Oakland County
Department of Information Technology
Project Scope and Approach

Project Name: Workstation Build Role Establishment **Project ID: TN2186WB**

Leadership Group: Information Technology Steering Committee			
Department: Information Technology		**Division: Technical Systems & Networking (TSN)**	
Project Sponsor: Mike Timm	**Date Requested: 06/10/2022**	**PM Customer No. 186**	
Request Type: **New Development**			
IT Team Name: Workstation Services		**IT Team No: N**	
Project Manager/Leader: Mike Zemina			
Account Number: 17030	**Account Description:** Technical Systems and Networking	**Customer Name:** Information Technology	
Grant Funded? **No**		**Mandate?** **No** **Mandate Source:**	

Project Goal

To create a proof of concept (POC) using two departments that will align job roles to software so that Workstation Services can automate deployment of workstation builds, creating a faster deployment turn around for customers.

Business Objective

The objective of the project is to establish workstation software standardization using two departments, by aligning job role tasks with appropriate software. Standardization will result in operational efficiencies in the preparation process for workstation builds resulting in quicker delivery to the customer.

Major Deliverables

- Software application matrices for the two selected departments
- Establish job role and associated duties in correlation to the two departments needed software
- Build job role software task sequences
- Department validation

Approach

- Create software matrix and distribute to CRMs for departmental feedback
- Compile departmental feedback and establish job roles
- Validate software lists for each established job role for the two departments
- Create task sequence for each job role
- Create internal workstation specific documentation
- Provide post implementation support as needed
- Department validates completed build

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Research & Analysis

IT Research & Advisory Services Recommendation

- Research not Required

Benefits

See Return on Investment (ROI) Analysis Document

Impact

Number of Users All personnel that use utilize County workstations

Divisions All

Leadership Groups All

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 per the attached project plan.

Other Staffing: additional staffing will be available as follows:

Role:	Name	Hours per Day
Project Sponsor:	EJ Widun	As Needed
App Services Stakeholder:	Tammi Shepherd	As Needed
CLEMIS Stakeholder:	Jeff Nesmith	As Needed
CTO:	EJ Widun	As Needed
IT Director:	Mike Timm	As Needed

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Facilities

- None

Technical

- None

Funding

- Information Technology

Other

- None

Priority TBD

Constraints

- None

Exclusions

- None

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PROJECT PHASE AUTHORIZATION

Phase(s): All	
Total Estimated Application Services	**Hours: 30**
Total Estimated Technical Systems	**Hours: 456**
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: 486**	
Previously Authorized Development	**Hours:**	
Preliminary Estimated Development for Future Phases	**Hours:**	
Grand Total Estimated Development	**Hours: 486**	**Cost: $80,190**

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PROJECT COMPLETION AUTHORIZATION

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

Workstation Build Role Establishment - Size Estimate (+/- 10% to 50%)

	Type	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3	**Phase**	**000000**	**PROJECT ADMINISTRATION - WS BUILD ROLE ESTABLISHMENT**	**156**	
4	**Phase**	**100000**	**DEFINE BUSINESS REQUIREMENTS**	**188**	
5	**Phase**	**200000**	**IMPLEMENTATION**	**96**	
6	**Phase**	**300000**	**POST IMPLEMENTATION SUPPORT**	**46**	
7				486	

TN2186WB

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Return on Investment Analysis

Date: 06/10/2022

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:	11,700	11,700	11,700	11,700	11,700	11,700	70,200
Costs:							
Development Services Subtotal:	80,190	0	0	0	0	0	80,190
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	11,700	11,700	11,700	11,700	11,700	11,700	70,200
Annual Total Costs	80,190	0	0	0	0	0	80,190
Annual Return on Investment	(68,490)	11,700	11,700	11,700	11,700	11,700	(9,990)
Annual Costs/Savings Ratio	685.38%	0.00%	0.00%	0.00%	0.00%	0.00%	
Project Cumulative Statistics:							
Cumulative Total Savings	11,700	23,400	35,100	46,800	58,500	70,200	70,200
Cumulative Total Costs	80,190	80,190	80,190	80,190	80,190	80,190	80,190
Cumulative Return on Investment	(68,490)	(56,790)	(45,090)	(33,390)	(21,690)	(9,990)	(9,990)
Cumulative Cost/Savings Ratio	685.38%	342.69%	228.46%	171.35%	137.08%	114.23%	114.23%
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:			

Oakland County -- WS Build Role Establishment

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
Not having to spend time on Incidents and Change Orders with support hours.	Cost Avoidance	Information Technology				1,560	1.000
Reducing the amount of time spent on workstation prep - by one-half	Cost Avoidance	Information Technology				10,140	1.000
Enhance customer satisfaction	Intangible Benefit	Information Technology					
						0	
						0	
						0	
						0	
						0	
						0	

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Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Affects Project ROI? Y1	Y2	Y3	Y4	Y5	Y6	Potential Savings Extensions Y1	Y2	Y3	Y4	Y5	Y6
Not having to spend time on Incidents and Change Orders with support hours.	Cost Avoidance	x	x	x	x	x	x	1,560.00	1,560	1,560	1,560	1,560	1,560
Reducing the amount of time spent on workstation prep - by one-half	Cost Avoidance	x	x	x	x	x	x	10,140.00	10,140	10,140	10,140	10,140	10,140
Enhance customer satisfaction	Intangible Benefit												

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Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Not having to spend time on Incidents and Change Orders with support hours.	1,560	1,560	1,560	1,560	1,560	1,560	9,360
Reducing the amount of time spent on workstation prep - by one-half	10,140	10,140	10,140	10,140	10,140	10,140	60,840
Cost Avoidance Subtotal:	***11,700***	***11,700***	***11,700***	***11,700***	***11,700***	***11,700***	***70,200***
Intangible Benefit:							
Enhance customer satisfaction							
Savings Total:	***11,700***	***11,700***	***11,700***	***11,700***	***11,700***	***11,700***	***70,200***

Oakland County -- WS Build Role Establishment

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	Information Technology		486	165	80,190		X					
IT Hours - New Development - YR2	Development Svcs				165	0							
IT Hours - System Maintenance	Development Svcs				165	0							
IT Hours - Customer Support	Development Svcs				165	0							
IT Hours - Planned Maintenance	Development Svcs				165	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				639	0							
PC System - Maintenance	Hardware				3,352	0							
Laptop - Acquisition	Hardware				922	0							
Laptop - Maintenance	Hardware				3,352	0							
Tablet Notebook - Acquisition	Hardware				1,069	0							
Tablet Notebook - Maintenance	Hardware				3,352	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							
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						
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							

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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 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				3,769	0							
Websphere Basic Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				754	0							
Websphere ND Per Processor Single/Dual Core - Includes Year 1 Maintenance	Infrastructure				14,170	0							
Websphere ND Per Processor Single/Dual Core - Year 2 and Beyond	Infrastructure				2,835	0							
SSL Certificate	Infrastructure				910	0							

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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
Internet Access	Infrastructure				190	0							
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure		ANN		500	0							
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure		ANN		446	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = $2,735	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $3,057	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $8,715	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,758	Infrastructure		ANN			0							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $24,137	Infrastructure		ANN			0							

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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	80,190					
IT Hours - New Development - YR2	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						
Laptop - Acquisition	Hardware						
Laptop - Maintenance	Hardware						
Tablet Notebook - Acquisition	Hardware						
Tablet Notebook - Maintenance	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						
Oracle Enterprise Software Purchase - Per Processor (4 Cores) - Requires Annual Support Below	Infrastructure						
Oracle Enterprise Software Support - Per Processor (4 Cores)	Infrastructure						
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						

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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 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						
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						

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Return on Investment Analysis

Cost Detail

Cost Description	Project Cost Category	Potential Cost Extensions					
		Y1	Y2	Y3	Y4	Y5	Y6
Internet Access	Infrastructure						
Imperva Web Application Firewall (External Web Applications Only)	Infrastructure						
App Code Directories on Consolidated IIS Server (Virtual)	Infrastructure						
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $601 On Premise Physical Server = $2,735	Infrastructure						
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $951 On Premise Physical Server = $3,057	Infrastructure						
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $1,702 On Premise Physical Server = $8,715	Infrastructure						
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $3,167 On Premise Physical Server = $10,758	Infrastructure						
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = $7,564 On Premise Physical Server = $24,137	Infrastructure						

Oakland County -- WS Build Role Establishment

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	80,190						80,190
Development Services Subtotal:	***80,190***						***80,190***
Hardware:							
Hardware Subtotal:							
Software:							
Software Subtotal:							
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	***80,190***						***80,190***

Oakland County -- WS Build Role Establishment

Return on Investment Analysis

Assumptions

Date	Assumption Description
17-Aug-22	For the entire County, the average County workstation prep takes approximately 4 hours core work. The goal is to reduce this in-half (2 hours). On average - baseline: 5,300 workstations on a 5 yr life cycle = 1,060 machine replacements per year. 4*1060 = 4,240 hrs verses 2*1060 = 2,120 hrs Cost saving of $65/hr * 2,120hrs = $137,800 per year
17-Aug-22	For the entire county, expecting the cost avoidance spent on Incidents and Change Orders for support hours. The estimate of 15% of the current workforce (system breakage, adding new equipment, etc.) would yield : 1,060 * 15% = 159 workstations 159 * 2hr (reducing the 2 hr prep) = 318hrs 318hrs * $65/hr = $20,670 per year $20,670 + $137,800 = $158,470 per year
17-Aug-22	For this POC (2 departments; Health and Clerks), 300+90=390 workstations yields 78 machine replacements per year 4*78 = 312 hrs verses 2*78 = 156 hrs Cost saving of $65/hr * 156hrs = $10,140 per year
17-Aug-22	For this POC (2 departments; Health and Clerks), 78 * 15% = 11.7 workstations (rounded to 12) 12 * 2hr (reducing the 2 hr prep) = 24hrs 24hrs * $65/hr = $1,560 $1,560 + $10,140 = $11,700 per year total