Avalon Technologies, Inc.
39533 Woodward Avenue Suite 308
Bloomfield Hills, MI 48304
(800)720-3811
avalontech.net

AVALON
TECHNOLOGIES

We have prepared a quote for you

City of Royal Oak - DC Refresh (Primary only)

QUOTE # JPG004739 V4

PREPARED FOR

City of Royal Oak

PREPARED BY

Avalon Sales Team

Primary Data Center

Description			Price	Qty	Ext. Price
PowerStore 500T AF SAN (5 Years Support) ; 60TiBe			$146,087.91	1	$146,087.91
210-AXXJ	PowerStore 500T Dell Customer Racked	1			
370-AFXQ	192GB Appliance DIMM 96GB Per Node	1			
528-BTZK	PowerStore Base SW	1			
406-BBOO	25GBE OPTICAL 4 PORT CARD PAIR	1			
450-AKHM	Dual 1450W (200-240V) HIGH Line Only Power Supply	1			
343-BBMR	BASE UNIT CONFIG KIT	1			
384-BFBB	Single Drive Failure 4+1	1			
886-3374	ProSupport 4-Hour 7x24 Onsite Service 2 Years Extended	1			
886-3375	ProSupport 4-Hour 7x24 Onsite Service 3 Years	1			
886-3491	ProSupport 4-Hour 7x24 Technical Support and Assistance 5 Years	1			
400-BGGP	P1 25X2.5 NVME SED SSD 7.68TB	7			
565-BBJO	10GBE OPTICAL 4 PORT IO MODULE PAIR	1			
407-BCGB	25GBE OPTICAL SFP PAIR	4			
891-5163	ProSupport Onsite Medium Capacity 5 years	7			
Hyper-V Hosts: R660 Servers: 5 Years Support			$27,151.80	2	$54,303.60
210-BEQQ	PowerEdge R660 Server	2			
461-AAIG	Trusted Platform Module 2.0 V3	2			
321-BHRW	2.5" Chassis with up to 10 Hard Drives (SAS/SATA), 2CPU, PERC11	2			
338-CPCS	Intel Xeon Gold 6548N 2.8G, 32C/64T, 20GT/s, 60M Cache, Turbo, HT (250W) DDR5-5200	2			
338-CPCS	Intel Xeon Gold 6548N 2.8G, 32C/64T, 20GT/s, 60M Cache, Turbo, HT (250W) DDR5-5200	2			
379-BDCO	Additional Processor Selected	2			
379-BFFD	No HBM	2			
412-ABCG	Performance Heatsink for 2 CPU configuration (CPU more than or equal to 250W)	2			
370-AAIP	Performance Optimized	2			
370-BBRX	5600MT/s RDIMMs	2			
780-BCDI	No RAID	2			
405-ABCQ	PERC H355 Controller Front	2			
750-ADRI	Front PERC Mechanical Parts, rear load	2			
750-AABF	Power Saving Dell Active Power Controller	2			
800-BBDM	UEFI BIOS Boot Mode with GPT Partition	2			
384-BCUJ	4 Very High Performance Fans	2			
450-AKLF	Dual, Redundant(1+1), Hot-Plug Power Supply,1100W MM(100-240Vac) Titanium	2			

Primary Data Center

Description			Price	Qty	Ext. Price
330-BBYX	Riser Config 1, Low Profile, 3x16 LP Slots (Gen4)	2			
329-BKBP	Motherboard MLK supports ALL CPUs and is required for CPUs 250W and above	2			
528-CTIC	iDRAC9, Enterprise 16G	2			
540-BCOC	Broadcom 57414 Dual Port 10/25GbE SFP28, OCP NIC 3.0	2			
540-BDKD	Broadcom 5720 Dual Port 1GbE LOM	2			
325-BEVE	Standard Bezel	2			
350-BCKC	Dell Luggage Tag	2			
403-BCRZ	BOSS-N1 controller card + with 2 M.2 960GB (RAID 1)	2			
470-AFMG	BOSS Cables and Bracket for R660	2			
350-BBXM	No Quick Sync	2			
379-BCSF	iDRAC,Factory Generated Password	2			
379-BCQX	iDRAC Service Module (ISM), NOT Installed	2			
379-BCQY	iDRAC Group Manager, Disabled	2			
611-BBBF	No Operating System	2			
605-BBFN	No Media Required	2			
770-BDMR	ReadyRails Static Rails for 2/4-post Racks (A14)	2			
631-AACK	No Systems Documentation, No OpenManage DVD Kit	2			
707-7809	ProSupport 4-Hour 7x24 Onsite Service 2 Years Extended	2			
707-7833	ProSupport 4-Hour 7x24 Onsite Service 3 Years	2			
707-7988	ProSupport 4-Hour 7x24 Technical Support and Assistance 5 Years	2			
370-BBRN	64GB RDIMM, 5600MT/s, Dual Rank	32			
400-AXTV	480GB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD	2			
450-AALV	Power Cord - C13, 3M, 125V, 15A (North America, Guam, North Marianas, Philippines, Samoa, Vietnam)	4			
540-BDGV	Broadcom 57414 Dual Port 10/25GbE SFP28 Adapter, PCIe Low Profile, V2	2			

Primary Data Center

Description	Price	Qty	Ext. Price
iSCI Switches: Dell S5248F-ON Switch, 48x25GbE SFP28, 4x100GbE QSFP28, 2x100GbE QSFP-DD, IO to PSU, 2xPSU: 5 Years Support	$26,675.99	2	$53,351.98

210-APEX	Dell S5248F-ON Switch, 48x25GbE SFP28, 4x100GbE QSFP28, 2x100GbE QSFP-DD, IO to PSU, 2xPSU	2
343-BBLP	Dell EMC S52XX-ON Series User Guide	2
634-BRUN	OS10 Enterprise, S5248F-ON	2
891-6701	ProSupport 4-Hour 7x24 Onsite Service 1 Year	2
891-6705	ProSupport 4-Hour 7x24 Onsite Service 4 Years Extended	2
891-6750	ProSupport 4-Hour 7x24 Technical Support and Assistance 5 Years	2
848-8533	5 Years ProSupport OS10 Enterprise Software Support-Maintenance	2
470-ABOU	Dell Networking Cable, 100GbE QSFP28 to QSFP28, Passive Copper Direct Attach Cable, 0.5 Meter	2
470-BBDC	Dell Networking, Cable, SFP28 to SFP28, 25GbE,Passive Copper Twinax Direct Attach Cable,2 Meter	4
450-AAFH	Power Cord, 125V, 15A, 10 Feet, NEMA 5-15/C13	2
450-AAFH	Power Cord, 125V, 15A, 10 Feet, NEMA 5-15/C13	2

Description	Price	Qty	Ext. Price
Pricing based on Dell's MHEC Contract: please reference the Midwestern Higher Education Commission (MHEC) Contract No. MHEC-04152022 for Dell Computers, on your purchase order	$0.00	1	$0.00
		Subtotal	**$253,743.49**

Cables/Misc.

Description	Price	Qty	Ext. Price
Cables/Misc.	$1,000.00	2	$2,000.00
		Subtotal	**$2,000.00**

Avalon Professional Services

Description	Price	Qty	Ext. Price
Avalon Professional Services - SAN/Server /Switch/Deployment **Statement of Work (SOW)**	$10,900.00	1	$10,900.00

Avalon Professional Services

Description	Price	Qty	Ext. Price

Dell EMC SAN Deployment - Primary
 	
○ Initial configuration of SAN
○ Update of SAN components to the latest stable firmware and software
○ Dell Support Health Check of SAN
○ Failover, redundancy and performance verification testing
○ Network integration with iSCSI switches
○ Presentation of storage to up to five (5) servers via iSCSI
○ Installation and configuration of SAN Manager
 	
R Series Server Deployment - Primary
 	
○ Firmware updates on all R series server components to latest stable code levels
○ Operating System Installation
○ Network and storage (if applicable) connection integration
 	
Dell Networking Top of Rack Switch Deployment -Primary
Update of switch firmware to latest stable code
General Switch Configuration
    Management Interface
    Time zone / NTP
    Root / Enable credentials
    SSH Setup
    AAA Setup
    Login Banner
    OOB IP Address
Best practice configuration of switches as redundant top of rack fabric
    VLANs
    Spanning Tree
    Port Descriptions
    Uplink to existing network infrastructure
Failover, redundancy and performance testing
 	
Knowledge Transfer
 	
● Administration and operations knowledge transfer covering:
○ Dell PowerEdge Servers
○ Dell Networking
 	
Assumptions
 	
● **Some project tasks will be performed remotely**
● Project may not commence until any necessary hardware or software has been delivered.
● Any tasks not specifically included in this statement of work must be agreed to in a written change order by all parties involved.
● Avalon Technologies and customer will determine a mutually convenient project start date			

Avalon Professional Services

Description	Price	Qty	Ext. Price

and timeline.

- Avalon Technologies and customer will provide a project-lead to be the single point of contact for project coordination.
- The above statement of work is based upon the bill of materials (if applicable) and details collected by Avalon from the customer during scoping. Should the bill of materials or details of the project change, the statement of work will require revision and additional cost may apply
- Customer will sign a Customer Acceptance Form (CAF) after the completion of each milestone and/or project completion

Customer Responsibilities

- Customer to provide secure remote access to facilitate remote work (e.g. VPN)
- Customer to provide all software licenses and software license keys as required for implementation
- Customer to provide engagement and availability of customer personnel resources to assist with coordination of services or completion of customer dependent tasks
- Customer to provide administrator, root or adequate privileged access to systems involved in the implementation
- Customer will provide all hardware and software required to ensure a successful implementation including those stated in any associated bill of materials and also any ancillary items such as any required cables, optics, software etc.
- Customer will maintain a backup of all data and programs on affected systems prior to Avalon performing the Services and during the term of the Statement of Work (SOW). Avalon will have no liability for loss or recovery of data, programs or loss of use of system(s) arising out of or in connection with the Services provided under this SOW.
- Customer will maintain recent (i.e. released within the last year) & stable firmware and/or operating system on equipment with which the project will be integrating or connecting e.g. switch firmware
- The Customer will ensure the Avalon personnel have reasonable and safe access to the Project site, a safe working environment, an adequate office space, and parking as required.
- The customer will maintain active support agreements for any hardware or software involved in the project included, but not limited to servers, storage, networking equipment and software

Outside of Project Scope

- Any services, tasks or activities other than those specifically noted in the section titled "Statement of Work"
- Configuration or remediation of any server or workstation operating system or application software affected or unaffected by the services performed under the statement of work
- Configuration or remediation of any networking components affected or unaffected by services performed under the statement of work
- Post-implementation support
- Disposal or recycling of customer equipment, new equipment boxes or any other items

Avalon Professional Services

Description	Price	Qty	Ext. Price
• Installation of software or hardware firmware updates, service packs patches or new version that are released after services commence			
• Updating or reconfiguration of 3rd party applications that integrate with existing environment (e.g. Anti-virus, backup, email relay services, fax/voicemail to email, etc.)			
• Transportation of equipment between customer sites			
Professional Services Terms			
• 50% to Commence Services			
• 50% upon Completion of Services			
• Avalon may invoice for professional services balance if project completion is delayed by customer beyond ninety (90) calendar days after date of purchase order.			
Subtotal			**$10,900.00**

City of Royal Oak - DC Refresh (Primary only)

Prepared by:	Prepared for/Ship To:	Quote Information:
Avalon Technologies, Inc.	**City of Royal Oak**	**Quote #: JPG004739**
Avalon Sales Team	211 S Williams St	Version: 4
(800)720-3811	Royal Oak, MI 48067	Delivery Date:
avasales@avalontech.net	Chris Gomez	02/11/2025
	(248) 246-3080	Expiration Date:
	chris.gomez@romi.gov	04/30/2025

Department:

211 S Williams St
Royal Oak, MI 48067

Quote Summary

Description	Amount
Primary Data Center	$253,743.49
Cables/Misc.	$2,000.00
Avalon Professional Services	$10,900.00
Total:	**$266,643.49**

Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.
Terms: Net 30 after equipment ships.
Avalon's full terms can be found at:

Terms & Conditions:
https://tinyurl.com/yja6vgob

In executing this Quote, the customer acknowledges and agrees to the following:
An enforceable contract is being entered into with Avalon Technologies, Inc. and that Avalon's terms and conditions are incorporated by reference;
Avalon's terms and conditions may change from time to time upon notice and that such notice will be included on Avalon's invoices or other writings by Avalon.
The customer referenced above represents and warrants to Avalon that the person signing this quote is authorized to execute same and bind the customer to the terms thereof.

Avalon Technologies, Inc.

Signature: _____

Name: Avalon Sales Team

Title: Business Development Manager

Date: 02/11/2025

City of Royal Oak [Customer]

Signature: _____

Name: Chris Gomez

Date: _____