



The following documentation is an electronically-submitted 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.

Header 1

List View

General Information [Contact](#) [Default Values](#) [Discount](#) [Document Information](#) [Clarification Request](#)

Procurement Folder: 2012537

Procurement Type: Central Purchase Order

Vendor ID:

Legal Name: CONVERGE TECHNOLOGY SOLUTIONS US LLC

Alias/DBA:

Total Bid: \$1,232,000.00

Response Date:

Response Time:

Responded By User ID:

First Name:

Last Name:

Email:

Phone:

SO Doc Code: CRFQ

SO Dept: 0947

SO Doc ID: ERP2700000001

Published Date: 7/17/26

Close Date: 8/4/26

Close Time: 13:30

Status: Closed

Solicitation Description:

Total of Header Attachments: 1

Total of All Attachments: 1



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: 2012537
Solicitation Description: Server Infrastructure Refresh 2026
Proc Type: Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2026-08-04 13:30	SR 0947 ESR08032600000000684	1

VENDOR
VS0000041625
CONVERGE TECHNOLOGY SOLUTIONS US LLC

Solicitation Number: CRFQ 0947 ERP2700000001
Total Bid: 1232000
Response Date: 2026-08-03
Response Time: 16:48:21
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	Infrastructure - See pricing page	1.00000	LS	1232000.000000	1232000.00

Comm Code	Manufacturer	Specification	Model #
43201802			

Commodity Line Comments:

Extended Description:

See attached documentation for further details.



Mr. Larry D. McDonnell
West Virginia Purchasing Division
2019 Washington Street East
Charleston, West Virginia 25305-0130

August 4, 2026

Subject: CRFQ 0947 ERP2700000001 due 8-4-2026

Dear Mr. McDonnell,

Please find attached the Peller/Converge response to CRFQ 0947 ERP2700000001 due August 4, 2026. Peller/Converge agrees with the requirements of the RFQ and is submitting our response accordingly. We were the successful vendor that implemented the original WV Oasis Production and DR FlexPod installation that included the current Cisco, NetApp and Palo Alto technologies

The RFQ states that all professional services personnel must have experience with projects of similar scope utilizing the hardware and software.

Peller/Converge will furnish **all** material, **labor**, equipment and software license necessary to complete all services per the requirements. All implementation services including migrations are included and will be provided with certified employees as was the original implementation.

Thank you for the opportunity to submit this response.

Sincerely,

A handwritten signature in black ink, appearing to read "CD AH", written over a horizontal line.

Charlie Arnett
Senior Client Executive
Converge Technology Solutions
A Peller Company

304 549-7698

Charlie.arnett@peller.com



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
Info Technology

Proc Folder: 2012537			Reason for Modification:
Doc Description: Server Infrastructure Refresh 2026			
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2026-07-17	2026-08-04 13:30	CRFQ 0947 ERP2700000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code:

Vendor Name : Converge Technology Solutions US, LLC

Address : 130 Technology Parkway, Peachtree Corners GA 30092

Street :

City :

State :

Country :

Zip :

Principal Contact : Charlie Arnett

Vendor Contact Phone: 304-549-7698

Extension:

FOR INFORMATION CONTACT THE BUYER

Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

Vendor
Signature X

Signed by:

Greg Berard

C84DEAE34D9A470...

FEIN# 82-378457

DATE 7/27/2026

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

ADDITIONAL INFORMATION

The State of West Virginia Purchasing Division, is soliciting bids for the agency, West Virginia Enterprise Resource Planning Board to establish a contract for the one-time purchase for the replacement of its current production and disaster recovery NetApp and FlexPod Infrastructure and services to assist with installation, migration, and configuration of the new hardware, per the attached documentation.

READ ALL TERMS AND CONDITIONS AND SPECIFICATIONS IN ITS ENTIREITY - SEE ATTACHED FILE NAMED: CRFQ ERP27*01 - SOLICITATION DOCUMENTATION

****Questions regarding the solicitation must be submitted in writing to Larry.D.McDonnell@wv.gov prior to the question period deadline listed in the attached documentation****

INVOICE TO**SHIP TO**

ENTERPRISE RESOURCE
PLANNING BOARD
1007 BULLITT STREET
SUITE 400
CHARLESTON
US

WV

ENTERPRISE RESOURCE
PLANNING BOARD
1007 BULLITT STREET
SUITE 400
CHARLESTON
US

WV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Infrastructure - See pricing page	1.00000	LS	\$1,232,000	\$1,232,000

Comm Code**Manufacturer****Specification****Model #**

43201802

Extended Description:

See attached documentation for further details.

SCHEDULE OF EVENTS**Line****Event****Event Date**

EXHIBIT A - PRICING PAGE

Production and Disaster Recovery Infrastructure

CRFQ ERP27*01

Specification Section	Description	Model No/Brand Name	Quantity	Unit Price	Extended Amount
3.3.1 & 3.3.2	Storage Array Solution - Production Site	AFF-A30A-100C NetApp	1	694,000	\$ 694,000
3.3.3	Storage Array Solution - Disaster Recovery Site	FA550-100-C NetApp	1	306,000	\$ 306,000
3.3.4	Palo Alto Production Site with Implementation Services	PA-1420 Palo Alto	1	194,000	\$ 194,000
3.3.10	Implementation/Migration Services Phase One/Storage	NetApp	1	24,000	\$ 24,000
3.4	Knowledge Transfer & Training		1	14,000	\$ 14,000
	Failure to use this form may result in disqualification				
Total Bid Amount:				\$ 1,232,000	\$ 1,232,000

BOM Primary AFF-A30A-100C

Line	Item Number	Description	Qty Quoted
1	AFF-A30	Header Line	1
2	AFF-A30-001	AFF A30 HA System	2
3	AFF-A30A-100-C	AFF A30 HA System,-C	1
4	SW-ONTAPO-FLASH-A30-C	SW,ONTAP One Package,Per TB,Flash,A30,-C	152
5	X60130A-C	IO Module,2PT,100GbE,-C	2
6	X60132A-C	IO Module,4PT,10/25GbE,-C	2
7	X-QSFP-100G-CU1M-C	Cable,Cisco,QSFP-QSFP 100G,CU Passive,1m,-C	2
8	X-QSFP-100G-CU2M-C	Cable,Cisco,QSFP-QSFP 100G,CU Passive,2m,-C	4
9	X6566B-2-N-C	Cable,Direct Attach CU SFP+ 10G,2M,-C	8
10	X5532A-N-C	Rail,4-Post,Thin,Rnd/Sq-Hole,Sm,Adj,24-32,-C	1
11	X800-42U-R6-C	Jumper Crd,In-Cab,C13-C14,-C	6
12	X97602A-C	Power Supply,1600W,Titanium,-C	2
13	DATA-AT-REST-ENCRYPTION	Data at Rest Encryption Capable Operating Sys	2
14	CS-G1A-SE-ADVISOR	SupportEdge Advisor	1
15	CS-4HR-REPLACEMENT-A	4hr Parts Replacement	1
16	CS-ADVISOR-PLUS-SYS-A	Advisor Plus for System	1
17	PS-DEPLOY-STD-ONTAP-L	PS Deployment ONTAP, Standard, Low	1
18	PS-FFP-TECH-REFRESH-ZA	Tech Refresh VolMove Service	1
19	X4027A-2-A-C	Drive Pack 2X7.6TB,NVMe4,SED,-C	10
20	CLMSWITCH-24NODE-R5	SwitchNetAppCluster24-Node	2
21	SVC-CISCO-ENTITLEMENT	Entitlement,Cisco Switch NOW Site	2
22	X190200-CS-PE	Cluster Switch,N9336C 36Pt PTSX10/25/40/100G	2
23	SVCVN-OSP-N9336FX3	HW SUPP 9336,X190200/X190210,24X7X4OS	2
24	DOC-CISCO-CONTRACT	Cisco Switch Service Contract	2
25	SW-SMIRROR-CLD-ONTAP-ONE	SW-SMIRROR-CLD-ONTAP-ONE	1
26	SW-S3-SM-ONTAP-ONE	SW-S3-SM-ONTAP-ONE	1
27	TI-D2-BASE	Trade-in Credit,D2,Platform Base	1
28	TI-D2-SW	Trade-in Credit,D2,Software Returns	1
29	TI-D2-STG	Trade-in Credit,D2,Storage Returns	1
30	X-QSFP-4SFP10G-CU3M	Cable,Cisco,QSFP/4xSFP10G,CU Passive,3m	2
31	PS-TM-CONSULT-DAY-TE-ZA	Consulting Day >10 + TE, Exp. 1yr. from PO	2
32	PS-TM-CONSULT-DAY-ZA	Consulting Day > 10 days, Exp. 1yr. from PO	4

BOM Secondary

FAS50A-100-C

Line	Item Number	Description	Qty Quoted
1	CLMSWITCH-24NODE-R5	SwitchNetAppCluster24-Node	2
2	SVC-CISCO-ENTITLEMENT	Entitlement,Cisco Switch NOW Site	2
3	X190200-CS-PE	Cluster Switch,N9336C 36Pt PTSX10/25/40/100G	2
4	SVCVN-OSP-N9336FX3	HW SUPP 9336,X190200/X190210,24X7X4OS	2
5	DOC-CISCO-CONTRACT	Cisco Switch Service Contract	2
6	SW-SMIRROR-CLD-ONTAP-ONE	SW-SMIRROR-CLD-ONTAP-ONE	1
7	SW-S3-SM-ONTAP-ONE	SW-S3-SM-ONTAP-ONE	1
8	FAS50	FAS50 HA System	1
9	FAS50-001	FAS50 HA System	2
10	FAS50A-100-C	FAS50 HA System,-C	1
11	X336A-2-A-C	Drive Pack,7.2K,12G,2x4TB,-C	18
12	SW-ONTAPO-NLSAS-F50-C	SW,ONTAP One Package,Per TB,NLSAS,FAS50,-C	144
13	X60130A-C	IO Module,2PT,100GbE,-C	2
14	X60132A-C	IO Module,4PT,10/25GbE,-C	2
15	X-QSFP-100G-CU1M-C	Cable,Cisco,QSFP-QSFP 100G,CU Passive,1m,-C	2
16	X-QSFP-100G-CU2M-C	Cable,Cisco,QSFP-QSFP 100G,CU Passive,2m,-C	4
17	X6566B-2-N-C	Cable,Direct Attach CU SFP+ 10G,2M,-C	8
18	X66030A-N-C	Cable,12Gb,Mini SAS HD,0.5m,-C	2
19	X66031A-N-C	Cable,12Gb,Mini SAS HD,1m,-C	8
20	X-02657-00-N-C	Rail Kit,Thin,Rnd/Sq-Hole,4-Post,Adj,24-32,-C	3
21	X5532A-N-C	Rail,4-Post,Thin,Rnd/Sq-Hole,Sm,Adj,24-32,-C	1
22	X800-42U-R6-C	Jumper Crd,In-Cab,C13-C14,-C	12
23	X97602A-C	Power Supply,1600W,Titanium,-C	2
24	DATA-AT-REST-ENCRYPTION	Data at Rest Encryption Capable Operating Sys	2
25	CS-G1A-SE-ADVISOR	SupportEdge Advisor	1
26	CS-4HR-REPLACEMENT-A	4hr Parts Replacement	1
27	CS-ADVISOR-PLUS-SYS-A	Advisor Plus for System	1
28	PS-DEPLOY-STD-ONTAP-M	PS Deployment ONTAP, Standard, Medium	1
29	PS-FFP-TECH-REFRESH-ZA	Tech Refresh VolMove Service	1
30	TI-D2-BASE	Trade-in Credit,D2,Platform Base	1
31	TI-D2-SW	Trade-in Credit,D2,Software Returns	1
32	TI-D2-STG	Trade-in Credit,D2,Storage Returns	1
33	DS212C-C-0-12-A-C	Disk Shelf2U1212GEmptyDS212C-C	3
34	X60150B-C	IO Module,4-PT,miniSAS,12GB,-C	2
35	X-QSFP-4SFP10G-CU3M	Cable,Cisco,QSFP/4xSFP10G,CU Passive,3m	2

Palo Alto

Item #	SKU	Manufacturer	Mfr. Part #	Qty	Description and Product Info
1	HV4943	PALO ALTO PROFESSIONAL SERVICES	PAN-EDU-TRAINING-100	150	REDEEM CREDITS W/ INGRAM MICRO WWW.INGRAMMICROTRAINING.COM
2	HG6382	PALO ALTO NETWORKS	PAN-PA-1420	2	PA-1420
3	740K02	PALO ALTO NETWORKS	PAN-PA-1420-BND-PRECISIONAI-5YR	2	PA-1420 PRECISION AI NETWORK SECURITY SUBSCRIPTION BUNDLE 5
4	HG8870	PALO ALTO BACKLINE SUPPORT	PAN-SVC-BKLN-1420-5YR	2	PA-1420 PARTNER ENABLED PREM SUP 5YR 60MO TERM
5	HG6535	PALO ALTO PROFESSIONAL SERVICES	PAN-CONSULT-NGFW-QS-PA14XX	1	QUICKSTART SVC FOR NGFW PA-1400 SERIES INCL ONE CUTOVER

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Charlie Arnett, Account Executive

(Address) 165 Barr St., Lexington, KY 40507

(Phone Number) / (Fax Number) 859-554-3270

(email address) charlie.arnett@pellera.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Converge Technology Solutions US, LLC

Signed by:
(Company)

Greg Berard

(Signature of Authorized Representative)
Greg Berard

CEO

7/27/2026

(Printed Name and Title of Authorized Representative) (Date)

(Phone Number) (Fax Number)

(Email Address)



CERTIFICATE OF LIABILITY INSURANCE

12/31/2026

DATE (MM/DD/YYYY)

7/21/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies, LLC DBA Lockton Insurance Brokers, LLC in CA CA license #0F15767 3280 Peachtree Rd. NE, Ste. 1000 Atlanta GA 30305 (404) 460-3600	CONTACT NAME:
	PHONE (A/C, No, Ext):
INSURED 1560375 Converge Technology Solutions US, LLC, a Peller Company 130 Technology Parkway Peachtree Corners GA 30092	FAX (A/C, No):
	E-MAIL ADDRESS:
INSURER(S) AFFORDING COVERAGE	
INSURER A: Hartford Fire Insurance Company	NAIC # 19682
INSURER B: Trumbull Insurance Company	27120
INSURER C: Hartford Casualty Insurance Company	29424
INSURER D: National Union Fire Ins Co Pitts. PA	19445
INSURER E:	
INSURER F:	

COVERAGES**CERTIFICATE NUMBER:** 23773467**REVISION NUMBER:** XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☒ PRO-JECT ☒ LOC OTHER:	N	N	20UENBX7M3S	12/31/2025	12/31/2026	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 10,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ NON-OWNED AUTOS ONLY	N	N	20UENBX7CAP	12/31/2025	12/31/2026	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
C	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE DED ☒ RETENTION \$ 10,000	N	N	20XHUBX7M36	12/31/2025	12/31/2026	EACH OCCURRENCE \$ 25,000,000 AGGREGATE \$ 25,000,000 \$ XXXXXXXX
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	20WBBZ3LZZ	12/31/2025	12/31/2026	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Crime	N	N	11758424	12/31/2025	12/31/2026	Limit: \$5M Per Occ Ded: \$50K

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

30 Day Notice of Cancellation/Non-renewal, except 10 days for nonpayment of premium, to the certificate holder when required by written agreement.

CERTIFICATE HOLDER**CANCELLATION****23773467**West Virginia Enterprise Planning Board
1007 Bullitt Street, Suite 400
Charleston, WV 25301

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
07/21/2026

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services, Inc of Florida 701 Brickell Avenue Suite 3200 Miami FL 33131 USA		CONTACT NAME: PHONE (A/C, No, Ext): (866) 283-7122 FAX (A/C, No.): (800) 363-0105 E-MAIL ADDRESS:	
INSURED Converge Technology Solutions US, LLC A Peller Company 130 Technology Parkway Peachtree Corners GA 30092 USA		INSURER(S) AFFORDING COVERAGE INSURER A: Endurance American Specialty Ins Co. INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 41718	

COVERAGES**CERTIFICATE NUMBER:** 570121975637**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB ☐ OCCUR EXCESS LIAB ☐ CLAIMS-MADE DED ☐ RETENTION						EACH OCCURRENCE AGGREGATE	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	☐ Y / ☐ N	N / A				PER STATUTE ☐ OTH-ER ☐	
A	E&O - Technology			ANP30085685301 E&O/cyber claims made SIR applies per policy terms & conditions	04/22/2026	04/22/2027	Aggregate/Per claim SIR/Deductible	\$10,000,000 \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

West Virginia Enterprise Planning Board 1007 Bullitt Street, Suite 400 Charleston WV 25301 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Aon Risk Services Inc. of Florida</i>



AGENCY CUSTOMER ID: 570000096519

LOC #:

ADDITIONAL REMARKS SCHEDULE

Page _ of _

AGENCY Aon Risk Services, Inc of Florida		NAMED INSURED Converge Technology Solutions US, LLC	
POLICY NUMBER See Certificate Number: 570121975637			
CARRIER See Certificate Number: 570121975637	NAIC CODE	EFFECTIVE DATE:	

ADDITIONAL REMARKS**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,****FORM NUMBER:** ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

Excess Layers

All policies below are claims made.

Policy Number: 019151280
Policy Term: 04/22/2026 to 04/22/2027
Line of Business: Cyber-XS, E&O-Tech-XS
Underwriting: AIG Specialty Insurance Company
Aggregate: \$10,000,000
Excess of: \$10,000,000

Policy Number: MTE904865501
Policy Term: 04/22/2026 to 04/22/2027
Line of Business: Cyber-XS, E&O-Tech-XS
Underwriting: Indian Harbor Insurance Company
Aggregate: \$10,000,000
Excess of: \$ 20,000,000

Policy Number: XMS2609867
Policy Term: 04/22/2026 to 04/22/2027
Line of Business: Cyber-XS, E&O-Tech-XS
Underwriting: Scottsdale Insurance Company
Aggregate: \$10,000,000
Excess of: \$30,000,000

FlexPod®

Flexible Data Center Infrastructure Simplifies IT and Accelerates Applications

The Challenge

The need for agility and simplicity in deploying and managing infrastructure

Supporting business objectives from an IT perspective is becoming more complex and elusive, as users require on-demand resources that are secure, reliable, and easy to use. IT organizations need to adapt with simpler approaches to deploying and managing infrastructure. IT must enable greater agility by optimizing costs and existing staff resources, while also maintaining data security and adherence to compliance requirements. With growing businesses' requests such as expansion to new markets and support for mobile users—as well as opportunities in analytics and hybrid cloud—IT must anticipate new requests by modernizing the data center to become an agile, innovative service provider.

The Solution

The FlexPod converged infrastructure platform

Built on groundbreaking technology from NetApp and Cisco, the FlexPod® converged infrastructure platform meets and exceeds these challenges. FlexPod is trusted by thousands of customers across the globe. Composed of prevalidated storage, networking, and server technologies, FlexPod is designed to increase IT responsiveness to business needs and reduce the cost of computing with maximum uptime and minimal risk.

The prevalidated FlexPod architecture delivers unmatched application performance that drives higher productivity, faster decision making, and greater opportunities for growth. FlexPod simplifies and modernizes IT with continuous innovation, broad support for any cloud strategy, and improved operational efficiency to accelerate data center transformation and business evolution.

Key Features

Optimize your applications

Deliver increased application performance that drives greater productivity, speeds decision making, and provides opportunities for growth.

Embrace hybrid cloud

Transcend data center constraints with a secure and scalable foundation for cloud and as-a-service initiatives.

Simplify your IT

Reduce complexities, making room for better IT services, increased productivity, and continued innovation across the enterprise.

Solution Differentiators

- Flexible design with a broad range of reference architectures for popular business applications
- Elimination of costly, disruptive downtime with clustered Data ONTAP® nondisruptive operations
- Cisco ACI centralized, policy-driven automation that accelerates application deployments
- Multiprotocol storage platform that unifies application silos, allowing NAS or SAN, file or block, on one converged platform
- Support for private, public, or hybrid cloud strategies with a consistent set of data management tools from flash to disk to cloud



Application Optimization Starts with FlexPod

- Host multiple instances of mixed applications, consolidated on a shared infrastructure with centralized, simplified management
- Speed database application performance by up to 20x with All Flash FAS
- Scale out and scale up as workloads increase, adding storage and compute layers as your business grows

Hybrid Cloud Flexibility

- Operate across hybrid cloud resources with the software-defined capabilities of NetApp® Data Fabric, while maintaining security, control and workload portability with Cisco Intercloud Fabric
- Manage data from flash to disk to cloud with the simplicity of a single set of tools
- Optionally use OpenStack software on FlexPod to create a private or hybrid cloud

Simplified IT Infrastructure

- Use Cisco Unified Computing System (Cisco UCS) Director for end-to-end, single-view automation and orchestration, freeing IT staff to focus on new services
- Validated designs help you deploy FlexPod platforms in a wide range of operating environments with less risk and accelerated ROI
- Cooperative support is designed to simplify and streamline support for your FlexPod converged infrastructure

The FlexPod Family

FlexPod is offered in three solution categories that are designed to meet your specific capacity and performance requirements:

"Among the biggest benefits of FlexPod are integrated components that help enable us to centrally manage all our data center requirements."

Darrell Williams

Director of Information Systems, Katz, Sapper & Miller

- **FlexPod Express** is ideal for midsized businesses and branch offices. It can be used as a cost-effective starting point for infrastructure consolidation and virtualization solutions.
- **FlexPod Datacenter** is suited for large enterprises and cloud service providers that have mature IT processes and rapid growth expectations and want to deploy a highly scalable shared infrastructure for multiple business-critical applications.
- **FlexPod Select** supports high-performance computing or very large data capacity environments such as big data analytics, scientific computing, and dedicated application optimization.

Any of these FlexPod solutions can be scaled up or out and duplicated in modular fashion to accommodate your future growth. They can also scale to a larger FlexPod configuration with a clearly defined upgrade path that leverages all existing components and management processes.

Proven Across a Broad Range of Environments

FlexPod has been pretested and jointly validated with popular hypervisors, operating systems, applications, and infrastructure software, including:

- VMware vSphere
- VMware View
- Citrix XenDesktop
- Red Hat Enterprise Linux

- Red Hat Enterprise Linux OpenStack Platform
- Oracle (RAC, JD Edwards, Oracle Linux, Oracle VM Server)
- SAP
- Microsoft Exchange, SQL Server, and SharePoint
- Microsoft Private Cloud
- Hortonworks Data Platform
- Cloudera's Distribution, including Apache Hadoop
- NetApp SnapProtect® technology
- Cisco Nexus data center switches

Reference Architectures

NetApp and Cisco have jointly developed numerous reference architectures to help you integrate and flex the solution to meet your specific requirements for the following critical environments:

Workload consolidation

FlexPod helps you consolidate and virtualize your business applications onto less hardware. Along with improved hardware utilization, this approach frees up data center space and reduces power and cooling requirements, enabling you to slash your infrastructure costs by up to 50%.

Virtual desktop infrastructure

FlexPod is a self-contained virtual desktop solution in a rack. Its modular design facilitates rapid, repeatable deployment of thousands of virtual desktops. FlexPod is optimized for VMware View and Citrix XenDesktop. You gain efficiencies by deduplicating up to 90% of redundant user and OS

data, and I/O performance can be accelerated by up to 50% with the NetApp Virtual Storage Tier. The extended memory technology of Cisco Unified Computing System provides the industry's greatest number of VMs per core density.

Development and test

FlexPod enables rapid provisioning and deprovisioning of virtual resources, making it ideal for development and test environments. NetApp FlexClone® software facilitates rapid development/test setup with cloning technology that lets you deploy thousands of space-efficient VMs for new projects in minutes, accelerating time to market. Clones can also be redeployed to secondary sites, reducing preparation time for initiatives such as disaster recovery testing.

Business and disaster recovery

FlexPod can be configured with integrated data protection software to provide fast recovery from system, site, and regional outages for business continuity. The combination of NetApp MetroCluster™ and SnapMirror® technologies with Cisco UCS Manager offers automated monitoring and failover, as well as cost-effective replication to a secondary site for continuous protection against unplanned downtime. FlexPod lets you move virtual server and storage resources and data nondisruptively across hardware to eliminate planned downtime.

Secure multi-tenancy and secure separation

FlexPod leverages Cisco and NetApp technologies to deliver secure multi-tenancy with solutions such as Cisco Secure Enclaves.

“Our executives loved the simplicity and power of the integrated stack in FlexPod. And for IT, the prevalidated architecture with prescriptive sizing and design guides reduced our risk.”

Wojciech Biernacki

IT Systems Administrator, University of Tennessee

Resources and data for each tenant—application, business unit, or customer—are securely isolated within the FlexPod environment. This combines the data separation and service-level guarantees offered by application silos with the efficiencies of a converged, virtualized infrastructure.

Best-in-Class Components for Enhanced Data Center Efficiency

FlexPod components are integrated in a standardized configuration that scales from entry-level designs for hundreds of users up to high-performance big data workloads for thousands of users. This integrated approach can significantly reduce your capital and operating expenses through end-to-end virtualization and higher efficiencies at each layer.

Cisco Unified Computing System

Cisco UCS is a data center platform that eliminates time-consuming manual configuration, reduces TCO, and increases business agility. It combines compute and network resources, storage access, and virtualization into a scalable, modular system that is easily managed as a single entity by Cisco UCS Manager. Service profile templates enable automatic, policy-based hardware configuration and deployment for large, stateless computing environments. Highly efficient Cisco UCS extended memory technology reduces memory requirements by up to 60%.

Cisco Nexus data center switches

Cisco Nexus switches use award-winning unified fabric technology to identify and consolidate all network traffic onto a single simplified, cost-effective architecture based on Fibre Channel over Ethernet. The switches offer “zero-touch” installation, automatic configuration, enterprise-class scalability, and nondisruptive in-service upgrades. A single point of policy management also increases efficiency, availability, and security.

The option of Cisco Nexus 7000 Series switches provides even greater networking scale, throughput, availability, and advanced features for data center interconnect requirements. Cisco Nexus 9000 switches lay the foundation for software-defined innovations such as Cisco Application Centric Infrastructure, allowing intelligent software to automate hardware resources across next-generation data centers.

NetApp FAS storage

NetApp FAS storage systems reduce the cost and complexity for virtualized infrastructures by meeting all of your storage requirements with a single, highly scalable solution. NetApp's unified storage platform supports all protocols, so you no longer need to purchase separate systems to accommodate different storage needs. You can slash capacity use by up to 50% with built-in deduplication, thin provisioning, and space-efficient backup and cloning.

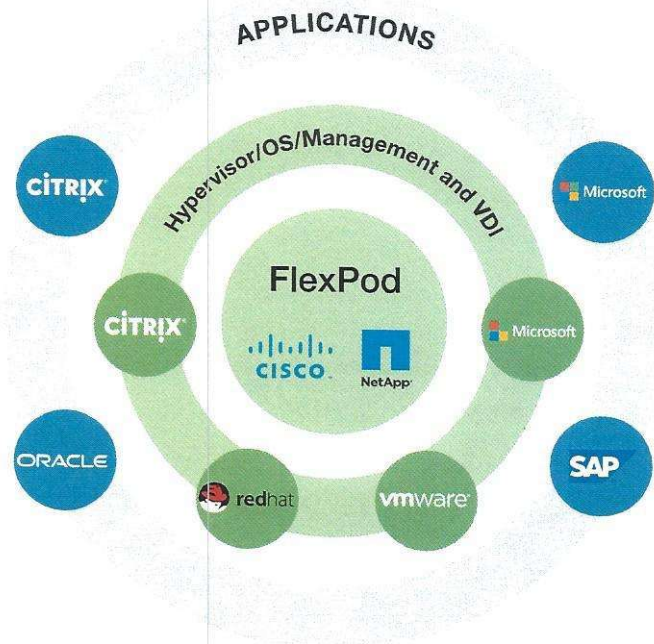


Figure 1) FlexPod Cooperative Support model: an ecosystem of a multivendor engagement.

NetApp systems enhance operational efficiency with automated storage management, data protection, and security. The clustered Data ONTAP operating system brings a new level of nondisruptive operations, scalability, and efficiency to enterprise storage. Performance is optimized with innovative flash technologies and 10GbE and FCoE support. With NetApp storage, you can deploy the exact proportion of flash to spinning media for your particular environment. And for extreme performance for dedicated workloads, NetApp All Flash FAS systems increase database application performance by up to 20x.

Cooperative Support Speeds Problem Resolution

FlexPod Cooperative Support is a partnership between NetApp; Cisco; and our technology partners Microsoft, VMware, Citrix, and Red Hat. Your IT staff chooses which vendor to call based on your initial assessment of the problem's origin. Multivendor engineers work to resolve your issue quickly using shared communications, expertise gained through ongoing joint training, and a formal escalation process. The result is a rapid, coordinated resolution to your technical issues.

Choice of Management Solutions

NetApp and Cisco work with trusted partners to provide you with a choice of management solutions. The FlexPod architecture provides APIs at each layer so that it can easily integrate with a broad range of software solutions for end-to-end management. Validated FlexPod management solutions have been tested to verify that they deliver essential functionality. Together with partners, we provide a variety of capabilities, including automation and orchestration, monitoring and analytics, and configuration management.

Global Service Delivery Ecosystem

You can choose from a global network of FlexPod Premium Partners and other highly qualified solution delivery partners to implement your FlexPod solution. These partners understand your business requirements and are certified on NetApp, Cisco, and complementary technologies to deliver a complete cloud solution that fits your business needs.

Getting Started

To learn how the FlexPod platform enables you to build a flexible and efficient converged virtualized infrastructure to modernize your data center, contact your local NetApp or Cisco representative or partner. Learn more at www.netapp.com/flexpod.



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NETAPP AFF A-SERIES



Powerful. Intelligent. Secure.

Unified data storage built for the AI era

Welcome to the future of intelligent data infrastructure.

NetApp® AFF A-Series systems easily power your most demanding workloads—from the mission-critical apps that run your business today to the AI and GenAI workloads that will unlock innovation and productivity in the future. With the advanced data management, industry-leading ransomware protection, and cloud integration that GenAI and other modern workloads demand, only NetApp delivers true unified storage architected for the next generation.

The AFF A-Series storage family, powered by NetApp ONTAP® data management software, delivers the same NetApp simplicity and reliability that tens of thousands of organizations of every size, in every industry, around the globe, have trusted for years. It's the same technology that the top three public clouds rely on to drive all your apps and data across hybrid cloud. No more silos, no more storage complexity. Just powerful, intelligent, secure storage to seamlessly accelerate your business.

Transform to meet the needs of business today

Data-driven organizations require an agile and efficient hybrid IT infrastructure to meet the demand for fast, secure, and continuous access to distributed data in the hybrid cloud. NetApp's intelligent data infrastructure delivers the industry's richest suite of data services across hybrid multicloud, enabling teams to seamlessly consume the services they require, on premises or in the cloud.

NetApp technologies, including the AFF A-Series, are anchored in unified data storage, which enables businesses to run any data type, and any app workload, across their premises and cloud with a single OS: ONTAP. A unified management experience provides ease of use and efficiency, eliminating infrastructure silos and data bottlenecks and delivering unmatched simplicity at scale.

Emerging workloads, such as AI and GenAI, data analytics, and deep learning, demand extreme performance. AFF A-Series systems deliver industry-leading speed, massive scalability, and best-in-class integration with public clouds, NVIDIA, and the MLOps ecosystem to help you accelerate, manage, and protect your next-generation apps across hybrid cloud.

Organizations of every size, in every industry, rely on AFF systems to:

- Accelerate and consolidate every workload (VMware, database, AI, and more) with unmatched performance, efficiency, and scale
- Drive transformation with a future-proof intelligent data infrastructure that seamlessly manages, protects, and mobilizes data across hybrid cloud
- Protect business-critical data against internal and external threats with real-time ransomware detection, guaranteed recovery, and business continuity

Turbocharge every workload without trade-offs

NetApp AFF A-Series systems deliver industry-leading performance, verified by SPC-1 and SPEC SFS industry benchmarks. These systems are ideal for everything from VMware environments, to highly transactional applications (such as Oracle, Microsoft SQL Server, and MongoDB databases), to the most data-intensive AI training, tuning, inferencing, and retrieval-augmented generation (RAG) workloads.

With the power of front-end NVMe/FC and NVMe/TCP host connectivity combined with back-end NVMe-attached SSDs, the high-end AFF A1K modular system delivers up to 40 million IOPS and 1TBps throughput in a single cluster through a unified, scale-out architecture.

The AFF A90 system also delivers high-end performance—in an integrated form factor that's especially well suited for AI (including GenAI), EDA, and media/entertainment workloads. It also enables in-chassis nondisruptive upgrades.

The integrated midrange AFF A70 system puts outstanding performance and flexibility (more I/O on network connection) within your budget.

The midrange AFF A50, AFF A30, and the entry-level AFF A20 all-flash storage systems offer high performance at an aggressive price point.

KEY BENEFITS

Powerful

- Turbocharge every workload—VMware, database, AI—with 40 million IOPS, 1TBps throughput, and massive scale.
- Enable unmatched power and consolidation for all your workloads with hyperefficient, unified storage that supports block, file, and object.
- Accelerate without trade-offs through consistent performance, AQoS, and proven 99.9999% data availability.

Intelligent

- Transform with an AI-ready ecosystem built on data-driven intelligence, future-proof infrastructure, and deep integrations with NVIDIA and the MLOps ecosystem.
- Seamlessly manage, protect, and mobilize data, at the lowest cost, across hybrid cloud with a single storage OS and the industry's richest data services suite.
- Simplify and automate hybrid operations with AI Ops, efficient AI model versioning, and intuitive hybrid multicloud control delivered by BlueXP.

Secure

- Protect valuable data from cyberthreats with built-in AI/ML-based real-time ransomware detection designed for industry-first 99%+ accuracy, SIEM/XDR integrations, and guaranteed recovery with end-to-end orchestration.
- Trust in the only hardened enterprise storage that's validated to store top-secret data.
- Prevent app disruptions, even during site failures, with integrated business continuity.

With the new AFF A-Series systems, you'll never need to choose between performance and efficiency. You'll have always-on improved data compression and no performance impact, thanks to QuickAssist Technology (Intel QAT). The systems allow you to achieve exceptional storage efficiency while delivering the consistent high performance needed for mission-critical workloads. In addition, the new systems come with faster front-end 200Gb Ethernet and 64Gb FC networking connectivity.

All AFF A-Series systems offer advanced reliability, availability, and serviceability to keep your critical data available. They also provide comprehensive data management and data protection capabilities for your enterprise applications with industry-leading ONTAP software.

Leverage unmatched consolidation and scale

Consolidate all your workloads on AFF A-Series systems, which can:

- Deliver up to 2x better performance compared to previous generations of systems, with latency as low as 100µs
- Support any data type, any app workload, across hybrid cloud
- Provide consistent performance, adaptive quality of service (AQoS), and proven 99.9999% data availability to safeguard SLAs even in multiworkload and multitenant environments
- Scale nondisruptively to 185PB in a single namespace
- Improve the speed and productivity of collaborative teams across multiple locations and increase data throughput for read-intensive applications with NetApp FlexCache® software

Enable your AI workloads

AI holds the promise of new levels of innovation and productivity—and AFF A-Series systems are the ideal storage solution to power your AI initiatives and other data-intensive workloads. The AFF A-Series gives enterprises five critical AI capabilities:

- Unify data across hybrid cloud and efficiently and securely serve data science teams.
- Deliver abundant levels of performance, efficiency, and scalability to power every segment of the AI data pipeline, up to and including AI-as-a-service model training tasks in enterprises.
- Streamline AI workflows with model interpretability, simple versioning, and clear visibility into data lineage.
- Get seamless, proven data management across hybrid multicloud to enable hybrid cloud workloads.
- Improve GenAI accuracy and insights by training large foundational models with your secured data sets.



NetApp warrants Snapshot data recovery if a ransomware attack occurs. If you can't recover your data copies with help from NetApp or partner assistance, NetApp offers compensation.

[Find details here](#)

With AFF A-Series systems, you can add AI workloads to your existing ecosystem as needed without creating new silos or complexity.

Keep important data available, protected, and secure

For data-driven enterprises, the business impact of data loss can be dramatic—and costly. Organizations must protect their valuable data from ransomware and other external cyberattacks, and from internal threats, to keep their data available, eliminate disruptions, and quickly recover from failures.

AFF systems are the only hardened enterprise storage validated to store top-secret data. They deliver a comprehensive suite of integrated and application-consistent data protections, including:

- Robust protection through multifactor authentication, immutable tamperproof NetApp Snapshot™ copies, end-to-end encryption, and automatic blocking of malicious file types
- Real-time autonomous ransomware detection, enhanced by embedded (ML) models, designed for industry-first 99%+ accuracy
- SIEM/XDR integrations
- Guaranteed recovery with end-to-end orchestration through the NetApp Ransomware Recovery Guarantee and Ransomware Recovery Assurance Service
- Integrated active-active business continuity
- Cyber-vault capability that combines advanced encryption, immutable backups, and air-gapped storage
- Application-consistent data protection and clone management with the NetApp SnapCenter® licensed capability
- Replication to any NetApp AFF or FAS system on the premises or in the cloud with NetApp SnapMirror® technology

NetApp is the only storage vendor that can give you this level of comprehensive, automated protection and guaranteed recovery.

Integrate business continuity and get fast disaster recovery

With AFF, you can maintain constant data availability with zero data loss and zero downtime if disruption or disaster occurs. NetApp MetroCluster® software replicates your data synchronously to a separate location to protect your entire system. If something goes wrong at one site, your applications automatically and instantaneously switch to the other site. For a more tailored approach, choose NetApp SnapMirror active sync to cost-efficiently replicate the most critical data while taking advantage of the increased performance, greater flexibility, and enhanced load-balancing capability that come with the symmetric active-active architecture.



With NetApp's comprehensive security solutions, you can achieve FIPS 140-2 compliance (Level 1 and Level 2) with self-encrypting drives. And you can meet governance, risk, and compliance requirements with security features such as secure purge, logging and auditing monitors, and write once, read many (WORM) file locking.

Increase operational efficiency for your business

With NetApp ONTAP advanced data management, you can lower IT costs by simplifying operations, consolidating workloads, and lowering overhead.

NetApp AFF A-Series systems offer broad support of application ecosystems and deep integration for enterprise applications, virtual desktop infrastructure, databases, server virtualization, and MLOps. Infrastructure management tools simplify and automate common storage tasks:

- Easily provision and rebalance workloads in minutes with one-click automation and self-service.
- Upgrade your OS and firmware with a single click.
- Import LUNs from third-party storage arrays directly into an AFF system to seamlessly migrate data.

In addition, the NetApp BlueXP™ digital advisor enables you to optimize your NetApp systems with predictive analytics and proactive support.

Flexibly consume storage resources

NetApp AFF A-Series systems are unified data storage built for the AI era. This intelligent data infrastructure enables you to architect for the future while powering all of your workloads today.

Like the rest of the NetApp portfolio, the new AFF A-Series systems are available through traditional capex or as a service with the NetApp Keystone® portfolio. Gain financial flexibility as you modernize, and better align IT expenditure to business needs.

Get more business value with services

Whether you're planning your next-generation data center, need specialized know-how for a major storage deployment, or want to optimize the operational efficiency of your existing infrastructure, [NetApp Professional Services](#) and [NetApp Certified Partners](#) can help.



Eliminate the headache of tech refreshes with the Storage Lifecycle Program: Get a new controller every 3 years with support-managed updates included, or move to the cloud—whichever best meets your needs.

[Find out more](#)

Table 2) AFF A-Series software

Data access protocols	• FC, iSCSI, NVMe/FC, NVMe/TCP, NFS, NFSv4/RDMA, SMB, S3
High availability	• Active-active controller architecture • Nondisruptive maintenance, upgrade, and scale-out clustering • Multisite resiliency for continuous data access
Storage efficiency	• Inline data compression, deduplication, and compaction • Space-efficient LUN, file, and volume cloning • Automatic data tiering
Data management	• Intuitive onboard GUI, REST APIs, and automation integration • AI-informed predictive analytics and corrective action • QoS workload control • Easy provisioning and data management from market-leading host operating systems, hypervisors, and application software • Multisite copy caching for improved read and write performance over distance
Scalable NAS	• Large-scale single namespace management with local and remote caching
Data protection	• Application-consistent snapshot copies and restore capabilities • Integrated remote backup and disaster recovery • Synchronous zero-data-loss replication • Symmetric active-active multi-site replication for business continuity
Security and compliance	• Automatic ransomware protection • Multifactor administrative access, multi-admin verification, dynamic authorization framework • Secure multitenant shared storage • Tamper-proof snapshots with SnapLock • In-flight and data-at-rest encryption • Regulatory-compliant data retention
Cloud integration	• Seamlessly tier, back up, replicate, and cache data to private and public clouds



Contact Us



About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. www.netapp.com

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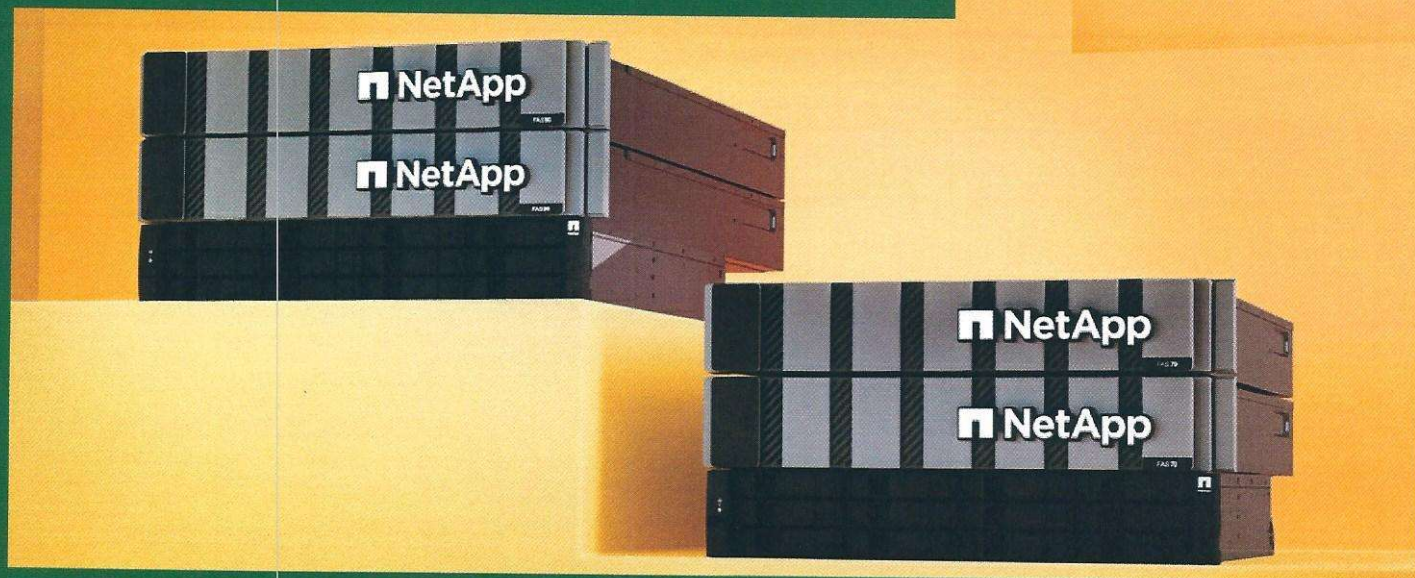
Table 1) AFF A-Series technical specifications



	AFF A1K	AFF A90	AFF A70	AFF A50	AFF A30	AFF A20
Maximum scale-out	2-24 nodes (12 HA pairs)	2-24 nodes (12 HA pairs)	2-24 nodes (12 HA pairs)	2-24 nodes (12 HA pairs)	2-24 nodes (12 HA pairs)	2-24 nodes (12 HA pairs)
Maximum SSDs	2880	2880	2880	1440	864	576
Maximum effective capacity¹	185PB	185PB	185PB	176.47PB	59.05PB	39.37PB
Controller chassis form factor	2X2U	4U; 48 internal SSD slots	4U; 48 internal SSD slots	2U; 24 internal SSD slots	2U; 24 internal SSD slots	2U; 24 internal SSD slots
Power consumption (median)	2718W ² (with NS224)	1950W ²	1232W ²	Results pending	Results pending	Results pending
PCIe expansion slots	18	18	18	8	8	8
FC target ports (64Gb autoranging)	48	56	56	24	24	24
FC target ports (32Gb autoranging)	48	56	56	24	24	24
FC target ports (16Gb autoranging)	48	56	56	24	24	24
FCoE target ports, U TA2	n/a	n/a	n/a	64	n/a	n/a
200GbE ports (100GbE/40GbE autoranging)	24	24	24	n/a	n/a	n/a
100GbE ports (40GbE autoranging)	36	36	36	16	16	12
25GbE ports (10GbE autoranging)	48	56	56	24	24	32
10GbE ports	48	56	56	24	24	24
10GBASE-T (1GbE autoranging)	48	56	56	24	24	24
12Gb/6Gb SAS ports	n/a	n/a	n/a	16	16	16
OS version	ONTAP 9.15.1 or later	ONTAP 9.15.1 or later	ONTAP 9.15.1 or later	ONTAP 9.16.1 or later	ONTAP 9.16.1 or later	ONTAP 9.16.1 or later
Shelves and media	NS224 (2U, 24 drives, SFF NVMe)	NS224 (2U, 24 drives, SFF NVMe)	NS224 (2U, 24 drives, SFF NVMe)	NS224 (2U, 24 drives, SFF NVMe)	NS224 (2U, 24 drives, SFF NVMe)	NS224 (2U, 24 drives, SFF NVMe)
Host/client OS supported	Windows Server, Linux, Oracle Solaris, AIX, HP-UX, macOS, VMware, ESX					

¹Effective capacity based on 5:1 storage efficiency ratio with the maximum number of SSDs installed; space savings will vary dependent on workload and use cases.
²Estimate under typical conditions - awaiting field data for new product.

NETAPP FAS STORAGE ARRAYS



Optimize secondary storage workloads with hybrid flash storage

The challenge

Simplifying data management on premises and in the public cloud

Organizations of every size face increasing pressure to simplify and secure their storage operations. They're tasked with lowering overall storage spending while delivering efficient backup, tiering, and cyber vault capabilities for fast-growing SAN, NAS, and object datasets — and with quickly recovering backup data for a growing number of use cases. Businesses can achieve these objectives with a purpose-built secondary storage solution like NetApp FAS. Part of NetApp's unified data storage portfolio, FAS is cost-optimized secondary storage that integrates seamlessly within your NetApp ONTAP OS ecosystem across on premises and cloud.

An ideal balance of capacity and performance storage that also simplifies your operations. Industry-leading data management NetApp FAS arrays, powered by NetApp ONTAP data management software, help you build a storage infrastructure that is economical, simple, and secure.

The solution

With FAS, IT can realize dramatic savings in the lifecycle cost of data by automatically offloading the estimated 60% to 80% of typical enterprise primary storage data that is cold data. FAS provides seamless scale of capacity and performance, fast recovery for Dev/Test and AI, and deep integration to public cloud with ONTAP, making it ideal for diverse use cases, including as a target for an ONTAP powered cyber vault. Economical, simple, and secure, FAS enhances operational efficiency, delivers effective data protection, and scales easily as you grow.

NetApp FAS systems cost-effectively deliver the data protection, security, and scalability to safeguard your data and drive operational efficiency. Whether you're running a small business, a remote office, or a large enterprise, the FAS family's leading range of unified capabilities for SAN, NAS, and object workloads make it an ideal solution for your general-purpose business applications as well as for backup and retention.

Economical

Achieve lowest lifecycle cost of data When it comes to long-term investments in storage infrastructure, it's crucial to focus on simplifying your storage environment and reducing total cost of ownership. The FAS family offers significant advantages:

- Reduce costs and minimize your storage footprint: Automatically move your infrequently used data to more cost-efficient object storage—on premises or in the cloud—without having to refactor your applications.
- Eliminate silos by supporting NAS, SAN, and object workloads on one unified system.
- Go from initial power-on to serving data in less than 10 minutes with simple application provisioning.
- Simplify ongoing management by upgrading software or servicing storage with zero downtime during regular business hours.
- Accelerate business operations by leveraging NetApp Snapshot™ copies to instantly create writable clones for use in DevTest, report generation, and analytics.
- Increase the efficiency of your staff by using the deep integration of ONTAP with key business applications.



KEY BENEFITS

Economical

- Optimize the overall cost of storage over the data lifecycle with automated tiering and economical backup.
- Slash costs by automatically moving infrequently used data to cost-efficient hybrid flash storage.
- Preserve primary storage efficiency and use NetApp® FAS data reduction for additional savings.

Simple

- Flexibly adapt to evolving business needs with industry-leading hybrid flash storage.
- Simplify at scale by using FAS for backup and/or tiering and/or cyber vault on the same NetApp ONTAP® OS as the rest of your hybrid cloud environment.
- Consolidate your 3-2-1 backup strategy entirely on a single cloud-connected storage OS and enjoy seamless integration with backup software vendors.
- Leverage policy-based data tiering that frees primary storage capacity.

Secure

- Rely on the safest storage on the planet to securely store your critical backup datasets.
- Safeguard your data with autonomous ransomware protection and guaranteed ransomware recovery.
- Deploy FAS as a resilient, logically air-gapped cyber vault target.
- Use immutable NetApp Snapshot™ copies, lockable data, and role-based access control to prevent unauthorized access to data.

Simple

Streamline your storage operations

The FAS family has the flexibility to keep up with your growing business as your capacity and performance requirements change. Scale up by adding capacity or by upgrading controllers. Scale out by growing from 2 nodes up to a 24-node cluster with 176PB of capacity.

Plus, you can cluster different combinations of FAS and AFF models to build out your environment by adding new generations of storage with the latest technologies.

The FAS family also supports massive NAS containers, which are easy to manage. With the NetApp FlexGroup feature of ONTAP 9, a single namespace can grow to 20PB and 400 billion files while maintaining consistent high performance and resilience.

With nondisruptive addition and replacement of storage systems and components, scaling occurs without maintenance windows or the challenge of coordinating downtime across teams. And you can perform your updates during regular work hours.

Integrate with the cloud

FAS systems running ONTAP are optimized for private and hybrid cloud by providing secure multitenancy, quality of service, nondisruptive operations, and easily defined tiers of service. Plus, NetApp offers a number of options for extending your FAS system to the hybrid cloud with Amazon Web Services, Microsoft Azure, Google Cloud, and other leading cloud providers. Easily move your data between your on-premises FAS system and cloud environments by using NetApp SnapMirror® data replication software.

Optimize your storage with smart management You don't need to be a storage expert to use the broad range of capabilities in the NetApp storage management portfolio.

- Simplify and speed up day-to-day management activities with ONTAP System Manager. The new GUI provides quick insights into capacity, system health, networking, and performance history.
- Streamline your management of multiple storage clusters with NetApp Active IQ® Unified Manager. Boost the efficiency of your staff by monitoring petabytes of data from a single dashboard, and receive notifications to quickly resolve issues before they affect data services. The latest version of Active IQ Unified Manager provides insights and advice on security risks and compliance.

Use the insights and recommendations derived from predictive analytics and community wisdom to optimize and protect your storage investments with Active IQ. Expose risk factors and prevent problems before they affect your business. Benefit from insights and best-practice recommendations derived from the collective wisdom of NetApp's large user base. Implement this actionable intelligence to prevent problems, save time, and make smarter decisions when managing your infrastructure with ONTAP System Manager and Active IQ Unified Manager.

NetApp BlueXP data management simplification NetApp BlueXP simplifies storage and data services management as the unified control plane across your entire data estate, including FAS systems designed for secondary workloads. By leveraging BlueXP, businesses can seamlessly manage on-premises and cloud environments, utilizing familiar ONTAP OS tools and workflows. BlueXP breaks down management silos through unified control of your intelligent data infrastructure, that is powered by AIOps, automates workflows. It delivers real-time health monitoring, and offers actionable insights with guided remediation,

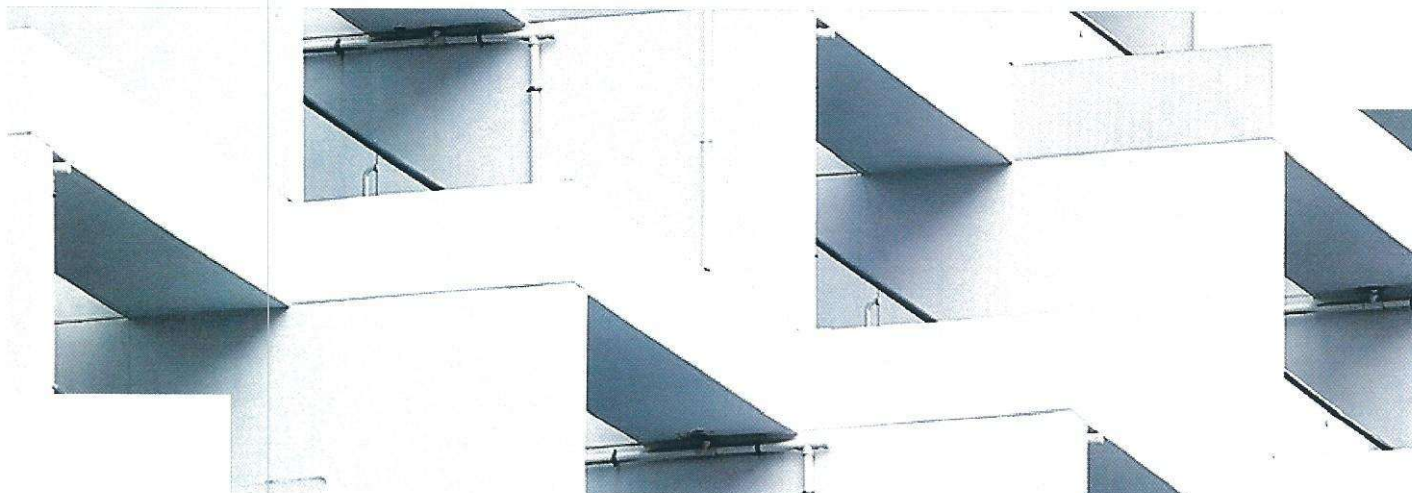


to optimize performance and prevent downtime. This unified management approach enhances operational simplicity, ensures robust data protection, and maximizes ROI through intelligent automation and resource optimization. Storage efficiencies such as compression, deduplication, and compaction are preserved when moving data to FAS, reducing required object storage capacity and transport costs.

Secure

Secure company and customer data across your hybrid cloud

- ONTAP offers both software- and hardware-based encryption technologies to protect data at rest. ONTAP also offers encryption for data in-flight to prevent and protect data that is transmitted between systems.
- Snaplock allows you to create special-purpose volumes in which files can be stored and committed to a tamper-proof, non-erasable, non-writable state either for a designated retention period or indefinitely.
- Easily and efficiently safeguard your data with autonomous ransomware protection.
- Protect against weak administrative passwords, the leading cause of system compromises, by using multifactor authentication.
- Designate and validate authorized users with role-based access control.
- Multi-admin verification (MAV) ensures that certain operations, such as deleting volumes or Snapshot copies, can be executed only after approvals from multiple designated administrators.
- Use storage-level file security to prevent unauthorized administrators from accessing or deleting crucial intellectual property.
- Meet privacy standards, including GDPR, by cryptographically shredding and sanitizing individual files.



Protect against data loss and accelerate recovery FAS systems running ONTAP provide comprehensive, integrated data protection to safeguard your data. Meet your requirements for local backup with near-instant recovery by using space-efficient NetApp Snapshot copies. Achieve remote backup/recovery and disaster recovery with NetApp SnapMirror asynchronous replication. Plus, deep integration with leading backup applications makes management easier. Rely on the safest storage on the planet to securely store your critical backup datasets with NetApp ONTAP NetApp ONTAP provides robust security features for FAS systems, making it ideal for secondary storage.

It includes autonomous ransomware protection with AI/ML models for over 99% precision in threat detection, multi-factor authentication (MFA), role-based access control (RBAC), and comprehensive logging and auditing. Data encryption is supported both in-transit and at-rest, along with tamperproof Snapshots and SnapLock for regulatory compliance and data immutability. ONTAP's secure purge capabilities help meet GDPR compliance, and its integration with SnapMirror ensures efficient remote backup and disaster recovery. These features, combined with automatic tiering and space-efficient Snapshots, optimize storage efficiency while providing peace of mind for data protection.

Achieve unparalleled availability and nondisruptive operations NetApp MetroCluster™, SnapMirror Business Continuity, and SnapMirror Synchronous technologies expand data protection to eliminate risk of data loss by synchronously mirroring data between locations for continuous availability of information. Storage arrays can exist in a single data center or in two different data centers that are located across a campus, across a metropolitan area, or in different cities. No matter what happens, your data can be protected from loss, and with MetroCluster and SnapMirror Business Continuity, it is continuously available to meet business-critical needs.

FAS systems are engineered to meet demanding availability requirements. All models are designed to deliver at least 99.9999% availability through a comprehensive approach that combines highly reliable hardware, innovative software, and sophisticated service analytics.

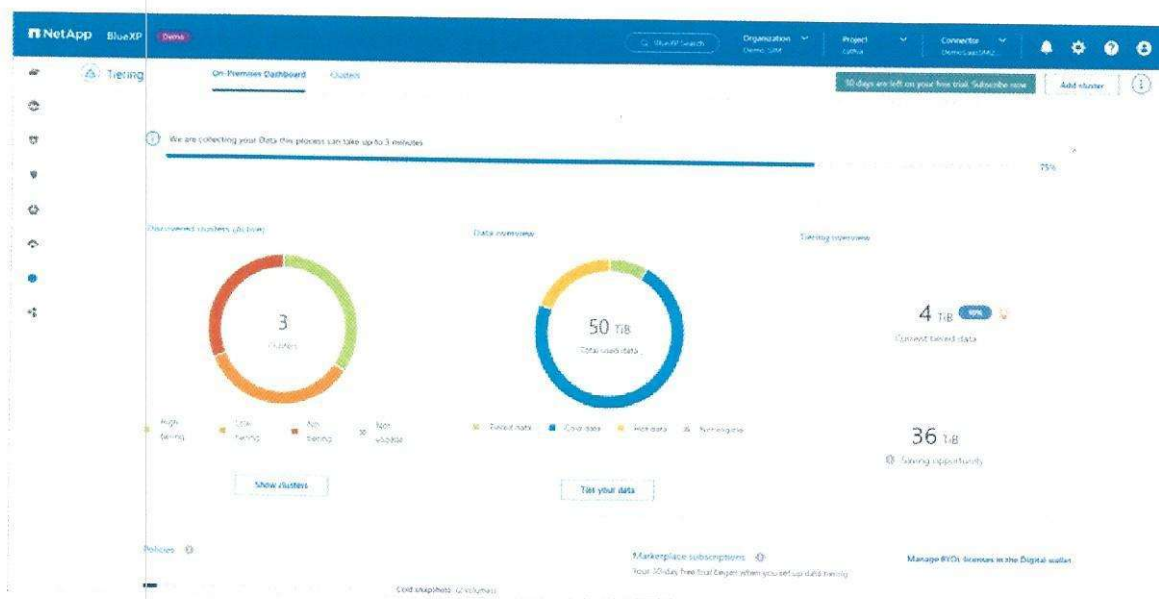
Introducing our new FAS70 and FAS90 systems!

The NetApp FAS70 and FAS90 systems are tailored for organizations looking to efficiently manage their secondary workloads with data tiering and backup. Both systems are designed to facilitate the smooth transition of infrequently accessed data to secondary storage. This tiering process is not only seamless, it's also cost-effective, so that data remains accessible and secure without incurring unnecessary storage expenses.

These systems are optimized to capitalize on their storage density to manage and protect backup data efficiently. FAS systems provide optimal security with the capability to deploy as a logically air-gapped cyber vault target and immutable Snapshot copies. Disaster recovery is also a streamlined process with these systems, thanks to the incorporation of NetApp SnapMirror® technology for reliable data replication.

NetApp FAS Storage Arrays:

- FAS90. New high-range system with 1.35x the performance of FAS9500 and 4U form factor.
- FAS70. New mid-range, consolidated 4U system 1.85x the performance of FAS8300 for secondary workloads.
- FAS50. New mid-range 2U system with 1.5X the performance of the FAS8300 for secondary workloads.
- FAS2820. Optimized for small and midsize businesses that require simple deployment and operations. Ideal for high-capacity use cases.
- FAS2750. Optimized for small and midsize businesses that require simple deployment and operations. Supports up to 24 internal drives plus external storage shelves.



Realize the most from your investment by engaging NetApp Professional Services experts or our Services Certified partners. When moving data into your new environment, smooth the transition and mitigate risks by using proven NetApp methodologies, tools, and best practices. With the NetApp Storage Lifecycle Program, you can purchase a NetApp AFF, ASA or FAS system and we'll upgrade it indefinitely with nondisruptive refreshes of storage controllers every 3 years at no additional cost. You choose the timing of your upgrade, and we'll help you seamlessly and securely scale as you grow.

For more information, go to netapp.com/services.

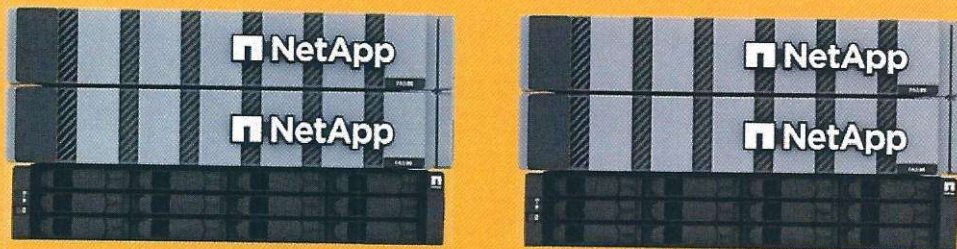
Harness the Power of ONTAP to Simplify and Accelerate Your Storage Environment:	
Storage efficiency	Reduce costs with leading data reduction technologies and built-in configuration efficiencies.
Business continuity	Make sure that your critical applications stay online with continuous data availability.
Nondisruptive operations	Eliminate business disruptions during maintenance and upgrades.
Performance and scalability	Improve performance for consolidated workloads, and scale up or scale out capacity and performance.
Cloud Integration	Easily move your data between your on-premises FAS system and cloud environments.
Security	Safeguard your critical data with anti-ransomware protection for both preemption and post-attack recovery.
Compliance	Meet strict governance and data retention policies.

Table 1. NetApp FAS technical specifications

	FAS90	FAS70	FAS50	FAS2820	FAS2750
Maximum scale-out	up to 24 nodes (12 HA pairs)	up to 24 nodes (12 HA pairs)	up to 8 nodes (4 HA pairs)	up to 24 nodes (12 HA pairs)	up to 24 nodes (12 HA pairs)
Maximum Drives per HA pair (2 nodes)	1440	1440	480	144	144
Maximum Raw Capacity per HA pair	14.7PB	14.7PB	10.6PB	2.3PB	1.2PB
Controller Chassis Form factor	4U 2×2U	4U 2×2U	2U	2U	2U

Note: All HA pair specifications are for dual controller, active-active configurations.

¹Maximum raw capacity depends on the drive offerings. For current information, see netapp.com.



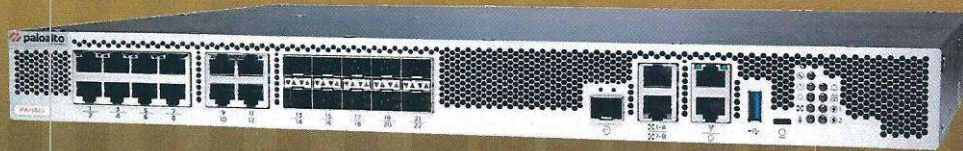
Contact Us



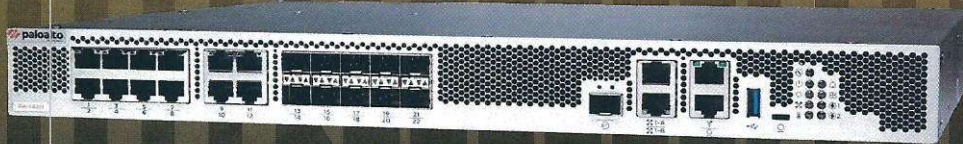
About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. www.netapp.com

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PA-1410



PA-1420

PA-1400 Series

Palo Alto Networks PA-1400 Series ML-Powered Next-Generation Firewalls, comprising the PA-1420 and PA-1410, provide secure connectivity for organizations' branch offices and midsize businesses.

Highlights

- World's first ML-Powered NGFW.
- Powered by Precision AI®, a groundbreaking AI-driven engine that analyzes and prevents threats in real time.
- Leader in the 2025 Gartner® Magic Quadrant™ for Hybrid Mesh Firewall.
- Leader in The Forrester® Wave™: Enterprise Firewall Solutions, Q4 2024.
- Built with a single-pass architecture to deliver predictable performance with security services.
- Simplifies deployment of large numbers of firewalls with optional Zero Touch Provisioning (ZTP).
- Native web proxy support in NGFW to simplify and consolidate management of firewall and proxy functionalities.
- Supports centralized administration with Panorama network security management.
- Extends visibility and security to all devices, including unmanaged IoT devices, without the need to deploy additional sensors.
- Supports high availability with active/active and active/passive modes.
- Managed with Strata™ Cloud Manager, the industry's first AI-powered unified management and operations solution for network security.

The controlling element of the PA-1400 Series is PAN-OS®, the same software that runs all Palo Alto Networks NGFWs. PAN-OS natively classifies all traffic, inclusive of applications, threats, and content, and then ties that traffic to the user regardless of location or device type. The applications, content, and users—the elements that run your business—serve as the basis of your security policies, resulting in an improved security posture and reduced incident response times. PAN-OS embeds machine learning (ML) in the firewall core to provide inline signatureless attack prevention for file-based attacks while identifying and immediately stopping never-before-seen phishing attempts.

Post-Quantum Cryptography Optimizations

The PA-1400 Series is a post-quantum cryptography (PQC)-ready NGFW that helps you achieve quantum-safe security in hardware and software with PAN-OS 12.1. PA-1400 Series NGFWs support:

- PQC for PQC SSL/TLS decryption, PQC VPN site-to-site, PQC SSL/TLS Cipher Translation Proxy, and PQC SSL/TLS Service Profile for Management Access to the firewall.
- PQC algorithms, including NIST standards, like ML-KEM, ML-DSA, and SLH-DSA, as well as experimental PQCs, like Classic McEliece, BIKE, HQC, Frodo-KEM, and NTRU-Prime.

For more information, see [Support for Post-Quantum Features](#) in TechDocs.

Prevention of Malicious Activity Concealed in Encrypted Traffic

PA-1400 Series NGFWs provide the ability to:

- Inspect and apply policies to SSL/TLS-encrypted traffic (both inbound and outbound), traffic that uses SSLv3, TLSv1.1, TLSv1.2, and TLSv1.3, as well as application protocols SMTP, WebSocket, gRPC, HTTP/1.0, HTTP/1.1, and HTTP/2.
- Decrypt and inspect SSL/TLS sessions with the classical key exchange algorithms RSA, ECDHE, DHE, and post-quantum key exchange standards ML-KEM, HQC, as well as experimental BIKE and Frodo-KEM.
- Let you enable or disable decryption flexibly—based on URL category, source and destination zone, address, user, user group, device, and port—for privacy and regulatory compliance purposes.

Read the [Decryption: Why, Where, and How](#) *whitepaper* to learn about decryption to prevent threats and secure your business.

Application Identification and Categorization with Full Layer 7 Inspection

App-ID™ identifies and categorizes all applications, on all ports, all the time, with full Layer 7 inspection, supporting the following capabilities:

- Uses advanced techniques, such as protocol decoding, heuristics, and signature matching, to accurately identify applications across the network, regardless of the port, protocol, or encryption methods used. The optional App-ID Cloud Engine (ACE) service provides on-demand App-IDs for SaaS applications.
- Allows for the effective enforcement of security policies tailored to specific applications, by centralizing the identification and control of applications at the firewall level.
- Uses cutting-edge AI techniques to enhance precision in identifying and categorizing AI-powered applications. These techniques ensure that even the most advanced and dynamic applications are accurately recognized and appropriately managed within the network.

For more information, see the [App-ID solution brief](#).

User Security Enforcement

PA-1400 Series NGFWs enforce security for users at any location, on any device, while adapting policies based on their activity. They include the ability to:

- **Unify identity and policy enforcement:** Bridge on-premises and cloud identity stores to enforce consistent user-based policies everywhere via the Cloud Identity Engine, and block malicious traffic sources automatically by using IP geolocation.
- **Automate dynamic risk control:** Apply dynamic security actions based on user behavior and risk scores using Cloud Dynamic User Groups (CDUGs)—without depending on directory updates. Also, leverage automated policy recommendations to save time and reduce human error when restricting suspicious activity.
- **Secure credentials:** Prevent credential theft and abuse by enforcing multifactor authentication (MFA) at the network layer for any application, including legacy and nonweb apps, without requiring application changes.

For more information, see the [Cloud Identity Engine solution brief](#).

Unique Approach to Packet Processing

PA-1400 Series NGFWs process packets by using a single-pass architecture. Using this approach, the NGFWs are able to:

- Perform networking, policy lookup, application and decoding, and signature matching—for all threats and content—in a single pass. This significantly reduces the amount of processing overhead required to perform multiple functions in one security device.
- Avoid introducing latency by scanning traffic for all signatures in a single pass, using stream-based, uniform signature matching.
- Produce consistent and predictable performance when security subscriptions are enabled (see table 1).

For more information, see the [Single-Pass Architecture solution brief](#).

AI-Powered Unified Management and Operations with Strata Cloud Manager

Manage your PA-1400 Series NGFWs with Strata Cloud Manager, which enables you to:

- **Gain complete visibility across your network security estate:** Achieve real-time, comprehensive visibility of your entire network security landscape, including all users, applications, devices, and the most critical threats that need attention through a unified interface.
- **Enable simple and consistent network security lifecycle management:** Manage configuration and policy management across all enforcement points, including SASE, hardware and software firewalls, as well as all security services to ensure consistency and reduce operational overhead.
- **Strengthen security posture in real time:** Leverage AI-powered analysis to detect, resolve, and optimize policy anomalies like shadow and redundant policies and overly permissive or unused rules. Improve your security posture with integrated best practice recommendations and maintain compliance with industry and InfoSec standards.

For more information, see the [Strata Cloud Manager datasheet](#).

Combined NGFW Clustering and High Availability Elements

NGFW clustering optimizes resource usage and increases throughput while maintaining a highly redundant and resilient solution. This solution enables efficient horizontal scaling for highly available networks.

See the [Migrating to NGFW Clustering whitepaper](#) for more information.

Best-in-Class Cloud-Delivered Security Services Powered by Precision AI

PA-1400 Series NGFWs provide best-in-class security with Cloud-Delivered Security Services (CDSS). At the heart of our CDSS is Precision AI. Unlike traditional reactive tools, Precision AI empowers your defenses with proactive Threat Detection, inline prevention, and automated response—stopping even the most evasive, never-before-seen attacks before they cause damage. Backed by threat intelligence from our over 70,000 customers globally, our cloud-delivered services continuously learn, adapt, and evolve. Integrated seamlessly with our NGFW and SASE platforms, CDSS delivers unified protection across web, DNS, email, applications, and more—no matter where your users or data reside.

Whether you're navigating hybrid work, embracing cloud transformation, or defending against sophisticated adversaries, CDSS powered by Precision AI gives you the visibility, automation, and confidence to stay ahead.

Advanced Threat Prevention

Palo Alto Networks Advanced Threat Prevention is the industry's first intrusion prevention system (IPS) that stops zero-day, command-and-control (C2) attacks and unknown exploits completely inline. In addition to traditional IPS capabilities, it delivers industry-leading protection against known and unknown threats.

For more information, see the [Advanced Threat Prevention datasheet](#).

Advanced WildFire

Palo Alto Networks Advanced WildFire® is the industry's largest cloud-based malware prevention engine. It protects organizations from highly evasive threats by using patented ML detection engines, enabling automated protections across networks, cloud, and customer application endpoints.

For more information, see the [Advanced WildFire datasheet](#).

Advanced URL Filtering

Advanced URL Filtering analyzes URL strings and web content in real time and classifies them into benign or malicious categories, which can be built into NGFW policies for control of web traffic. It protects against phishing, malware, ransomware, C2 communications, and evasive web-based attacks.

For more information, see the [Advanced URL Filtering datasheet](#).

Advanced DNS Security

Advanced DNS Security delivers real-time protection that instantly blocks sophisticated DNS request and response-based threats—including DNS hijacking, domain generation algorithms (DGA), DNS tunneling, and C2 callbacks. It uses inline, AI-powered detection models to analyze every DNS request and response in real time. These models enable precise identification of never-before-seen malicious domains, DNS tunneling, C2 activity, and network-level DNS hijacking. This powerful first line of defense identifies and stops threats at the DNS layer—whether they originate from outside or inside the network.

For more information, see the [Advanced DNS Security datasheet](#).

Device Security

Palo Alto Networks Device Security delivers a unified, AI-first solution that provides comprehensive protection and monitoring across your entire attack surface. It discovers all connected devices and then identifies and mitigates hidden risks that would otherwise remain invisible or elusive to even the most seasoned InfoSec professionals.

For more information, see the [Device Security solution brief](#).

SaaS Security

Palo Alto Networks SaaS Security delivers broad visibility and real-time control over all SaaS applications, including GenAI apps. Moreover, it provides robust data protection by monitoring and securing the unapproved movement and storage of sensitive data across various SaaS platforms.

For more information, see the [SaaS Security solution brief](#).

AI Access Security

AI Access Security™ empowers organizations to monitor the adoption and usage of sanctioned and unsanctioned GenAI apps. It proactively prevents sensitive data leakage and provides continuous risk monitoring so organizations can safely adopt and use third-party GenAI tools.

For more information, see the [AI Access Security datasheet](#).

Advanced SD-WAN

Easily adopt SD-WAN by simply enabling it on your existing firewalls with integrated security. Get an exceptional end-user experience and ensure SLAs by using SD-WAN path measurements and application steering capabilities to intelligently steer applications to the best performing paths.

For more information, refer to the [SD-WAN documentation](#) in TechDocs.

Table 1. PA-1400 Series Performance and Capacities

	PA-1410	PA-1420
Firewall throughput (appmix)*	8.5 Gbps	9.5 Gbps
Threat Prevention throughput (appmix)†	4.5 Gbps	6.2 Gbps
IPsec VPN throughput‡	4.1 Gbps	5.6 Gbps
Max concurrent sessions§	945,000	1.4M
New sessions per second¶	100,000	140,000
Virtual systems (base/max)#	1/6	1/6

Notes: Results were measured on PAN-OS 12.1.

* Firewall throughput is measured with App-ID and logging enabled by using appmix transactions.

† Threat Prevention throughput is measured with App-ID, IPS, antivirus, antispysware, WildFire, DNS Security, file blocking, and logging enabled, by using appmix transactions.

‡ IPsec VPN throughput is measured with 64KB HTTP transactions and logging enabled.

§ Max concurrent sessions are measured by using HTTP transactions.

¶ New sessions per second is measured with application override, by using 1 byte HTTP transactions.

Adding virtual systems over base quantity requires a separately purchased license.

The PA-1400 Series ML-Powered NGFWs support a wide range of networking features that enable you to more easily integrate our security features into your existing network.

Table 2. PA-1400 Series Networking Features

Interface Modes
L2, L3, tap, virtual wire (transparent mode)
Routing
OSPFv2/v3 with graceful restart, BGP with graceful restart, RIP, static routing
Policy-based forwarding
Point-to-Point Protocol over Ethernet (PPPoE)
Multicast: PIM-SM, PIM-SSM, IGMP v1, v2, and v3
SD-WAN
Path quality measurement (jitter, packet loss, latency)
Initial path selection (PBF)
Dynamic path change
IPv6
L2, L3, tap, virtual wire (transparent mode)
Features: App-ID, User-ID, Content-ID, WildFire, and SSL decryption
SLAAC
IPsec and SSL VPN
Key exchange: manual key, IKEv1, and IKEv2 (pre-shared key, certificate-based authentication)
Encryption: 3des, AES (128-bit, 192-bit, 256-bit)
Authentication: MD5, SHA-1, SHA-256, SHA-384, SHA-512
GlobalProtect® Large Scale VPN for simplified configuration and management*
Secure access over IPsec and SSL VPN tunnels using GlobalProtect gateway and portals*
VLANs
802.1Q VLAN tags per device/per interface: 4,094/4,094
Aggregate interfaces (802.3ad), LACP
Network Address Translation
NAT modes (IPv4): static IP, Dynamic IP, Dynamic IP and Port (port address translation)
NAT64, NPTv6
Additional NAT features: Dynamic IP reservation, tunable Dynamic IP and Port oversubscription
High Availability
Modes: active/active, active/passive
Failure detection: path monitoring, interface monitoring

* Requires GlobalProtect license.

Table 3. PA-1400 Series Hardware Specifications**I/O**

PA-1410: 10/100/1000 (8), 1G/2.5G/5G (4)/PoE, 1G SFP (6), 1G/10G SFP/SFP+ (4)

PA-1420: 10/100/1000 (4), 1G/2.5G/5G (4), 1G/2.5G/5G (4)/PoE, 1G SFP (2), 1G/10G SFP/SFP+ (8)

Management I/O

10/100/1000 out-of-band management port (1)

HSCl 10 gigabit high availability (1)

RJ-45 console port (1)

USB port (1)

Micro USB console port (1)

Power over Ethernet (PoE)

PA-1410, PA-1420 Total PoE Power Budget: 151W, Maximum load on single port: 90W

Storage Capacity

PA-1410: 120 GB SSD

PA-1420: 240 GB SSD

Trusted Platform Module (TPM)

Integrated with TPM for secure boot, hardware root of trust, and securing system secrets.

Power Supply (Avg/Max Power Consumption)

AC 450W power supply (1); Optional for purchase 2nd AC 450W power supply (1)

Power Consumption (Avg/Max)*

PA-1410: 250 W/290 W

PA-1420: 260 W/300 W

Mean Time Before Failure (MTBF)

24 Years

Input Voltage (Input Frequency)

100–240 VAC (50–60 Hz)

Rack Mount Dimensions

PA-1410, PA-1420: 1U, 19" standard rack (1.70" H x 14.15" D x 17.15" W)

Weight (Standalone Device/As Shipped)

PA-1410, PA-1420: 15.5 lbs

Safety

cTUVus, CB

EMI

FCC Class A, CE Class A, VCCI Class A

Certifications

See paloaltonetworks.com/legal-notices/trust-center/compliance

Environment

Operating temperature: 0°C to 40°C at 10,000 feet

Nonoperating temperature: -4°F to 158°F; -20°C to 70°C

Airflow

Front to back



3000 Tannery Way
Santa Clara, CA 95054

Main: +1.408.753.4000

Sales: +1.866.320.4788

Support: +1.866.898.9087

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