

The following documentation is an electronicallysubmitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.



WOASIS	Jump to PRCUID 🟦 Go 🕼 Home 🌽 Personalize 🔊 Accessibility 🧧 App Help 🌾 About
/elcome, Robert M Ross	Procurement Budgeting Accounts Receivable Accounts Payable
olicitation Response(SR) Dept: 0947 ID: ESR11012300000002165 Ver.: 1 Function: New Phase: Final Modified by ba	lich , 11/01/2023
Header () 4	
	≦ List View ▲
General Information Contact Default Values Discount Document Information Clarification Request	
Procurement Folder: 1302684	SO Doc Code: CRFQ
Procurement Type: Central Purchase Order	SO Dept: 0947
Vendor ID: VS000043442	SO Doc ID: ERP240000001
Legal Name: Avalon Technologies	Published Date: 10/25/23
Alias/DBA:	Close Date: 11/1/23
Total Bid: \$290,000.00	Close Time: 13:30
Response Date: 11/01/2023	Status: Closed
Response Time: 10:54	Solicitation Description: NetApp Backup Storage Target
Responded By User ID: jpgradin	Total of Header Attachments: 4
First Name: John	Total of All Attachments: 4
Last Name: Gradin	
Email: jp.gradin@avalontech.net	
Phone: 2485666434	



Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

### State of West Virginia **Solicitation Response**

Proc Folder:	1302684					
Solicitation Description:	NetApp Backup	NetApp Backup Storage Target				
Proc Type:	Central Purchase	e Order				
Solicitation Closes		Solicitation Response	Version			
2023-11-01 13:30		SR 0947 ESR1101230000002165	1			

VENDOR					
VS0000043442 Avalon Technologies					
Solicitation Number:	CRFQ 0947 ERP2400000001				
Total Bid:	290000	Response Date:	2023-11-01	Response Time:	10:54:33
Comments:					

FOR INFORMATION CONTACT THE BUYER Larry D McDonnell 304-558-2063 larry.d.mcdonnell@wv.gov			
Vendor Signature X	FEIN#	DATE	

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	NetApp FAS2820 HA System, or equal	2.00000	EA	145000.000000	290000.00
Comm	Code Manufacturer		Specifica	ation	Model #
32226	00				
ommo	odity Line Comments: Dell EMC A300 - L3 - S *** Dell EMC Equal Sol		15x4TB)/800GB	SSD - 4 x Node Clus	ter (per site)
	ed Description: FAS2820 HA System (Item Number: FAS2820	A-001), or e	equal.		
ine	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	SW, ONTAP Base Package, Per-0.1TB, or equal	1920.000	00 EA		
Comm	Code Manufacturer		Specifica	ation	Model #
432226	00				
ommc	dity Line Comments: *** Dell EMC Equal Sol	lution **			
	ed Description: ITAP Base Package, Per-0.1TB (Item Number S	SW-ONTAF	PB-NLSAS-F01-0	C), or equal.	
ine	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	NetApp FAS2820, 12x16TB, 7.2K, -C, or equal	1.00000	EA		
Comm	Code Manufacturer		Specifica	ation	Model #
432226	00				
commo	dity Line Comments: *** Dell EMC Equal Sol	lution **			
	ed Description: FAS2820, 12x16TB, 7.2K, -C (Item Number: F/	AS2820-10-	4-C), or equal.		
ine	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	NetApp Documents, FAS2820, -C, or equal	1.00000	EA		
Comm	Code Manufacturer		Specifica	ation	Model #
432226	00				
:ommc	dity Line Comments: *** Dell EMC Equal Sol	lution **			
	ed Description: Documents, FAS2820, -C (Item Number: DOC·	-2820-C), o	r equal.		
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	NetApp Data at Rest Encryption Capable OS or equal	-	EA		
Comm	Code Manufacturer		Specifica	ation	Model #
432226	00				
ommo	odity Line Comments: *** Dell EMC Equal Sol	lution **			

NetApp Data at Rest Encryption Capable Operating System (Item Number: DATA-AT-REST-ENCRYPTION), or equal.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	NetApp PS Deployment, Standard, FAS, Low, or equal	1.00000	EA		
Comm	n Code Manufacturer		Specifica	ation	Model #
432226	300				
Commo	odity Line Comments: *** Dell EMC Equal So	lution **			
Extend	ded Description:				
NetApp	o PS Deployment, Standard, FAS, Low (Item Nu	mber: PS-D	EPLOY-STAND	-FAS-L), or equal.	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	NetApp Four Hour Parts Delivery and Replacement, or equal	1.00000	EA		
Comm	n Code Manufacturer		Specifica	ation	Model #
432226					
Extend	odity Line Comments: *** Dell EMC Equal So ded Description: o Four Hour Parts Delivery and Replacement (Ite		CS-4HR-REPL	ACEMENT), or equa	al.
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
8	NetApp Advisor Plus for Single Controller, or equal	1.00000	EA		
Comm	n Code Manufacturer		Specifica	ation	Model #
432226	500				
Extend	odity Line Comments: *** Dell EMC Equal So ded Description:				
NetApp	b Advisor Plus for Single Controller (Item Number	sr· ( 'ς_Δ  )\//'			
			50R-PL052), 0	r equal.	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
<b>Line</b> 9			· · · · · ·	-	Ln Total Or Contract Amount
9	Comm Ln Desc NetApp SupportEdge Advisor, or equal	Qty	Unit Issue EA	Unit Price	
	Comm Ln Desc         NetApp SupportEdge Advisor, or equal         n Code       Manufacturer	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount Model #
9 Comm 432226 Commo Extend	Comm Ln Desc         NetApp SupportEdge Advisor, or equal         n Code       Manufacturer	Qty 1.00000	Unit Issue EA Specifica	Unit Price	
9 Comm 432226 Commo Extenc NetApp	Comm Ln Desc         NetApp SupportEdge Advisor, or equal         n Code       Manufacturer         600         odity Line Comments:       *** Dell EMC Equal So         ded Description:	Qty 1.00000	Unit Issue EA Specifica	Unit Price	
9 Comm 432226 Commo Extenc NetApp	Comm Ln Desc         NetApp SupportEdge Advisor, or equal         n Code       Manufacturer         600         odity Line Comments:       *** Dell EMC Equal So         ded Description:         o SupportEdge Advisor (Item Number: CS-G1-SI	Qty 1.00000 lution ** E-ADVISOR	Unit Issue EA Specifica	Unit Price	Model #
9 Comm 432226 Comme Extend NetApp Line	Comm Ln Desc         NetApp SupportEdge Advisor, or equal         a Code       Manufacturer         600         odity Line Comments:       *** Dell EMC Equal So         ded Description:         o SupportEdge Advisor (Item Number: CS-G1-SI         Comm Ln Desc         SFP+ Optical 10Gb Shortwave, -C, or equal	Qty 1.00000 lution ** E-ADVISOR Qty	Unit Issue EA Specifica R), or equal.	Unit Price	Model #

Commodity Line Comments: \*\*\* Dell EMC Equal Solution \*\*

SFP+ Optical 10Gb Shortwave, -C (Item Number: X6589-N-C), or equal.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
11	Cable, 25GbE, SFP28-SFP28, Cu, 0.5m, -C, or equal	2.00000	EA		
Comm	Code Manufacturer		Specifica	ation	Model #
432226	00				
Commo	dity Line Comments: *** Dell EMC Equal Sol	ution **			
Extend	ed Description:				
Cable, 2	25GbE, SFP28-SFP28, Cu, 0.5m, -C (Item Num	ber: X6624	0A-05-N-C), or e	equal.	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
12	Cable, LC-LC, OM4, 5m, -C, or equal	8.00000	EA		
Comm	Code Manufacturer		Specifica	ation	Model #
321310	01				
Commo	dity Line Comments: *** Dell EMC Equal Sol	ution **			
Extend	ed Description:				
Cable, I	_C-LC, OM4, 5m, -C (Item Number: X66250-5-N	I-C), or equ	al		
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
13	Rail Kit, Thin, Round/Square-Hole, 4-Post,	1.00000	EA		
_	Adj, 24-32, or eq	1.00000	EA		
Comm	Adj, 24-32, or eq		EA Specifica	ation	Model #
	Adj, 24-32, or eq Code Manufacturer			ation	Model #
<b>Comm</b> 321310	Adj, 24-32, or eq Code Manufacturer 01			ation	Model #
Comm 321310 Commc	Adj, 24-32, or eq Code Manufacturer			ation	Model #
Comm 321310 Commc Extend	Adj, 24-32, or eq Code Manufacturer 01 Odity Line Comments: *** Dell EMC Equal Sol	ution **	Specifica		
Comm 321310 Commc Extend NetApp	Adj, 24-32, or eq Code Manufacturer 01 Odity Line Comments: *** Dell EMC Equal Sol ed Description:	ution ** 24-32, -C (	Specifica (Item Number X-		equal.
Comm 321310 Commc Extend NetApp Line	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,	ution **	Specifica	02657-00-N-C), or e	
Comm 321310 Commc Extend	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal	ution ** 24-32, -C ( <b>Qty</b>	Specifica (Item Number X- Unit Issue	02657-00-N-C), or e Unit Price	equal.
Comm 321310 Commc Extend NetApp Line 14	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer	ution ** 24-32, -C ( <b>Qty</b>	Specifica (Item Number X- Unit Issue EA	02657-00-N-C), or e Unit Price	equal. Ln Total Or Contract Amount
Comm 321310 Commc Extend NetApp Line 14 Comm 432226	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer	ution ** 24-32, -C ( <u>Qty</u> 2.00000	Specifica (Item Number X- Unit Issue EA	02657-00-N-C), or e Unit Price	equal. Ln Total Or Contract Amount
Comm 321310 Commc Extend NetApp Line 14 432226 Commc	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer         00	ution ** 24-32, -C ( <u>Qty</u> 2.00000	Specifica (Item Number X- Unit Issue EA	02657-00-N-C), or e Unit Price	equal. Ln Total Or Contract Amount
Comm 321310 Commc Extend NetApp Line 14 Comm 432226 Commc Extend	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer         00         odity Line Comments:       *** Dell EMC Equal Sol	ution ** 24-32, -C ( Qty 2.00000	Specifica (Item Number X- Unit Issue EA Specifica	02657-00-N-C), or e Unit Price	equal. Ln Total Or Contract Amount
Comm 321310 Commc Extend NetApp Line 14 Comm 432226 Commc Extend NetApp	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer         00         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:	ution ** 24-32, -C ( Qty 2.00000	Specifica (Item Number X- Unit Issue EA Specifica	02657-00-N-C), or e Unit Price	equal. Ln Total Or Contract Amount
Commo 321310 Commo Extend NetApp 14 Commo 432226 Commo Extend NetApp	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer         00         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         MEZZANINE, 4x25 GbE with I/O Plate, -C (Iten	ution ** 24-32, -C ( <b>Qty</b> 2.00000	Specifica (Item Number X- Unit Issue EA Specifica X1166A-C), or e	02657-00-N-C), or e Unit Price	equal. Ln Total Or Contract Amount Model #
Commo 321310 Commo Extend NetApp Line 432226 Commo Extend NetApp Line	Adj, 24-32, or eq         Code       Manufacturer         01         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj,         Comm Ln Desc         NetApp MEZZANINE, 4x25 GbE with I/O         Plate, -C, or equal         Code         Manufacturer         00         odity Line Comments:       *** Dell EMC Equal Sol         ed Description:         MEZZANINE, 4x25 GbE with I/O Plate, -C (Iten         Comm Ln Desc         NetApp Jumper CrdIn-Cab48-INC13-C14-C, or equal	ution ** 24-32, -C ( <b>Qty</b> 2.00000 ution ** n Number: 2 <b>Qty</b>	Specifica (Item Number X- Unit Issue EA Specifica X1166A-C), or e Unit Issue	02657-00-N-C), or o Unit Price	equal. Ln Total Or Contract Amount Model #

NetApp Jumper CrdIn-Cab48-INC13-C14-C (Item Number: X1558A-R6-C), or equal.



# **Primary Site:**

PowerScale A300		
210-AZWL	A300 - L3 - SED 60TB (15x4TB)/800GB SSD	4
800-BBQV	Informational Purposes Only	4
800-BBQV	Informational Purposes Only	4
800-BBQV	Informational Purposes Only	4
590-TFHE	2x25GbE (SFP28) Back-end W/O OPTICS	4
590-TFBK	2x25GbE (SFP28) W/O OPTICS	4
149-BBGK	OneFS Base License A3 2-8TB Tier 3 L3=ID	4
149-BBGX	OneFS Encyrption Key A3 2-8TB Tier 3 L3=ID	4
151-BBHJ	SnapShotIQ Base License Bundle A3 Tier 3 L3 =ID	4
151-BBIJ	Basic Bundle A3 Tier 3 L3 =ID	4
151-BBJE	SmartConnect Base License Bundle A3 Tier 3 L3 =ID	4
151-BBJB	SmartDedupe Base License A3 Tier 3 L3 =ID	4
151-BBGU	SynclQ Base License A3 Tier 3 L3 =ID	4
151-BBEH	HDFS for OneFS (\$0.00)	4
379-BDPD	ISG Product (info)	4
876-9295	Dell Hardware Limited Warranty	4
876-9515	ProSupport Mission Critical 4-Hour 7x24 Onsite Service with Emergency Dispatch 3 Years	4
876-9593	ProSupport Mission Critical 7x24 Technical Support and Assistance 3 Years	4
989-3439	Thank you choosing Dell ProSupport. For tech support, visit //www.dell.com/support or call 1-800- 945-3355	4
854-7118	3 Years ProSupport OneFS Enc-Key Mgt Base 2-8TB Software Support-Maint	4
854-7233	3 Years ProSupport Basic Bundle Base Software Support-Maint	4
854-6384	3 Years ProSupport SmartDedupe Base Software Support-Maint	4
854-7426	3 Years ProSupport SyncIQ Base Software Support-Maint	4
849-5190	3 Years ProSupport HDFS for OneFS Software Support-Maint	4
825-6815	None	4
825-6815	None	4
825-6815	None	4
812-4005	ProDeploy Plus No Charge Training 300	4
829-3033	ProDeploy Plus for PowerScale Node	4
407-BCIU	Transceivers/Optic/SFP+/SR/10GbE/2 GEN6	4
407-BCLU	Transceiver/Optic/SFP28/SR/25Gbe/Qty 2	4
149-BBGI	OneFS Capacity A3 Tier 3 L3=CB	240
151-BBIE	Basic Bundle Capacity A3 Tier 3 L3 =CB	240
151-BBIY	SnapShotIQ Capacity License Bundle A3 Tier 3 L3 =CB	240
151-BBJP	SmartConnect Capacity License Bundle A3 Tier 3 L3 =CB	240
151-BBJF	SmartDedupe Capacity License A3 Tier 3 L3=CB	240
151-BBHY	SynclQ Capacity License A3 Tier 3 L3=CB	240
854-6079	3 Years ProSupport OneFS Capacity Software Support-Maint	240



854-6118	3 Years ProSupport Basic Bundle Capacity Software Support-Maint	240
854-6320	3 Years ProSupport SmartDedupe Capacity Software Support-Maint	240
854-7564	3 Years ProSupport SynclQ Capacity Software Support-Maint	240
854-3369	ProSupport Mission Critical 4-Hour 7x24 Onsite Capacity Addon 3 Years	240
825-6815	None	4
825-6815	None	4
PowerScale Chassis		
210-BBFS	Base Chassis - Normal A-Series	1
800-BBQV	Informational Purposes Only	1
379-BDPD	ISG Product (info)	1
876-8976	Dell Hardware Limited Warranty	1
876-8980	ProSupport Mission Critical 4-Hour 7x24 Onsite Service with Emergency Dispatch 3 Years	1
876-8983	ProSupport Mission Critical 7x24 Technical Support and Assistance 3 Years	1
989-3439	Thank you choosing Dell ProSupport. For tech support, visit //www.dell.com/support or call 1-800- 945-3355	1
Backend Network		
Switches 210-AWOS	S4112F Dell Networking Switch	2
343-BBQL	S4112 Series User Guide	2
750-ACVX	S4112F Install Kit	2
750-ACVY	DELL Switch, Dual Tray Kit for S4112F, 1U	2
750-ACWB	EMC GEN3 Switch Rail 22-31in Offset Kit, S4112F	2
528-CKSS	OS10 Enterprise Software, S4112F	2
877-7460	ProSupport Mission Critical 7x24 HW-SW Tech Support and Assistance 3 Years	2
877-7690	Dell Hardware Limited Warranty	2
877-7691	ProSupport Mission Critical 4-Hour 7x24 Onsite Service with Emergency Dispatch 3 Years	2
989-3439	Thank you choosing Dell ProSupport. For tech support, visit //www.dell.com/support or call 1-800- 945-3355	2
Isilon Rack		
210-AUVL	RACK ASSY TITAN-D 40U SINGLE PHASE	1
800-BBQV	Informational Purposes Only	1
450-AJHQ	PWCRD,6, SINGLE PHASE G2/3 15F L6-30P/NORTH AMER	1
877-8736	Basic Hardware Services Business Hours 5x10 Next Business Day Parts Delivery 3 Years	1
877-8737	Dell Hardware Limited Warranty	1
800-BBQV	Informational Purposes Only	1
379-BDPD	ISG Product (info)	1
Isilon Accessories		
210-AXGY	Accessories Label BASE	1
800-BBQV	Informational Purposes Only	1
800-BBQV	Informational Purposes Only	1
800-BBQV	Informational Purposes Only	1
379-BDPD	ISG Product (info)	1
929-3709	Thank you for Your Order	1



935-6720	Thank you for Your Order	1
450-AJHP	PWCRD KIT for Normal Chassis	2
470-AFFZ	100G to 25G Breakout (4)SFP28 to (1)Q28 DAC 3M	2
Storage Unstructured Services		
210-AYWM	PowerScale Services	1
929-3709	Thank you for Your Order	1
935-6720	Thank you for Your Order	1
829-3028	ProDeploy Plus Add-On for PowerScale Advanced Bundle	1
823-9285	ProDeploy Additional Deployment Time:8 Hour Onsite Storage Technical Resource	2



# Secondary Site:

PowerScale A300		
210-AZWL	A300 - L3 - SED 60TB (15x4TB)/800GB SSD	4
800-BBQV	Informational Purposes Only	4
800-BBQV	Informational Purposes Only	4
800-BBQV	Informational Purposes Only	4
590-TFHE	2x25GbE (SFP28) Back-end W/O OPTICS	4
590-TFBK	2x25GbE (SFP28) W/O OPTICS	4
149-BBGK	OneFS Base License A3 2-8TB Tier 3 L3=ID	4
149-BBGX	OneFS Encyrption Key A3 2-8TB Tier 3 L3=ID	4
151-BBHJ	SnapShotIQ Base License Bundle A3 Tier 3 L3 =ID	4
151-BBIJ	Basic Bundle A3 Tier 3 L3 =ID	4
151-BBJE	SmartConnect Base License Bundle A3 Tier 3 L3 =ID	4
151-BBJB	SmartDedupe Base License A3 Tier 3 L3 =ID	4
151-BBGU	SynclQ Base License A3 Tier 3 L3 =ID	4
151-BBEH	HDFS for OneFS (\$0.00)	4
379-BDPD	ISG Product (info)	4
876-9295	Dell Hardware Limited Warranty	4
876-9515	ProSupport Mission Critical 4-Hour 7x24 Onsite Service with Emergency Dispatch 3 Years	4
876-9593	ProSupport Mission Critical 7x24 Technical Support and Assistance 3 Years	4
989-3439	Thank you choosing Dell ProSupport. For tech support, visit //www.dell.com/support or call 1-800- 945-3355	4
854-7118	3 Years ProSupport OneFS Enc-Key Mgt Base 2-8TB Software Support-Maint	4
854-7233	3 Years ProSupport Basic Bundle Base Software Support-Maint	4
854-6384	3 Years ProSupport SmartDedupe Base Software Support-Maint	4
854-7426	3 Years ProSupport SynclQ Base Software Support-Maint	4
849-5190	3 Years ProSupport HDFS for OneFS Software Support-Maint	4
825-6815	None	4
825-6815	None	4
825-6815	None	4
812-4005	ProDeploy Plus No Charge Training 300	4
829-3033	ProDeploy Plus for PowerScale Node	4
407-BCIU	Transceivers/Optic/SFP+/SR/10GbE/2 GEN6	4
407-BCLU	Transceiver/Optic/SFP28/SR/25Gbe/Qty 2	4
149-BBGI	OneFS Capacity A3 Tier 3 L3=CB	240
151-BBIE	Basic Bundle Capacity A3 Tier 3 L3 =CB	240
151-BBIY	SnapShotIQ Capacity License Bundle A3 Tier 3 L3 =CB	240
151-BBJP	SmartConnect Capacity License Bundle A3 Tier 3 L3 =CB	240
151-BBJF	SmartDedupe Capacity License A3 Tier 3 L3=CB	240
151-BBHY	SynclQ Capacity License A3 Tier 3 L3=CB	240
854-6079	3 Years ProSupport OneFS Capacity Software Support-Maint	240



854-6118	3 Years ProSupport Basic Bundle Capacity Software Support-Maint	240
854-6320	3 Years ProSupport SmartDedupe Capacity Software Support-Maint	240
854-7564	3 Years ProSupport SynclQ Capacity Software Support-Maint	240
854-3369	ProSupport Mission Critical 4-Hour 7x24 Onsite Capacity Addon 3 Years	240
825-6815	None	4
825-6815	None	4
PowerScale Chassis		
210-BBFS	Base Chassis - Normal A-Series	1
800-BBQV	Informational Purposes Only	1
379-BDPD	ISG Product (info)	1
876-8976	Dell Hardware Limited Warranty	1
876-8980	ProSupport Mission Critical 4-Hour 7x24 Onsite Service with Emergency Dispatch 3 Years	1
876-8983	ProSupport Mission Critical 7x24 Technical Support and Assistance 3 Years	1
989-3439	Thank you choosing Dell ProSupport. For tech support, visit //www.dell.com/support or call 1-800- 945-3355	1
Backend		
Network Switches		
210-AWOS	S4112F Dell Networking Switch	2
343-BBQL	S4112 Series User Guide	2
750-ACVX	S4112 School Salt Suide S4112F Install Kit	2
750-ACVY	DELL Switch, Dual Tray Kit for S4112F, 1U	2
750-ACWB	EMC GEN3 Switch Rail 22-31in Offset Kit, S4112F	2
528-CKSS		2
877-7460	OS10 Enterprise Software, S4112F ProSupport Mission Critical 7x24 HW-SW Tech Support and Assistance 3 Years	2
877-7690		
877-7691	Dell Hardware Limited Warranty ProSupport Mission Critical 4-Hour 7x24 Onsite Service with Emergency Dispatch 3	2
011-1001	Years	2
989-3439	Thank you choosing Dell ProSupport. For tech support, visit //www.dell.com/support or call 1-800- 945-3355	2
Isilon Rack		
210-AUVL	RACK ASSY TITAN-D 40U SINGLE PHASE	1
800-BBQV	Informational Purposes Only	1
450-AJHQ	PWCRD,6, SINGLE PHASE G2/3 15F L6-30P/NORTH AMER	1
877-8736	Basic Hardware Services Business Hours 5x10 Next Business Day Parts Delivery 3 Years	1
877-8737	Dell Hardware Limited Warranty	1
800-BBQV	Informational Purposes Only	1
379-BDPD	ISG Product (info)	1
Isilon Accessories		
210-AXGY	Accessories Label BASE	1
800-BBQV	Informational Purposes Only	1
800-BBQV	Informational Purposes Only	1
800-BBQV	Informational Purposes Only	1
379-BDPD	ISG Product (info)	1
929-3709	Thank you for Your Order	1



935-6720	Thank you for Your Order	1
450-AJHP	PWCRD KIT for Normal Chassis	2
470-AFFZ	100G to 25G Breakout (4)SFP28 to (1)Q28 DAC 3M	2
Storage Unstructured Services		
210-AYWM	PowerScale Services	1
929-3709	Thank you for Your Order	1
935-6720	Thank you for Your Order	1
829-3028	ProDeploy Plus Add-On for PowerScale Advanced Bundle	1
823-9285	ProDeploy Additional Deployment Time:8 Hour Onsite Storage Technical Resource	2



Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

# State of West Virginia Centralized Request for Quote

Proc Folder:	1302684		Reason for Modification:
Doc Description:	NetApp Backup Storage Ta	To attach Addendum 01.	
8			
Proc Type:	Central Purchase Order		
Date Issued	Solicitation Closes	Solicitation No	Version
2023-10-25	2023-11-01 13:30	CRFQ 0947 ERP2400000001	2

<b>BID RECEIVING L</b>	OCATIO	ON			
BID CLERK					
DEPARTMENT OF	ADMIN	IISTRATION			
PURCHASING DIV	ISION				
2019 WASHINGTO	N ST E				
CHARLESTON	WV	25305			
US					

VENDOR			
Vendor Custome	er Code: VS0000043442		
Vendor Name :	Avalon Technologies	, Inc.	
Address :	39533 Woodward Ave	. #125	
Street :			
City :	Bloomfield Hills		
State :	Michigan	Country : USA	<b>Zip</b> : 48301
Principal Contac	ct : Rob Rulison		
	Phone: 248-896-1605	Extension:	
FOR INFORMAT Larry D McDonne 304-558-2063 larry.d.mcdonnell			
	+700/		
Vendor Signature X	1°C	FEIN# 020746597	DATE 10/30/23
/	t to all terms and condition	s contained in this solicitation	

All others

1

# ADDITIONAL INFORMATION

Addendum 01 is issued for the following: 1. To attach vendor questions and response and clarification.

2. To attach revised Section 8, Insurance with automobile liability insurance listed.

Bid opening remains November 01, 2023 at 1:30PM Eastern Time

#### No other changes

INVOIC	ETO	SHIP TO			
PLANNI	PRISE RESOURCE NG BOARD JLLITT STREET	ENTERP PLANNIN 837 CHE			
SUITE 4 CHARLI US		MORGAI US	NTOWN	WV	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	NetApp FAS2820 HA System, or equal	2.00000	EA		

Model #	Specification	Manufacturer	Comm Code
			43222600
			43222600

#### **Extended Description:**

NetApp FAS2820 HA System (Item Number: FAS2820A-001), or equal.

INVOICE	ТО	SHIP TO			
PLANNIN	RISE RESOURCE NG BOARD LLITT STREET	PLANNING	SE RESOURCE BOARD NUT RIDGE RO,	AD	
SUITE 40 CHARLE US		MORGANT( US	OWN	WV	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	SW, ONTAP Base Package, Per-0.1TB, or equal	1920.00000	EA		
Comm C	Code Manufacturer	Specificatio	n	Model #	
4322260	0				

#### **Extended Description:**

SW, ONTAP Base Package, Per-0.1TB (Item Number SW-ONTAPB-NLSAS-F01-C), or equal.

INVOICE TO		SHIP TO			
ENTERPRISE RESOURCE PLANNING BOARD		ENTERPRISE RESOURCE PLANNING BOARD			
1007 BULLITT STREET		837 CHESTN	JT RIDGE ROAD	)	
SUITE 400					
CHARLESTON	WV	MORGANTO	VN	WV	
US		US			
Line Comm Ln Desc		Qty	Unit Issue	Unit Price	Total Price
	x16TB, 7.2K, -C, or equal	1.00000	EA		
Comm Code	Manufacturer	Specification		Model #	
43222600					
Extended Description: NetApp FAS2820, 12x16TB, 7.2k	<, -C (Item Number: FAS28	20-104-C), or equal.			
INVOICE TO		SHIP TO			
ENTERPRISE RESOURCE		ENTERPRISE RESOURCE PLANNING BOARD			
1007 BULLITT STREET		837 CHESTN	UT RIDGE ROAI	C	
SUITE 400					
Terraria M	WV	MORGANTO	NN	WV	
US		US			
Line Comm Ln Desc		Qty	Unit Issue	Unit Price	Total Price
	FAS2820, -C, or equal	1.00000	EA		

Comm Code	Manufacturer	Specification	Model #	
43222600				

NetApp Documents, FAS2820, -C (Item Number: DOC-2820-C), or equal.

INVOICE TO		SHIP TO				
ENTERPRISE RESOURCE PLANNING BOARD		ENTERPRISE RESOURCE PLANNING BOARD				
1007 BUL	LITT STREET		837 CHEST	NUT RIDGE RO	AD	
SUITE 40 CHARLES US		WV	MORGANTC US	OWN	WV	
Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Total Price
5		Rest Encryption Capable OS,	2.00000	EA		
Comm Co	ode	Manufacturer	Specification	1	Model #	
43222600						
	Descriptions					

NetApp Data at Rest Encryption Capable Operating System (Item Number: DATA-AT-REST-ENCRYPTION), or equal.

INVOIC	ETO	SHIP TO			
	PRISE RESOURCE NG BOARD	ENTERPRISE RESOURCE PLANNING BOARD			
1007 BL	JLLITT STREET	837 CHESTNUT RIDGE ROAD			
SUITE 4 CHARLI US		MORGANTO\ US	WN	WV	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
6	NetApp PS Deployment, Standard, FAS, Low, or equal	1.00000	EA		
Comm	Code Manufacturer	Specification		Model #	

Comm Code	Manufacturer	Specification	Model #	
43222600				

# Extended Description:

NetApp PS Deployment, Standard, FAS, Low (Item Number: PS-DEPLOY-STAND-FAS-L), or equal.

INVOICE TO			SHIP TO				
ENTERPRISE RESOURCE PLANNING BOARD			ENTERPRISE RESOURCE PLANNING BOARD				
	JLLITT STREET	837 CHE	STNUT RIDGE RO	AD			
SUITE 400 CHARLESTON WV US		MORGANTOWN US		WV			
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	<b>Total Price</b>		
7	NetApp Four Hour Parts Delivery and Replacement, or equal	1.00000	EA				
Comm	Code Manufacturer	Specification		Model #			
432226	00						
Extendo NetApp	ed Description: Four Hour Parts Delivery and Replacement (Ite	em Number: CS-4HR	-REPLACEMENT),	or equal.			
INVOICE TO		SHIP TO					
ENTERPRISE RESOURCE PLANNING BOARD		PLANNIN	RISE RESOURCE				
1007 B		837 CHESTNUT RIDGE ROAD					

MORGANTOWN

Specification

Unit Issue

EA

US

Qty

1.00000

Comm	Code
432226	00

SUITE 400

US

Line

8

CHARLESTON

#### **Extended Description:**

equal

1007 BULLITT STREET

Comm Ln Desc

NetApp Advisor Plus for Single Controller (Item Number: CS-ADVISOR-PLUS2), or equal.

WV

NetApp Advisor Plus for Single Controller, or

Manufacturer

WV

**Unit Price** 

Model #

**Total Price** 

INVOICE TO	SHIP TO			
ENTERPRISE RESOURCE PLANNING BOARD 1007 BULLITT STREET	PLANNIN	RISE RESOURCE NG BOARD STNUT RIDGE ROA	٩D	
SUITE 400		×		
CHARLESTON WV	MORGAN	NTOWN	WV	
US	US			
Line Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
9 NetApp SupportEdge Advisor, or equal	1.00000	EA		
Comm Code Manufacturer	Specification		Model #	
43222600				
Extended Description: NetApp SupportEdge Advisor (Item Number: CS-G1-SE-/	ADVISOR), or equ	al.		
	SHIP TO		A states	
ENTERPRISE RESOURCE PLANNING BOARD 1007 BULLITT STREET	ENTERPRISE RESOURCE PLANNING BOARD 837 CHESTNUT RIDGE ROAD		AD	
SUITE 400				
CHARLESTON WV	MORGA	NTOWN	WV	
US	US			
Line Comm Ln Desc	Qty	Unit Issue	Unit Price	<b>Total Price</b>

0	SFP+ Optical 10Gb Shortwave, -C, or equal	8.00000	EA

Comm Code	Manufacturer	Specification	Model #	
43222600				

SFP+ Optical 10Gb Shortwave, -C (Item Number: X6589-N-C), or equal.

NVOICE TO			SHIP TO				
ENTERPRISE RESOURCE PLANNING BOARD			ENTERPRISE RESOURCE PLANNING BOARD				
LLITT STREET		1007 BL	JLLITT STREET				
00		SUITE 4	00				
STON	WV	CHARLE	ESTON	WV			
		US					
Comm Ln Desc		Qty	Unit Issue	Unit Price	<b>Total Price</b>		
Cable, 25GbE, S equal	FP28-SFP28, Cu, 0.5m, -C, or	2.00000	EA				
Comm Code Manufacturer		Specifica	ation	Model #			
0							
d Description:	28 Cu 0.5m -C (Item Number:	X66240A-05-N	I-C), or equal.				
	RISE RESOURCE NG BOARD LLITT STREET 00 SSTON Comm Ln Desc Cable, 25GbE, S equal Code 0 d Description:	RISE RESOURCE NG BOARD LLITT STREET 00 SSTON WV Comm Ln Desc Cable, 25GbE, SFP28-SFP28, Cu, 0.5m, -C, or equal Code Manufacturer 0 d Description:	RISE RESOURCE ENTERING BOARD PLANNI LLITT STREET 1007 BL 200 SUITE 4 STON WV CHARLE US Comm Ln Desc Qty Cable, 25GbE, SFP28-SFP28, Cu, 0.5m, -C, or 2.00000 equal Code Manufacturer Specification 0 d Description:	RISE RESOURCE       ENTERPRISE RESOURCE         NG BOARD       PLANNING BOARD         LLITT STREET       1007 BULLITT STREET         00       SUITE 400         CHARLESTON       US         Comm Ln Desc       Qty       Unit Issue         Cable, 25GbE, SFP28-SFP28, Cu, 0.5m, -C, or       2.00000       EA         code       Manufacturer       Specification         0       0       Image: Commit Co	RISE RESOURCE ENTERPRISE RESOURCE PLANNING BOARD PLANNING BOARD LLITT STREET 1007 BULLITT STREET 500 CHARLESTON WV CHARLESTON WV US US UITE 400 Comm Ln Desc Qty Unit Issue Unit Price Cable, 25GbE, SFP28-SFP28, Cu, 0.5m, -C, or 2.00000 EA equal Code Manufacturer Specification Model #		

INVOICE TO		SHIP TO				
	PRISE RESOURCE	ENTERPRISE RESOURCE PLANNING BOARD				
1007 BU	LLITT STREET	1007 BULLITT STREET				
SUITE 400 CHARLESTON WV		SUITE 400 CHARLESTON				
				WV		
US		US				
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	<b>Total Price</b>	
12	Cable, LC-LC, OM4, 5m, -C, or equal	8.00000	EA			

Comm Code	Manufacturer	Specification	Model #	
32131001				
New York Concerns of				

Extended Description: Cable, LC-LC, OM4, 5m, -C (Item Number: X66250-5-N-C), or equal.

INVOICE TO			SHIP TO			
ENTERPRISE RESOURCE PLANNING BOARD			ENTERPRISE RESOURCE PLANNING BOARD			
1007 BULLITT STREET			1007 BULLIT	T STREET		
SUITE 40	0		SUITE 400			
CHARLES	STON	WV	CHARLESTON		WV	
US			US			
Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Total Price
13	Rail Kit, Thin, Rou 24-32, or eq	ind/Square-Hole, 4-Post, Adj,	1.00000	EA		
Comm Code Manufacturer		Manufacturer	Specification		Model #	
32131001						
Extended	Description:			X 00057 00 N		

NetApp Rail Kit, Thin, Round/Square-Hole, 4-Post, Adj, 24-32, -C (Item Number X-02657-00-N-C), or equal.

INVOICE	ΤΟ	SHIP TO				
	RISE RESOURCE IG BOARD	ENTERPRISE RESOURCE PLANNING BOARD				
	LITT STREET	1007 BULLITT STREET				
SUITE 400 CHARLESTON WV		SUITE 400 CHARLESTON				
				WV		
US		US				
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	<b>Total Price</b>	
14	NetApp MEZZANINE, 4x25 GbE with I/O Plate, -C, or equal	2.00000	EA			
Comm C	Comm Code Manufacturer		ion	Model #		

43222600

# Extended Description:

NetApp MEZZANINE, 4x25 GbE with I/O Plate, -C (Item Number: X1166A-C), or equal.

INVOICE TO			SHIP TO			
ENTERPRISE RESOURCE PLANNING BOARD			ENTERPRISE RESOURCE PLANNING BOARD			
1007 BULLITT STREET		1007 BULLITT STREET				
SUITE 40	0		SUITE 400			
CHARLES	STON	WV	CHARLESTON		WV	
US			US			
Line	Comm Ln Desc		Qty	Unit Issue	Unit Price	Total Price
15	NetApp Jumper Cro equal	dIn-Cab48-INC13-C14-C, or	2.00000	EA		
Comm Code Manufacturer		Manufacturer	Specification		Model #	
43222600						

NetApp Jumper CrdIn-Cab48-INC13-C14-C (Item Number: X1558A-R6-C), or equal.

SCHEDULE OF EVENTS						
<u>Line</u>	Event	<u>Event Date</u>				
1	Technical Questions Due at 2:00PM EST	2023-10-23				

	Document Phase	Document Description	Page 10
ERP240000001	Final	NetApp Backup Storage Target	

# ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

# SOLICITATION NUMBER: CRFQ ERP240000001 Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

#### **Applicable Addendum Category:**

- [ ] Modify bid opening date and time
- [ | Modify specifications of product or service being sought
- $[\checkmark]$  Attachment of vendor questions and responses
- [ | Attachment of pre-bid sign-in sheet
- [ | Correction of error
- [√] Other

#### **Description of Modification to Solicitation:**

- 1. To attach vendor questions and response and clarification.
- 2. To attach revised Section 8, Insurance with automobile liability insurance listed.

Bid opening remains November 01, 2023 at 1:30PM Eastern Time

No other changes

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

#### **Terms and Conditions:**

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

# ATTACHMENT A

#### CRFQ ERP240000001 - Addendum No. 1

#### Answers to Vendor Questions

## Vendor Questions:

1) What type of vendor (manf) software backup will be used with this appliance?

Answer: We are using Oracle RMAN and Linux copies, no external software is planned.

2) What term and type are required on the backup appliance? Ie. 3yr 24x7 4hr, NBD (next bus day), etc.?

Answer: This is not relevant to the bid request.

- 3) Submit a question about their security needs for their backup target.
  - a. How important is immutability on your backup target?

Answer: This is not relevant to the bid request.

b. How important is controlled access to the backup target?

Answer: This is not relevant to the bid request.

c. Do you have any regulatory compliances that need to be met?

#### Answer: No.

4) Which backup application ISV is in use?

Answer: This is not relevant to the bid request.

5) How much future growth was planned in the Netapp solution?

Answer: This is not relevant to the bid request.

6) Is there a secondary storage backup of this backup target?

Answer: This is not relevant to the bid request.

7) How are backup copies implemented? Are they stored on tape or cloud?

Answer: This is not relevant to the bid request.

8) Do you require assistance on the integration of this backup target into your backup environment?

Answer: Yes. The winning vendor shall furnish all materials, labor, equipment, and software licenses necessary to complete all services and installation as per the specification's requirements.

Please note that automobile liability insurance will be required.

9) What is the maximum throughput requirement for the backup target to handle?

Answer: This is not relevant to the bid request.

10) Do you require DMR support on the backup target drives?

Answer: This is not relevant to the bid request.

11) On a Disaster Recovery, what is your RPO? Have you tested and can meet that RPO now?

Answer: This is not relevant to the bid request.

### **CLARIFICATION:**

Modifications to the Terms and Conditions:

Per the answer to question 8, the Purchasing Division is revising the Terms and Conditions, Section 8, Insurance; vendors will need include automobile liability insurance in the amount of \$1,000,000.00 on their certificate of insurance.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

Commercial General Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Automobile Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Professional/Malpractice/Errors and Omission Insurance in at least an amount of: per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

Cyber Liability Insurance in an amount of: \$2,000,000.00 per occurrence.

**Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

**Pollution Insurance** in an amount of: \_\_\_\_\_\_ per occurrence.

Aircraft Liability in an amount of: \_\_\_\_\_\_ per occurrence.

П

Revised 8/24/2023

#### ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFQ ERP24\*01

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

#### Addendum Numbers Received:

(Check the box next to each addendum received)

[ >	( ]	Addendum No. 1	[	]	Addendum No. 6
[	]	Addendum No. 2	[	]	Addendum No. 7
[	]	Addendum No. 3	[	]	Addendum No. 8
[	]	Addendum No. 4	[	]	Addendum No. 9
]	]	Addendum No. 5	[	]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Avalon Techr	nologies, Inc.	
Z	Company	P-
	Authorized Signature	
10/30/23		
	Date	

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

# **Dell PowerScale Archive**

# The PowerScale Archive nodes provide the lowest cost approach to support both active and cold archives.

The PowerScale family comprises of PowerScale and Isilon scale-out file storage platforms configured with the PowerScale OneFS operating system. PowerScale OneFS provides the intelligence behind the highly scalable, high–performance modular storage solution that can grow with your business. A OneFS powered cluster can be built with a flexible choice of storage platforms including all-flash, hybrid and archive nodes. These solutions provide the performance, choice, efficiency, flexibility, scalability, security, and protection for you to store massive amounts of unstructured data within a cluster.

PowerScale archive platforms use a modular architecture while dramatically reducing cost and complexity by utilizing a dense hardware design that provides four nodes within a single 4U chassis. The PowerScale all-flash and hybrid platforms can co-exist seamlessly in the same cluster with your existing PowerScale or Isilon nodes to drive your traditional and modern applications.

The PowerScale and Isilon archive nodes include:

## PowerScale A300 and A3000

**PowerScale A300** is an ideal active archive storage solution that combines high performance, near-primary accessibility, value, and ease of use. The A300 provides between 120 TB to 1.2 PB per chassis and scales to 75 PB in a single cluster. The A300 includes inline compression and deduplication capabilities.

**PowerScale A3000** delivers a solution for high performance, high density, deep archive storage that safeguards data efficiently for long-term retention. The A3000 stores up to 1.6 PB per chassis and scales to 100 PB in a single cluster. The A3000 includes inline compression and deduplication capabilities.



# PowerScale A300 Archive Specifications

A300 ATTRIBUTES & OPTIONS	2 TB HDD	4 TB HDD	8 TB HDD	12 TB HDD	16 TB HDD	20 TB HDD
Chassis capacity	120 TB	240 TB	480 TB	720 TB	960 TB	1.2 PB
HDD drives (3.5") per chassis	60					
Self-encrypting drive (SED HDD) FIPS 140-2 compliant option	Yes, except 20 TB drives					
Operating system	OneFS 9.2.1 or later					
Number of nodes per chassis	4					
ECC memory (per node)	96 GB					
Cache (per node) solid state drives (800GB, 1.6TB, 3.2TB, 7.68 TB)	1 or 2 Capacity and number of SSDs determined by HDD size and count2					

A300 ATTRIBUTES & OPTIONS	2 TB HDD	4 TB HDD	8 TB HDD	12 TB HDD	16 TB HDD	20 TB HDD
Front-end networking (per node)	2 x 100 GbE (QSFP28) or 2 x 25GbE (SFP28)					
Infrastructure networking (per node)	2 InfiniBand connections with QDR links or 2 X 100 GbE (QSFP28) or 2 X 25GbE (SFP28)					
Max Power Consumption @ 200~240v (per chassis)1	1070 Watts (@25°C)					
Typical thermal rating	3651 BTU/hr					

<sup>1</sup>Values at <25° C are reflective of more steady state maximum values during normal operation <sup>2</sup>Some versions of A300 default with just one 800GB and will only support L3 cache configuration

# PowerScale A3000 Archive Specifications

A3000 ATTRIBUTES & OPTIONS	12 TB HDD	16 TB HDD	20 TB HDD			
Chassis capacity	960	1.28 PB	1.6 PB			
HDD drives (3.5") per chassis		80				
Self-encrypting drive (SED HDD) FIPS 140-2 compliant option		Yes, except 20 TB drives				
Operating system		OneFS 9.2.1 or later				
Number of nodes per chassis	4					
ECC memory (per node)	96 GB					
Cache (per node) solid state drives (800GB2, 3.2TB, 7.68 TB)	1 or 2 Capacity and number of SSDs determined by HDD size and count3					
Front-end networking (per node)	2 x 100 C	GbE (QSFP28) or 2 x 25GbE (S	SFP28)			
Infrastructure networking (per node)	2 InfiniBand connections with QDR links or 2 X 100 GbE (QSFP28) or 2 X 25GbE (SFP28)					
Max Power Consumption @ 200~240v (per chassis)1	1230 Watts (@25°C)					
Typical thermal rating	4197 BTU/hr					

1 Values at <25° C are reflective of more steady state maximum values during normal operation

2 Some versions of A3000 default with just one 800GB and will only support L3 cache configuration

3 20TB drive version of A3000 default with one 7.68TB cache drive while 12 and 16TB drive versions default with two 3.2TB Cache drives

CLUSTER ATTRIBUTES	A300		A3000
Number of chassis		1 to 63	
Number of nodes		4 to 252	
Cluster capacity	120 TB to 75 PB		960 TB to 100 PB
Rack units		4 to 252	

# PowerScale Attributes

PRODUCT ATTRIBUTES	
Scale-out architecture	Distributed fully symmetric clustered architecture that combines modular storage with OneFS operating system in a single volume, single namespace, and single filesystem
Modular design	Four self-contained Isilon or PowerScale nodes include server, software, HDDs and SSDs in a 4U rack- mountable chassis. All nodes can be integrated into existing PowerScale and Isilon clusters with backend Ethernet or InfiniBand connectivity
Scalability	A cluster can scale up to 252 nodes. A minimum number of all-flash nodes per cluster is three for PowerScale and four for Isilon. Add nodes to scale performance and capacity. A single cluster can deliver up to 186PB raw capacity
High availability	No-single-point-of-failure. Self-healing design protects against disk or node failure; includes back-end intra-cluster failover
Operating system	PowerScale OneFS distributed file system creates a cluster with a single file system and single global namespace. It is fully journaled, fully distributed, and has a globally coherent write/read cache
Data protection	FlexProtect file-level striping with support for N+1 through N+4 and mirroring data protection schemes
2-way NDMP	Supports two ports of Fibre Channel (8G) that allows for two-way NDMP connections and two ports of standard 10GbE connectivity
Data retention	SmartLock policy-based retention and protection against accidental deletion
Security	File system audit capability and STIG hardening to improve security and control of your storage infrastructure and address regulatory compliance requirements
Efficiency	SmartDedupe data deduplication option, which can reduce storage requirements. Inline data reduction and compression available on F200, F600, F900, F810, , H700, H7000, A300, and A3000 nodes
Automated storage tiering	Policy-based automated tiering options including SmartPools and CloudPools software to optimize storage resources and lower costs
Network protocol support	NFSv3, NFSv4, NFS Kerberized sessions (UDP or TCP), SMB1 (CIFS), SMB2, SMB3, SMB3-CA, Multichannel, HTTP, FTP, NDMP, SNMP, LDAP, HDFS, S3, ADS, NIS reads/writes

Data replication

SynclQ fast and flexible one-to-many file-based asynchronous replication between clusters. SmartSync provides efficient file to file and file to object data movement

#### **ENVIRONMENTAL SPECIFICATIONS – POWER**

Power factor is a measure of how effectively you are using electricity. The power factor of an AC electrical power system is defined as the ratio of the real power absorbed by the load to the apparent power flowing in the circuit and is a dimensionless number in the closed interval of -1 to 1. A power factor of less than one indicates the voltage and current are not in phase, reducing the instantaneous product of the two.

For max power consumption information during unexpected environmental conditions, please refer to the "Site Preparation and Planning Guide".

A300 and A3000: Dual-redundant, hot-swappable 1050W (low line) 1100W (high line) power supplies with power factor correction (PFC); rated for input voltages 90 - 130 VAC (low line) and 180-264 VAC (high line)

Power factor and efficiency	rate for, A300 and A3000
-----------------------------	--------------------------

System Load	Efficiency	PF
10%	86.00%	0.918
20%	92.95%	0.967
30%	93.93%	0.970
40%	94.41%	0.972
50%	94.49%	0.981
60%	94.11%	0.986
70%	94.04%	0.990
80%	93.86%	0.992
90%	93.63%	0.995
100%	93.25	0.996

CFM – Volume of airflow; cubic feet/minute

A3000: each Node 60CFM, total chassis 240CFM (max.)

A300: each Node 70CFM, total chassis 280CFM (max)

#### **OPERATING ENVIRONMENT**

#### Compliant with ASHRAE A3 data center environment guidelines

#### DIMENSIONS / WEIGHT:

A300:

- Height: 7" (17.8 cm); Width: 17.6" (44.8 cm);
- Depth: (front NEMA rail to rear 2.5" SSD cover ejector): 35.8" (91.0 cm);
- Depth: (front of bezel to rear 2.5" SSD cover ejector): 37.6" (95.5 cm);

A3000:

- Height: 7" (17.8 cm); Width: 17.6" (44.8 cm);
- Depth: (front NEMA rail to rear 2.5" SSD cover ejector): 40.4" (102.6 cm);
- Depth: (front of bezel to rear 2.5" SSD cover ejector): 42.2" (107.1 cm);

The following max weights per Chassis/node:

- A300: 252.2 lbs (114.4 kg)
- A3000: 303 lbs. (137.4 kg)

MINIMUM SERVICE CLEARANCES

Front: 40" (88.9 cm), rear: 42" (106.7 cm)

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# Safety and EMI Compliance

#### **Statement of Compliance**

This Information Technology Equipment is compliant with the electromagnetic compatibility and product safety regulations/standards required by the countries in which the product is sold. Compliance is based on FCC part 15, CISPR22/CISPR24 and EN55022/EN55024 standards, including applicable international variations. Compliant Class A products are marketed for use in business, industrial, and commercial environments. Product Safety compliance is based on IEC 60950-1 and EN 60951-1 standards, including applicable national deviations.

This Information Technology Equipment is in compliance with EU RoHS Directive 2011/65/EU.

The individual devices used in this product are approved under a unique regulatory model identifier that is affixed to each individual device rating label, which may differ from any marketing or product family name in this datasheet.

PowerScale A3000 nodes are Energy Star compliant



For additional information see http://support.dell.com under the Safety & EMI Compliance Information tab.

### Take the next step

Contact your Dell sales representative or authorized reseller to learn more about how PowerScale scale-out NAS storage can benefit your organization.



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