotal:	*72,800*	*73,528*	*74,263*	*75,006*	*75,756*	*76,514*	*447,867*
Intangible Benefit:							
Storage space saved in courts							
Protection of critical data that cannot be recreated							
Savings Total:	*73,100*	*73,828*	*74,563*	*75,306*	*76,056*	*76,813*	*449,666*

Oakland County -- District-Court AV Backup Enhancement

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	Y1	Y2	Y3	Y4	Y5	Y6
								Affects Project ROI?					
IT Hours - New Development	Development Svcs		HR	512	165	84,480	1.015	x					
IT Hours - System Maintenance	Development Svcs		HR	10	165	1,650	1.015		x	x	x	x	x
IT Hours - Customer Support	Development Svcs		HR	20	165	3,300	1.015		x	x	x	x	x
IT Hours - Planned Maintenance	Development Svcs		HR	20	165	3,300	1.015		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		EA	4	1,421	5,684		x					
Tablet Notebook - Maintenance	Hardware		EA	4	2,800	11,200		x	x	x	x	x	x
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 (20TB needed)	Hardware		ANN	20	300	6,000		x	x	x	x	x	x
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 Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure				42,280	0							
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure				9,293	0	1.030						

Oakland County -- District-Court AV Backup Enhancement

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 Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				16,985	0							
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				12,724	0							
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				8,463	0							
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				4,261	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure				4,429	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure				3,317	0							
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure				2,205	0							
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure				1,112	0							
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				3,506	0							

Oakland County -- District-Court AV Backup Enhancement

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
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							
Dedicated Virtual Server	Infrastructure		ANN		4,150	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure		ANN			0							
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							
Other data storage	Infrastructure		ANN										

Oakland County -- District-Court AV Backup Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
IT Hours - New Development	Development Svcs	84,480.00					
IT Hours - System Maintenance	Development Svcs		1,674.75	1,699.87	1,725.37	1,751.25	1,777.52
IT Hours - Customer Support	Development Svcs		3,349.50	3,399.74	3,450.74	3,502.50	3,555.04
IT Hours - Planned Maintenance	Development Svcs		3,349.50		3,450.74		3,555.04
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	5,684.00					
Tablet Notebook - Maintenance	Hardware	11,200.00	11,200.00	11,200.00	11,200.00	11,200.00	11,200.00
Laserprinter - Acquisition	Hardware						
Laserprinter - Maintenance	Hardware						
PC Maintenance User Owned	Hardware						
Printer Maintenance User Owned	Hardware						
File Space (20TB needed)	Hardware	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
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 Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure						
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure						

Oakland County -- District-Court AV Backup Enhancement

Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Enterprise Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Enterprise - Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure						
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2019-Aug 2020 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2020-Aug 2021 - Includes Support thru Aug 2022	Infrastructure						
SQL Server Standard Software Purchase - Per Processor (4 cores) - Purchased Sept 2021-Aug 2022 - Includes Support thru Aug 2022	Infrastructure						
SQL Server - Standard Support, Per Processor (4 cores) - Sept 2022 and Beyond	Infrastructure						
Websphere Basic Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure						

Oakland County -- District-Court AV Backup Enhancement

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						
Dedicated Virtual Server	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = N/A	Infrastructure						
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						
Other data storage	Infrastructure						

Oakland County -- District-Court AV Backup Enhancement

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	84,480						84,480
IT Hours - System Maintenance		1,675	1,700	1,725	1,751	1,778	8,629
IT Hours - Customer Support		3,350	3,400	3,451	3,502	3,555	17,258
IT Hours - Planned Maintenance		3,350		3,451		3,555	10,355
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	*84,480*	*8,374*	*5,100*	*8,627*	*5,254*	*8,888*	*120,722*
Hardware:							
File Space (20TB needed)	6,000	6,000	6,000	6,000	6,000	6,000	36,000
Tablet Notebook - Acquisition	5,684						5,684
Tablet Notebook - Maintenance	11,200	11,200	11,200	11,200	11,200	11,200	67,200
Hardware Subtotal:	*22,884*	*17,200*	*17,200*	*17,200*	*17,200*	*17,200*	*108,884*
Software:							
Software Subtotal:							
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	*107,364*	*25,574*	*22,300*	*25,827*	*22,454*	*26,088*	*229,606*

Oakland County -- District-Court AV Backup Enhancement

Return on Investment Analysis

Assumptions

Date	Assumption Description
03-Mar-22	Need for all four District Courts
03-Mar-22	Replace CD backups and disc drives with automated process to a County central data storage location daily
03-Mar-22	Physical backups need redundant copies
03-Mar-22	If backups were damaged work would be lost
31-May-22	Four laptops are needed in Rochester so JAVS can be put on County PCs.
31-May-22	Estimated storage needed for BIS/JAVS data = 20TB. Will be increasing as District rollout out JAVS video.