

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 2

[List View](#)**General Information** | Contact | Default Values | Discount | Document Information

Procurement Folder: 380344

SO Doc Code: CRFQ

Procurement Type: Central Purchase Order

SO Dept: 0439

Vendor ID: VS0000014207 

SO Doc ID: EBA1800000002

Legal Name: Cirious, LLC

Published Date: 10/6/17

Alias/DBA: Aagean

Close Date: 10/17/17

Total Bid: \$29,883.19

Close Time: 13:30

Response Date: 10/17/2017 

Status: Closed

Response Time: 13:04

Solicitation Description: ADDENDUM 1 - PURCHASE OF 2 NETWORK ATTACHED 

Total of Header Attachments: 2

Total of All Attachments: 2



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

**State of West Virginia
 Solicitation Response**

Proc Folder : 380344

Solicitation Description : ADDENDUM 1 - PURCHASE OF 2 NETWORK ATTACHED STORAGE UNITS

Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2017-10-17 13:30:00	SR 0439 ESR10171700000001605	1

VENDOR
VS0000014207 Cirious, LLC Agean

Solicitation Number: CRFQ 0439 EBA1800000002

Total Bid : \$29,883.19

Response Date: 2017-10-17

Response Time: 13:04:31

Comments:

FOR INFORMATION CONTACT THE BUYER
 Michelle L Childers
 (304) 558-2063
 michelle.l.childers@wv.gov

Signature on File	FEIN #	DATE
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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	NETWORK ATTACHED STORAGE UNIT	2.00000	EA	\$14,941.595000	\$29,883.19

Comm Code	Manufacturer	Specification	Model #
43201835			

Extended Description : QNAP NAS UNITS WITH DUAL ACTIVE CONTROLLERS, ONBOARD RAM, WRITE CACHE, NVRAM CACHE, AND SSD DRIVES PER SECTION 2 OF THE SPECS



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

State of West Virginia
 Request for Quotation
 21 – Info Technology

Proc Folder: 380344

Doc Description: PURCHASE OF 2 NETWORK ATTACHED STORAGE UNITS

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-09-29	2017-10-17 13:30:00	CRFQ 0439 EBA1800000002	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

FOR INFORMATION CONTACT THE BUYER

Michelle L Childers
 (304) 558-2063
 michelle.l.childers@wv.gov

Signature X

FEIN #

DATE

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

ADDITIONAL INFORMATION:

Request for Quotation

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Educational Broadcasting Authority (WVEBA) for the one-time purchase of network attached storage.

INVOICE TO		SHIP TO	
CHIEF FINANCIAL OFFICER EDUCATIONAL BROADCASTING 124 INDUSTRIAL PARK RD		SITE MANAGER EDUCATIONAL BROADCASTING WSWP-TV 124 INDUSTRIAL PARK RD	
BEAVER	WV25813	BEAVER	WV 25813
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	NETWORK ATTACHED STORAGE UNIT	2.00000	EA		

Comm Code	Manufacturer	Specification	Model #
43201835			

Extended Description :

QNAP NAS UNITS WITH DUAL ACTIVE CONTROLLERS, ONBOARD RAM, WRITE CACHE, NVRAM CACHE, AND SSD DRIVES PER SECTION 2 OF THE SPECS

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. PREBID MEETING: The item identified below shall apply to this Solicitation.

A pre-bid meeting will not be held prior to bid opening

A **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

A **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: October 6, 2017 at 10:00 AM EDT

Submit Questions to: Michelle Childers, Senior Buyer
2019 Washington Street, East
Charleston, WV 25305
Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)
Email: Michelle.L.Childers@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID:
BUYER:
SOLICITATION NO.:
BID OPENING DATE:
BID OPENING TIME:
FAX NUMBER:

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression of Interest or Request for Proposal is not permitted in wvOASIS.

For Request For Proposal ("RFP") Responses Only: In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus N/A convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)

- Technical
 Cost

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: October 17, 2017 at 1:30 PM EDT

Bid Opening Location: Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, 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.

9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

10. ALTERNATES: Any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

12. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

13. REGISTRATION: Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

14. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

15. PREFERENCE: Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Vendor Preference Certificate form has been attached hereto to allow Vendor to apply for the preference. Vendor's failure to submit the Vendor Preference Certificate form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

17. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.

18. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

19. NON-RESPONSIBLE: The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance.”

20. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b.”

21. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

22. INTERESTED PARTY DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$100,000, the vendor must submit to the Purchasing Division a disclosure of interested parties to the contract, prior to contract award. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. "Interested parties" means: (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors; (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract; and (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency: Provided, That subdivision (2) shall be inapplicable if a business entity is a publicly traded company: Provided, however, That subdivision (3) shall not include persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

Term Contract

Initial Contract Term: This Contract becomes effective on _____ and extends for a period of _____ year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to _____ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed _____ months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____ days.

Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days.

Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional _____ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed _____ months in total. Automatic renewal of this Contract is prohibited.

One Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

Other: See attached.

4. NOTICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.

Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

BID BOND (Construction Only): Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of _____. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. Subsequent to contract award, and prior to the insurance expiration date, 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 mandated herein, including but not limited to, policy cancelation, policy reduction, or change in insurers. The insurance coverages identified below must be maintained throughout the life of this contract. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section.

Vendor must maintain:

Commercial General Liability Insurance in at least an amount of:

Automobile Liability Insurance in at least an amount of: _____

Professional/Malpractice/Errors and Omission Insurance in at least an amount of:

Commercial Crime and Third Party Fidelity Insurance in an amount of:

Cyber Liability Insurance in an amount of: _____

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

9. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

11. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount of

_____ for _____.

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

14. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

15. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

20. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

31. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

32. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

33. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

34. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

35. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) 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; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

36. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

37. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

38. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5-22-1(i), the contracting public entity shall not award a contract for a construction project to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees. Accordingly, prior to contract award, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.

39. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts (“Other Government Entities”). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

40. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

41. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

42. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider’s employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

43. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

44. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a “substantial labor surplus area”, as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

45. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$100,000, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-award interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. "Interested parties" means: (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors; (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract; and (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency: Provided, That subdivision (2) shall be inapplicable if a business entity is a publicly traded company: Provided, however, That subdivision (3) shall not include persons or business entities performing legal services related to the negotiation or drafting of the applicable contract. The Agency shall submit a copy of the disclosure to the Ethics Commission within 15 days after receiving the supplemental disclosure of interested parties.

REQUEST FOR QUOTATION
Network Attached Storage

SPECIFICATIONS

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Educational Broadcasting Authority (WVEBA) for the one-time purchase of network attached storage.

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
 - 2.1. **“Contract Item”** means Network Attached Storage (NAS) and NAS components to be sold under this contract, as described in the attached specifications.
 - 2.2. **“Pricing Pages”** means the pages upon which Vendor should list its proposed price for the Contract Items in the manner requested. The Pricing Pages are attached hereto as Exhibit A.
 - 2.3. **“DATA DEDUPLICATION”** means a method of reducing storage needs by eliminating redundant data.
 - 2.4. **“ENTERPRISE CLASS”** means hardware is designed to operate at or near capacity 24/7 with high performance and exceptionally low failure rates. Enterprise Class hardware is designed for demanding production environments.
 - 2.5. **“GB”** means Gigabyte which is a multiple of the unit byte for digital information.
 - 2.6. **“Gb/s”** is a unit of data transfer equal to 100 megabits per seconds.
 - 2.7. **“NVRAM”** means non-volatile random-access memory.
 - 2.8. **“mSATA (Mini-SATA)”** is a low-profile interface connector that enables more effective Serial ATA (SATA) integration in small form-factor drives.
 - 2.9. **“SSD”** means solid state drive.
 - 2.10. **“SATA”** is the faster serial version of the parallel ATA (PATA) interface. Both SATA and PATA are "integrated drive electronics" (IDE) devices, which means the controller is in the drive, and only a simple circuit is required on the motherboard.
 - 2.11. **“SAS”** means serial-attached SCSI (Small Computer System Interface).
 - 2.12. **“HOT-SWAPPABLE”** - A **hot swap** is the replacement of a hard drive, CD-ROM drive, power supply, or other device with a similar device while the computer system using it remains in operation. The replacement can be because of a device failure or, for storage devices, to substitute other data.

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- 2.13. “IOPS” means input/output operations per second.
- 2.14. “RAID” (Redundant Array of Independent Disks) is a data storage virtualization technology that combines multiple physical disk drive components into a single logical unit for the purposes of data redundancy, performance improvement, or both.
- 2.15. “iSCSI” means Internet Small Computer System Interface.
- 2.16. “PCIE GEN2/GEN3” - **PCI Express** (Peripheral Component Interconnect Express), officially abbreviated as **PCIe** or **PCI-e**, is a high-speed serial computer expansion bus standard, designed to replace the older PCI, PCI-X, and AGP bus standards. Gen2 and Gen3 are newer iterations of the PCIe interface with faster throughputs.
- 2.17. “LUN” (Logical Unit Number) is a unique identifier for designating an individual or collection of physical or virtual storage devices that execute input/output commands with a host computer.
- 2.18. “JBOD” means Just a Bunch Of Disks.
- 2.19. “GLOBAL HOT SPARE” is a disk or group of disks used to automatically or manually, depending upon the **hot spare** policy, replace a failing or failed disk in a RAID configuration.
- 2.20. “CHECKSUM” is a digit representing the sum of the correct digits in a piece of stored or transmitted digital data, against which later comparisons can be made to detect errors in the data.
- 2.21. “POOL SCRUB” is an error correction technique that uses a background task to periodically inspect main memory or **pools of storage** for errors, then correct detected errors using redundant data in the form of different checksums or copies of data.
- 2.22. “SNMP” means Simple Network Management Protocol.
- 2.23. “FTP” means File Transfer Protocol.
- 2.24. “LDAP” (Lightweight Directory Access Protocol) is a software protocol for enabling anyone to locate organizations, individuals, and other resources such as files and devices in a network, whether on the public Internet or on a corporate network.
- 2.25. “NIC” means Network Interface Card.
- 2.26. “LACP” means Link Aggregation Control Protocol.
- 2.27. “DHCP” means Dynamic Host Configuration Protocol.

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- 2.28. “SMB2” means Server Message Block 2.0.
- 2.29. “SMB3” means Server Message Block 3.0.
- 2.30. “NFS V3” means Network Files System protocol version 3.
- 2.31. “NFS V4” means Network File System protocol version 4.
- 2.32. “FTPS” means File Transfer Protocol using SSL.
- 2.33. “TFTP” means Trivial File Transfer Protocol.
- 2.34. “HTTP” means HyperText Transfer Protocol.
- 2.35. “HTTPS” means HyperText Transfer Protocol using SSL.
- 2.36. “SSH” means Secure Shell.
- 2.37. “SMTP” means Simple Mail Transfer Protocol.
- 2.38. “SMSC” means Short Message Service Center.
- 2.39. “FIPS 140-2” is a U.S. government computer security standard used to approve cryptographic modules.
- 2.40. “AES” means Advanced Encryption Standard
- 2.41. “SSL” means Secure Sockets Layer.
- 2.42. “TLS” means Transport Layer Security.
- 2.43. “FXP” means File eXchange Protocol.
- 2.44. “OPENSTACK CINDER” is the open source, block-based storage component of the OpenStack platform for cloud computing.
- 2.45. “RSYNC” is a widely-used utility to keep copies of a file on two computer systems the same. It functions as both a file synchronization and file transfer program. The **rsync** algorithm, a type of delta encoding, is used to minimize network usage.
- 2.46. “ACL” means Access Control List.

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- 2.47. **“SPC-3 PERSISTENT RESERVATION”** - SCSI reservations are used to control access to a shared SCSI device such as a disk or tape drive. The mechanics of SCSI reservations are specified in the SCSI protocols. The SCSI-3 Primary Commands (SPC-3) specification provides for a modern approach to reservations known as Persistent Reservations. Persistent Reservations add the ability for the reservation to persist even if the bus is reset for error recovery.
- 2.48. **“MPIO”** means MultiPath Input / Output.
- 2.49. **“MC/S”** means
- 2.50. **“Syslog”** is a way for network devices to send event messages to a logging server – usually known as a syslog server. The syslog protocol is supported by a wide range of devices and can be used to log different types of events.

3. GENERAL REQUIREMENTS:

- 3.1. **Mandatory Contract Item Requirements:** Contract Item must meet or exceed the mandatory requirements listed below. Quantity 2: QNAP NAS – part# ES1640dc-ES-V2-96G-38ES-SAS, or equal.

- 3.1.1. **Installed Components:** must be the manufacturer and part number listed, or equal. All components must be certified by the NAS manufacturer as fully compatible with the NAS unit quoted. Each NAS must ship with the listed components installed and burn-in testing performed on the assembled unit.

- 3.1.1.1. Dual Active Controllers
- 3.1.1.2. Onboard RAM: 64 GB total. 32 GB per controller.
- 3.1.1.3. Write Cache: 32 GB total. 16 GB per controller.
- 3.1.1.4. NVRAM Cache: Two internal 128 GB mSATA SSD dedicated to NVRAM, SATA signaling (1 per controller).
- 3.1.1.5. Quantity 2: SSD Drives: Seagate 1200.2 400 GB internal SAS SSD drives, Part# ST400FM0303, or equal. These drives must:
 - 3.1.1.5.1. Be hot-swappable
 - 3.1.1.5.2. Be Solid State Drives (SSD) with a minimum of 400 GB
 - 3.1.1.5.3. Interface: Dual SAS with a minimum of 12 Gb/Sec transfer rate
 - 3.1.1.5.4. Have a minimum of 4096 bytes per sector
 - 3.1.1.5.5. Have a maximum 4KB random read / write speed of 200,000 / 120,000 IOPS minimum

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- 3.1.1.5.6. Have a maximum sequential read /write speed of 1700 / 850 MB/sec minimum
 - 3.1.1.5.7. Maintain near maximum read and write speeds even when the disk is 90% full
 - 3.1.1.5.8. Have a maximum Annualized Failure Rate (AFR) of 0.35%
 - 3.1.1.5.9. Have a minimum of a 5 year warranty covering any defects in material or workmanship
- 3.1.1.6. Quantity 3: NAS Storage Drives: 8 TB Seagate Capacity Enterprise 12 Gbps drives, Part# ST8000NM0075, or equal. These drives must:
- 3.1.1.6.1. Be hot-swappable
 - 3.1.1.6.2. Be 3.5 inch form factor Enterprise Class drives with a minimum capacity of 8 TB
 - 3.1.1.6.3. Meet SAS 12 Gb/sec specifications or better
 - 3.1.1.6.4. Have a minimum data buffer of 128 MB
 - 3.1.1.6.5. Run at a minimum of 7200 RPM
 - 3.1.1.6.6. Have a minimum of 4096 bytes per sector
 - 3.1.1.6.7. Have a max sustained transfer rate of 226 MB/sec or better
 - 3.1.1.6.8. Have maximum error rate (non-recoverable, bits read) of 1 in 10¹⁵
 - 3.1.1.6.9. Have a maximum MTBF (mean time between failure) of 2 million hours
 - 3.1.1.6.10. Have a maximum annual failure rate (AFR) of 0.44%
 - 3.1.1.6.11. Support RAID rebuild
 - 3.1.1.6.12. Have a minimum of a 5 year warranty covering any defects in material or workmanship

3.1.2. Specifications and Features: Contract Item must meet or exceed the mandatory specifications and features listed below.

3.1.2.1. NAS Unit Specifications:

- 3.1.2.1.1. Dual controllers running in an active-active high availability configuration
- 3.1.2.1.2. Dual (one per controller) Intel Xeon 6-core E5-2420 v2 processors with 15M cache, running at 2.20 GHz, or equal
- 3.1.2.1.3. Redundant hot-swappable power supplies
- 3.1.2.1.4. Dual Battery Backup Units (BPU) – one per controller
- 3.1.2.1.5. Minimum iSCSI read/write throughput of 5500/2300 MB/sec

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- 3.1.2.1.6. Minimum of 127,000 iSCSI IOPS (Input/output Operations Per Second)
- 3.1.2.1.7. Battery protected caching module for improved IOPS
- 3.1.2.1.8. Minimum of 16 hot swappable drive bays (with trays) supporting 16 x 3.5 inch SAS/SATA drives. A minimum of four of these bays must support 2.5-inch SAS/SATA SSD drives. Must support 6 Gbps or faster drives.
- 3.1.2.1.9. Scalable to a minimum of 1 Petabytes (PB): must be expandable using add-on expansion enclosures
- 3.1.2.1.10. 2 x Gigabit RJ-45 Ethernet port (1 per controller)
- 3.1.2.1.11. 4 x 10 Gb Ethernet (2 per controller) - expandable to 8 x 10 GB Ethernet by installing two optional dual-port 10 Gb cards – one per controller (only one Ethernet expansion card type is possible – either two dual 10 GB or two dual 40 GB)
- 3.1.2.1.12. 4 x 40 Gb Ethernet (2 per controller) by installing two optional dual-port 40 GB Ethernet cards – one per controller (only one Ethernet expansion card type is possible – either two dual 10 GB or two dual 40 GB)
- 3.1.2.1.13. Rack mountable in standard 19 inch racks (rack mount kits included)
- 3.1.2.1.14. Alarm buzzer for audible systems warnings
- 3.1.2.1.15. Hot swappable cooling fan
- 3.1.2.1.16. Minimum of four expansion slots:
 - 3.1.2.1.16.1. Two PCIe Slot x8 (Gen3 x8) – one per controller
 - 3.1.2.1.16.2. Two PCIe Slot x4 (Gen2 x4) – one per controller
- 3.1.2.1.17. Minimum of 4 USB 3.0/2.0 ports – two per controller
- 3.1.2.1.18. Minimum of 2 Mini-SAS ports – one per controller
- 3.1.2.1.19. Minimum of 2 RJ11 to RS-232 serial connections – one per controller
- 3.1.2.1.20. Field replaceable units (FRU):
 - 3.1.2.1.20.1. Controller
 - 3.1.2.1.20.2. Power supply
 - 3.1.2.1.20.3. Battery backup units
 - 3.1.2.1.20.4. Fan modules
- 3.1.2.1.21. A minimum of a 5 Year warranty against defects in material and workmanship.

3.1.3. Required NAS Software / Operating System Features:

3.1.3.1. Storage Management:

- 3.1.3.1.1. Storage space utilization monitoring
- 3.1.3.1.2. Flexible folder/LUN creation and expansion

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- 3.1.3.1.3. Folder/LUN thin-provisioning with space reclamation
- 3.1.3.1.4. Online Folder/LUN Expansion
- 3.1.3.1.5. Online Expansion (also via add-on expansion enclosures)
 - LUN
 - Storage pool
 - Shared folder quota

- 3.1.3.1.6. Supports Single Disk, JBOD, RAID 0, 1, 5, 6, 10, 50, 60, RAID TP, Triple Mirror
- 3.1.3.1.7. RAID recovery
- 3.1.3.1.8. Global Hot Spare
- 3.1.3.1.9. SSD read cache
- 3.1.3.1.10. NVRAM write cache with field serviceable backup battery unit
- 3.1.3.1.11. Checksum for end-to-end data integrity
- 3.1.3.1.12. Pool scrub for data verification
- 3.1.3.1.13. Scheduled backup battery learning
- 3.1.3.1.14. Space reclamation
- 3.1.3.1.15. Snapshots:
 - Shared folder/LUN
 - Snapshot clone
 - Snapshot agent for Windows VSS and VMWare, or equal
 - Snapshot manager
- 3.1.3.1.16. WORM (Write Once Read Many) for shared folders
- 3.1.3.1.17. Bad Block Scan and Hard Drive S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology)
- 3.1.3.1.18. S.M.A.R.T. predict data migration
- 3.1.3.1.19. Time-Limited Error Recovery (TLER)
- 3.1.3.1.20. Silence error detection and self-healing
- 3.1.3.1.21. Inline block level deduplication for shared folder or LUN
- 3.1.3.1.22. Inline compression for shared folder or LUN
- 3.1.3.1.23. Inline encryption for shared folder or LUN
- 3.1.3.1.24. RAID Recovery
- 3.1.3.1.25. Bitmap Support
- 3.1.3.1.26. Block-based snapshots, max of 65535
- 3.1.3.1.27. Storage expansion:
 - Via QNAP EJ-1600 series JBOD expansion units (or equal hardware compatible with quoted NAS)

REQUEST FOR QUOTATION
Network Attached Storage

- JBOD ID reinitialized
- JBOD enclosure roaming

3.1.3.2. High Availability

- 3.1.3.2.1.** Active-active/active-standby dual controller for NAS
- 3.1.3.2.2.** Active-active dual controller for JBOD expander
- 3.1.3.2.3.** Automatic hardware error detection and failover
- 3.1.3.2.4.** Automatic failback when hardware recovered
- 3.1.3.2.5.** Data port network failover
- 3.1.3.2.6.** Management port network failover
- 3.1.3.2.7.** Dual SAS link loop
- 3.1.3.2.8.** Link aggregation for network high availability
- 3.1.3.2.9.** SMB3 continuous availability
- 3.1.3.2.10.** Multipath I/O (MPIO) and Asymmetric Logical Unit Access (ALUA) for iSCSI high availability

3.1.3.3. Supported Agency Owned Clients:

- 3.1.3.3.1.** Windows Server 2008 R2, 2012, 2012 R2, 2016 DataCenter
- 3.1.3.3.2.** Windows 7, 8, 10 - (32/64-bit)
- 3.1.3.3.3.** Apple Mac OS X or higher
- 3.1.3.3.4.** Linux

3.1.3.4. Power Management:

- 3.1.3.4.1.** Wake on LAN
- 3.1.3.4.2.** Internal Hard Drive Standby Mode
- 3.1.3.4.3.** Automatic Power on after Power Recovery
- 3.1.3.4.4.** Network UPS Support with SNMP Management

3.1.3.5. Access Right Management

- 3.1.3.5.1.** Active Directory Integration for Folder Permissions
- 3.1.3.5.2.** Batch Users Creation
- 3.1.3.5.3.** Import/Export Users
- 3.1.3.5.4.** User Quota Management

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- 3.1.3.5.5.** Local User Access Control for SMB and FTP
- 3.1.3.5.6.** Subfolder Permissions Support for SMB and FTP

3.1.3.6. Domain Authentication Integration:

- 3.1.3.6.1.** Microsoft Active Directory (AD) integration
- 3.1.3.6.2.** LDAP Client
- 3.1.3.6.3.** Domain Users Login via SMB and FTP

3.1.3.7. Administration:

- 3.1.3.7.1.** Toolbar and Dashboard for display of System Status
- 3.1.3.7.2.** Fan Control
- 3.1.3.7.3.** SNMP (v2 & v3)
- 3.1.3.7.4.** Resource Monitor
- 3.1.3.7.5.** Network Recycle Bin for File Deletion via SMB
- 3.1.3.7.6.** Comprehensive Logs (Events & Connection)
- 3.1.3.7.7.** Syslog Client
- 3.1.3.7.8.** Firmware Live Update
- 3.1.3.7.9.** System Settings Backup and Restore
- 3.1.3.7.10.** Restore to Factory Default
- 3.1.3.7.11.** Command Line Interface (CLI)
- 3.1.3.7.12.** Mobile App for Remote Monitoring

3.1.3.8. Networking:

- 3.1.3.8.1.** TCP/IP (IPv4 & IPv6)
- 3.1.3.8.2.** 10 / 40 Gigabit NICs
 - Jumbo frame
 - LACP, load balance, failover, round robin
- 3.1.3.8.3.** Optional Dual-port 10 GbE and 40 GbE Network Expansion Cards
- 3.1.3.8.4.** Support for 40 GbE Network Adapter Card
- 3.1.3.8.5.** Service Binding Based on Network Interfaces
- 3.1.3.8.6.** Proxy Client, Proxy Server
- 3.1.3.8.7.** DHCP Client
- 3.1.3.8.8.** Protocols: SMB2/SMB3, NFS v3/NFS v4, FTP, FTPS, TFTP, HTTP, HTTPS, SSH, iSCSI, SNMP, SMTP, and SMSC
- 3.1.3.8.9.** Bonjour Discovery

REQUEST FOR QUOTATION
Network Attached Storage

3.1.3.9. File Server:

- 3.1.3.9.1.** File Sharing across Windows, Mac, and Linux
- 3.1.3.9.2.** Shared folder for SMB, NFS and FTP
- 3.1.3.9.3.** Windows ACL
- 3.1.3.9.4.** Advanced folder permissions for SMB, FTP

3.1.3.10. Security:

- 3.1.3.10.1.** Network access protection with auto-blocking: SSH, HTTP(S), FTP, SMB
- 3.1.3.10.2.** SMB host access control for shared folders
- 3.1.3.10.3.** FIPS 140-2 validated AES 256-bit shared folder and LUN data encryption
- 3.1.3.10.4.** Can import SSL certificates

3.1.3.11. File Station (or equivalent or better utility):

- 3.1.3.11.1.** Share download and upload links
- 3.1.3.11.2.** Share to other NAS users
- 3.1.3.11.3.** Drag-n-drop Files via Chrome and Firefox Browsers
- 3.1.3.11.4.** Create and send download links to share public files with expiration date and password protection
- 3.1.3.11.5.** File Compression using ZIP and/or 7z
- 3.1.3.11.6.** Mobile App for File Browsing and Management

3.1.3.12. FTP Server:

- 3.1.3.12.1.** FTP over SSL/TLS
- 3.1.3.12.2.** Passive FTP Port Range Control
- 3.1.3.12.3.** Supports FXP

3.1.3.13. Cloud - OpenStack Cinder driver

3.1.3.14. Backup Station or equal

- 3.1.3.14.1.** Remote Replication Server (over Rsync)
- 3.1.3.14.2.** Snapshot support for Rsync
- 3.1.3.14.3.** Remote Replication over SnapSync or equal
- 3.1.3.14.4.** Compression, deduplication, and transfer rate limitation over SnapSync or equal
- 3.1.3.14.5.** Backup Windows desktops with QNAP NetBak Replicator or equal
- 3.1.3.14.6.** Scheduled Backup
- 3.1.3.14.7.** Third Party Backup Software Support for Veeam Backup & Replication, Acronis True Image, ARCserve Backup, EMC Retrospect, Symantec

REQUEST FOR QUOTATION
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Backup Exec, or any software of equal capability

3.1.3.15. iSCSI (IP SAN):

- 3.1.3.15.1. iSCSI Target
- 3.1.3.15.2. Multi-LUNs per Target
- 3.1.3.15.3. Up to 255 Targets/LUNs Combined
- 3.1.3.15.4. Supports LUN Mapping
- 3.1.3.15.5. Host ACL access
- 3.1.3.15.6. Thin-provisioned LUN with Space Reclamation supported
- 3.1.3.15.7. Online LUN Capacity Expansion
- 3.1.3.15.8. Supports SPC-3 Persistent Reservation
- 3.1.3.15.9. Supports MPIO & MC/S
- 3.1.3.15.10. iSCSI LUN snapshot and replication

3.1.3.16. Server Virtualization and Clustering Support:

- 3.1.3.16.1. VMWare vSphere (ESX/ESXi 5.5, 6.0), or equal
- 3.1.3.16.2. VMWare block VAAI, or equal
 - Thin provisioning with space reclamation
 - HW assist (Hardware assisted virtualization) locking
 - Full copy
 - Block zero
- 3.1.3.16.3. VMWare NAS VAAI, or equal
 - Space reserve
 - Native snapshot or linked clones
 - File cloning
 - Extended stats
- 3.1.3.16.4. vSphere client and web client plug-in, or equal
- 3.1.3.16.5. Citrix XenServer (6.2), or equal
- 3.1.3.16.6. Windows Server 2016 DataCenter Hyper-V, or equal
- 3.1.3.16.7. Supports Microsoft ODX, or equal
- 3.1.3.16.8. SMI-S provider for Microsoft SCVMM, or equal
- 3.1.3.16.9. VSS hardware provider, or equal
- 3.1.3.16.10. Snapshot agent for VMWare, or equal
- 3.1.3.16.11. Snapshot agent for Windows, or equal

4. CONTRACT AWARD:

4.1. Contract Award: The Contract is intended to provide the WVEBA with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on the Pricing Page.

REQUEST FOR QUOTATION
Network Attached Storage

4.1.1. Vendor should provide with their bid a copy of any and all Software Terms and Conditions or licenses that the State of West Virginia or the Agency will have to agree to or accept as a part of this solicitation. **This information will be required before Purchase Order is issued.**

4.1.2. Vendor should include a copy of any Maintenance Terms and Conditions or Licenses that the State of West Virginia or the Agency will be required to agree to and accept as a part of this solicitation. **This information will be required before Purchase Order is issued.**

4.2. Pricing Page: Vendor should complete the Pricing Page (Exhibit A) by entering the total price for the system (including delivery) The Vendor must complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in the Vendor's bid being disqualified.

Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

Vendor must submit Brand including Model Numbers of equipment they are submitting with their submitted Exhibit "A" response. This information must be submitted with their bid submission.

Vendor should provide product brochures with their submitted bid response. This information may be required before award of contract.

Vendors who wish to respond to a Centralized Request for Quotation (CRFQ) online may submit information through the State's wvOASIS Vendor Self-Serve (VSS) system. Vendors should download the Exhibit "A" Price Page that is attached to this to the CRFQ and published to the VSS. Vendors must complete this form with their price information as well as Brand and Model of equipment being submitted and include as an Attachment with their online response.

If unable to respond online the Vendor must submit the Exhibit "A" Price Page with their submitted bid response prior to the scheduled bid opening date.

Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

5. Payment: Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

6. DELIVERY AND RETURN:

6.1. Shipment and Delivery: Vendor shall ship the Contract Items immediately after being awarded

REQUEST FOR QUOTATION
Network Attached Storage

this Contract and receiving a purchase order or notice to proceed. Vendor shall deliver the Contract Items within 15 working days after receiving a purchase order or notice to proceed. Contract Items must be delivered to the following address: WV Educational Broadcasting Authority, 124 Industrial Park Rd., Beaver, WV 25813.

- 6.2. Late Delivery:** The WVEBA must be notified in writing if the shipment of the Contract Items will be delayed for any reason. Any delay in delivery that could cause harm to the WVEBA will be grounds for cancellation of the Contract, and/or obtaining the Contract Items from a third party.
- 6.3. Delivery Payment/Risk of Loss:** Vendor shall deliver the Contract Items F.O.B. destination to the WVEBA's location.
- 6.4. Return of Unacceptable Items:** If the WVEBA deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse the WVEBA for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the WVEBA with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the WVEBA's location. The returned product shall either be replaced, or the WVEBA shall receive a full credit or refund for the purchase price, at the WVEBA's discretion.
- 6.5. Return Due to WVEBA Error:** Items ordered in error by the WVEBA will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- 7.1.** The following shall be considered a vendor default under this Contract.
- 7.1.1.** Failure to provide Contract Items in accordance with the requirements contained herein.
 - 7.1.2.** Failure to comply with other specifications and requirements contained herein.
 - 7.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Items provided under this Contract.
 - 7.1.4.** Failure to remedy deficient performance upon request.
- 7.2.** The following remedies shall be available to the WVEBA upon default.
- 7.2.1.** Immediate cancellation of the Contract.

REQUEST FOR QUOTATION
Network Attached Storage

- 7.2.2. Immediate cancellation of one or more release orders issued under this Contract.
- 7.2.3. Any other remedies available in law or equity.

8. MISCELLANEOUS:

8.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Len MacBain
Telephone Number: 888 995-0880
Fax Number: 810 454-1839
Email Address: rfx@aagean.com

Exhibit "A" Pricing Sheet
 Educational Broadcast Authority
 Network Attached Storage

Item	Part Number	Description	Alternate Brand of Equipment Bid	Alternate Part Number Bid	Unit of Measure	Qty	Unit Cost	Extended Cost
3.1	QNAP NAS – part# ES1640dc-ES-V2-96G-38ES-SAS	Backup Hardware and Software System - all components installed and freight charges included			Each	2	14,941.59	29,883.19
							TOTAL BID AMOUNT	29,883.19

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.

Len MacBain, CEO

(Name, Title)

(Printed Name and Title)
27 Glen Street, Unit 2G, Stoughton, MA 02072

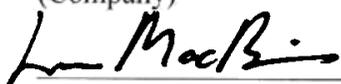
(Address)
888 995-0880 / 810 454-1839

(Phone Number) / (Fax Number)
rfx@aagean.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation 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 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 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.

Aagean

(Company)
 **Len MacBain, CEO**

(Authorized Signature) (Representative Name, Title)

Len MacBain, CEO

(Printed Name and Title of Authorized Representative)

October 17, 2017

(Date)

888 995-0880 / 810 454-1839

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

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)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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.

 Aagean

Company



Authorized Signature

 October 17, 2017

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

West Virginia Ethics Commission



Disclosure of Interested Parties to Contracts

Pursuant to W. Va. Code § 6D-1-2, a state agency may not enter into a contract, or a series of related contracts, that has/have an actual or estimated value of \$100,000 or more until the business entity submits to the contracting state agency a Disclosure of Interested Parties to the applicable contract. In addition, the business entity awarded a contract is obligated to submit a supplemental Disclosure of Interested Parties reflecting any new or differing interested parties to the contract within 30 days following the completion or termination of the applicable contract.

For purposes of complying with these requirements, the following definitions apply:

"Business entity" means any entity recognized by law through which business is conducted, including a sole proprietorship, partnership or corporation.

"Interested party" or "Interested parties" means:

- (1) A business entity performing work or service pursuant to, or in furtherance of, the applicable contract, including specifically sub-contractors;
- (2) the person(s) who have an ownership interest equal to or greater than 25% in the business entity performing work or service pursuant to, or in furtherance of, the applicable contract. (This subdivision does not apply to a publicly traded company); and
- (3) the person or business entity, if any, that served as a compensated broker or intermediary to actively facilitate the applicable contract or negotiated the terms of the applicable contract with the state agency. (This subdivision does not apply to persons or business entities performing legal services related to the negotiation or drafting of the applicable contract.)

"State agency" means a board, commission, office, department or other agency in the executive, judicial or legislative branch of state government, including publicly funded institutions of higher education: Provided, that for purposes of W. Va. Code § 6D-1-2, the West Virginia Investment Management Board shall not be deemed a state agency nor subject to the requirements of that provision.

The contracting business entity must complete this form and submit it to the contracting state agency prior to contract award and to complete another form within 30 days of contract completion or termination.

This form was created by the State of West Virginia Ethics Commission, 210 Brooks Street, Suite 300, Charleston, WV 25301-1804. Telephone: (304)558-0664; fax: (304)558-2169; e-mail: ethics@wv.gov; website: www.ethics.wv.gov.

West Virginia Ethics Commission

Disclosure of Interested Parties to Contracts

Contracting business entity: _____

Address: _____

Contracting business entity's authorized agent: _____

Address: _____

Number or title of contract: _____

Type or description of contract: _____

Governmental agency awarding contract: _____

Names of each Interested Party to the contract known or reasonably anticipated by the contracting business entity (*attach additional pages if necessary*):

Signature: _____ Date Signed: _____

Check here if this is a Supplemental Disclosure.

Verification

State of _____, County of _____:

I, _____, the authorized agent of the contracting business entity listed above, being duly sworn, acknowledges that the Disclosure herein is being made under oath and under the penalty of perjury.

Taken, sworn to and subscribed before me this _____ day of _____, _____.

Notary Public's Signature

To be completed by State Agency:

Date Received by State Agency: _____

Date submitted to Ethics Commission: _____

Governmental agency submitting Disclosure: _____

State of West Virginia
VENDOR PREFERENCE CERTIFICATE

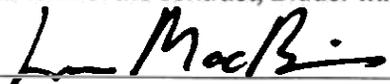
Certification and application is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
 Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,
2. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,
3. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,
4. **Application is made for 5% vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,
5. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,
6. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
 Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Aagean Signed: 
Date: October 17, 2017 Title: CEO

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

QNAP ES1640dc-E5-v2- 96G 16-Bay Rackmount NAS Diskless

SKU: ES1640dc-E5-v2-96G-DLS



ES1640dc-E5-v2

16-Bay Rackmount

ES Sneak Peek

Intel Xeon E5-2420 v2 Series

Processor Active-Active HA dual controller

QES Enterprise Operating System

ZFS (Zettabyte File System) File system 40GbE Ready

HPE Helion Support

Block-level SnapSync for disaster recovery NVRAM w/Cope-to-Flash

Why ES NAS

The Challenges Enterprise Face Today

Platform virtualization that was once only possible on expensive mainframes has become an indispensable core technology for enterprise IT

Using OpenStack to build a private cloud has become a recent trend in corporate IT architecture

Dilemma of high-cost SSD and high-capacity NL-SAS

The pursuit of uninterrupted operation and high data availability

Enterprises spend massive amounts of money to build out baseline architecture suitable for a VDI deployment



Active-Active HA Dual controller

What is ES NAS

Built for Business-critical Applications

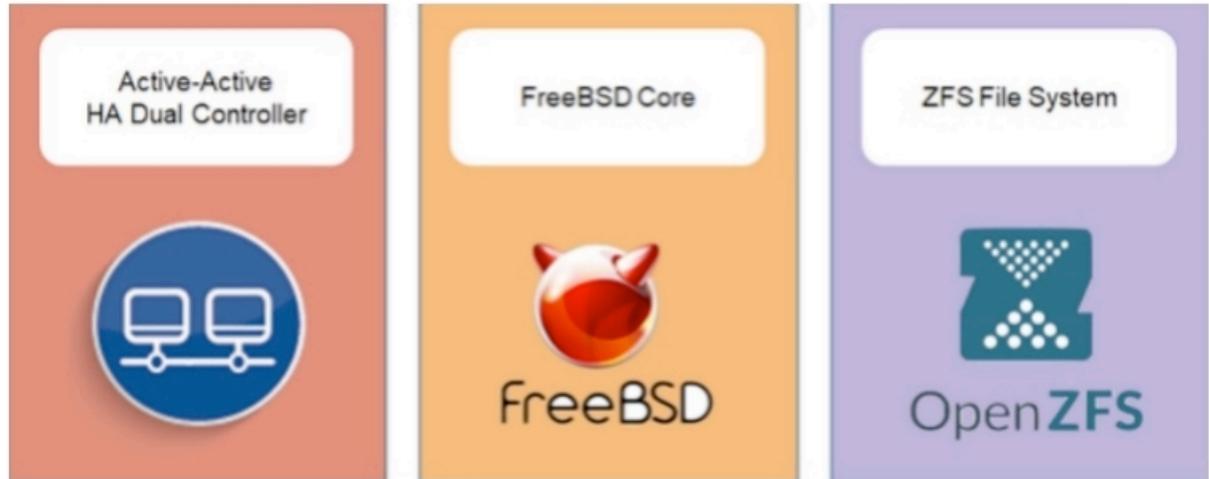
The Enterprise ZFS NAS, featuring the brand-new QES (QNAP Enterprise System) operating system. Both the software and hardware architecture were built from the ground up to completely support virtualization environments. It is easy to use, has a low learning curve, and the fastest deployment speed.

Overview of QNAP Enterprise ZFS NAS and the QES operating systems

	QES QNAP Enterprise System	QTS QNAP Turbo NAS System
Hardware platform	Enterprise ZFS NAS ES series NAS	QNAP Turbo NAS TS / TVS / TAS / TDS series
Operating system kernel	FreeBSD	Linux
File system	ZFS	Ext4
myQNAPcloud	Yes	Yes

Virtualization Station	No	Yes
Container Station	No	Yes
Dual active controller	Yes	No
NVRAM (Write to cache)	Yes	No
40G Ethernet network	Yes	Yes
Intel Quick Assist	No	Yes
Snapshot upper limit	65536	1024
Single LUN snapshot upper limit	65536	1024
Deduplication	Yes	No
Real time data compression	Yes	No
End-to-End Data Integrity	Yes	No
Application consistency	Snapshot Agent VSS Hardware Provider (QNAP NetBak Replicator)	Snapshot Agent VSS Hardware Provider (QNAP NetBak Replicator)
Remote disaster backup and recovery	SnapSync	Snapshot Replica

Essentials of QNAP ES



4 Reasons Why ZFS Rocks

Copy-on-write:

This technique ensures that data is always consistent on the disk, when data is changed it is not overwritten — it is always written to a new block and checksummed before pointers to the data are changed.

Data Integrity:

The file system uses a 256-bit checksum, which is stored as metadata, can detect phantom writes, misdirected reads and writes, DMA parity errors, driver bugs and accidental overwrites

Data Self-healing:

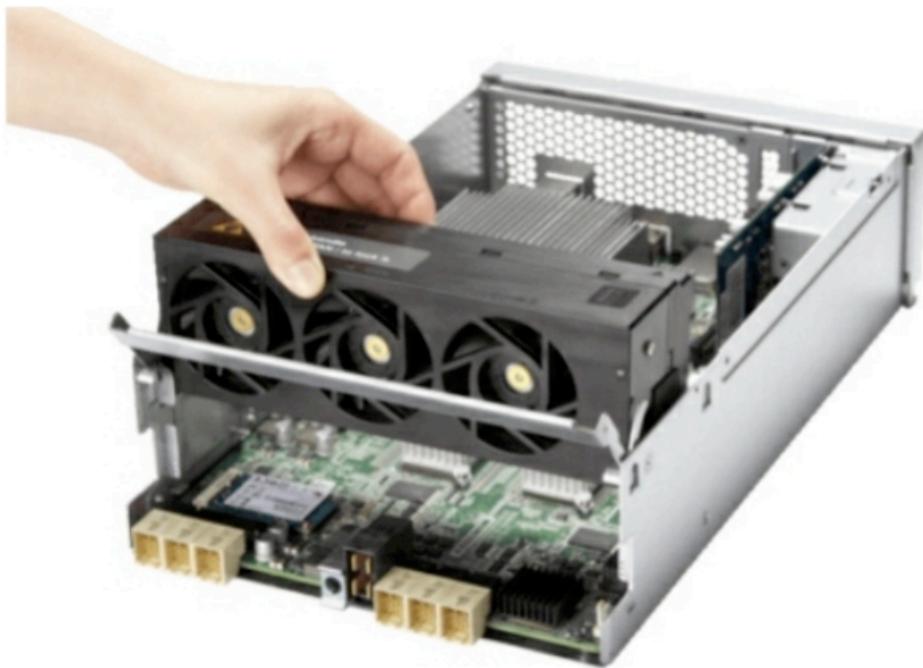
ZFS's near bullet-proof data integrity provides self-healing feature that can repair silent data corruption which occurs in mirrored volumes.

RAIDZ:

RAIDZ gets around “write hole” issue by using a variable width stripe, so every write is effectively a full stripe write. This, together with ZFS's copy on write characteristic, eliminates the RAID 5 write hole completely

Warranty and SimplyNAS Replacement Services (SRS):

Field-replaceable Unit (FRU) applies not only to the controllers but also to the cooling fans, power supplies, and the BBU battery pack for CF2 (Copy-to-Flash), providing a cost-effective way to maintain complex system



SPECIFICATION

CPU	Intel Xeon E5-2400 v2 family processor Intel Xeon 6-core Processor E5-2420 v2 (15M Cache, 2.20GHz)
Memory	System memory: DDR3 RDIMM Total memory slots: 6 (Dual controllers; 2 x main memory DIMM and 1 x write cache DIMM for NVRAM for each controller.) 32GB for main memory DIMM and 16GB write cache DIMM per controller.
Flash Memory	2 GB DOM
USB	2 x USB 3.0/2.0 port
Hard Drive	16 x 3.5"/2.5" SAS 6Gbps hard drive (compatible with SAS 12Gbps hard drive), or 2.5" SAS SSD
Maximized Raw Capacity	128TB (Configuration: 16 x 8TB hard drives)
Hard Drive Interface	SAS 6Gb/s
10/100/1000 Mbps LAN Port	1 for each controller (for remote management)
10Gbps LAN Port	2 x RJ45, Intel X540-BT2 for each controller
PCIe Slot	PCIe Slot x8 (Gen2 x8): reserved for 40GbE or 10GbE LAN card PCIe Slot x4 (Gen2 x4): reserved for dual path Mini-SAS
Cache	mSATA SSD dedicated to NVRAM, SATA signaling
Form Factor	3U rackmount
Dimension	618(D) x 446.2(W) x 132(H) mm (excluding front grips)
Weight	Net weight (NAS only): 26.75 kg / 58.97 lb Gross weight (with packing and accessories): 36.94 kg / 81.44 lb
Sound Level	Sound pressure (LpAm) (bystander position): 66.1dB
Power Consumption	Sleep mode: 314.86 W In operation: 501.40 W
Power Supply	770 W (Redundancy for fault tolerance)
Fan	Hot-swappable fan module (60*60*38mm; 16000RPM/12v/2.8A x 3)

**Electro-Magnetic
Compatibility (EMC)**

- FCC Class A (USA only)
- CE Mark (EN55022 Class A, EN55024

SAFETY Standard

- EN60950
- BSMI
- VCCI
- CB
- LVD



Front

1.Hard Drive Tray

2.Hard Drive LED Indicators

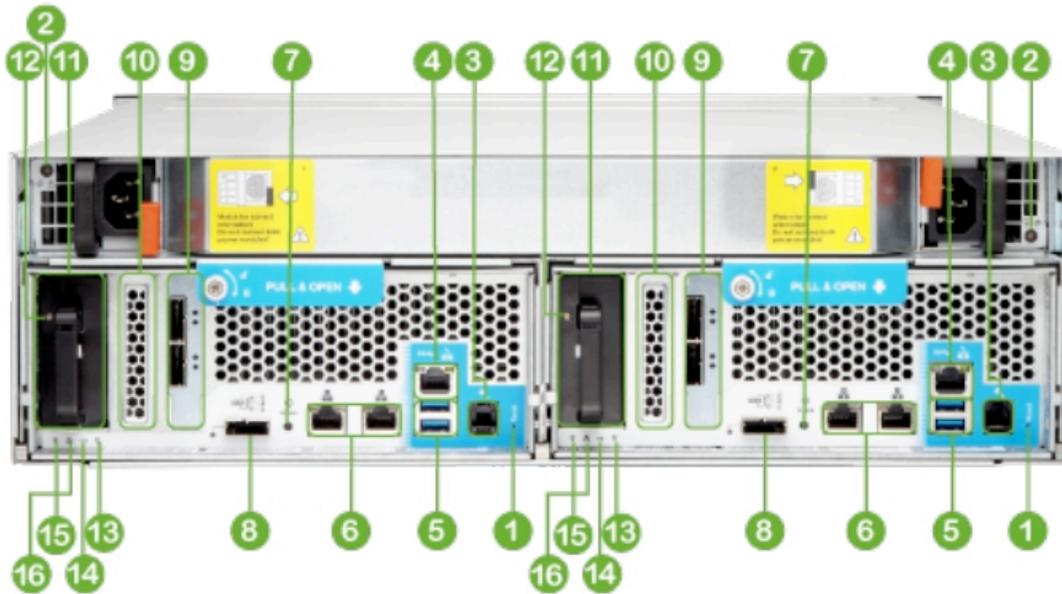
3.Power On Button

LED Indicators

System Power LED (Blue): on/off

System Status (Green/ Red): in operation, system errors, low power, degraded RAID mode, memory failure, fan/power supply

4.failure, system/disk temperature too high, storage pool reaching threshold value, system performing take-over, power supply unit unplugged
LCD Status Display (Two-digit number): Status of JBOD connection



Rear

- | | |
|--|---|
| <p>1. Password & Network Settings Reset Button</p> <p>2. Power Supply LED (Green/ Orange)</p> <p>3. RJ11 to RS-232 serial</p> <p>4. 1GbE Management Port</p> <p>5. 2 x USB 3.0/2.0 Port</p> <p>6. 2 x 10GbE (RJ45) Port</p> <p>7. Power Button</p> <p>8. Reserved Mini-SAS Port (SFF-8088)</p> | <p>9. PCIe Gen2 x4 Slot, with dual path Mini-SAS (SFF-8088) expansion card on board</p> <p>10. PCIe Gen3 x8 Slot, reserved for 40GbE LAN card</p> <p>11. BBU</p> <p>12. BBU Status Light (Green/ Red/ Orange)</p> <p>13. Controller Status Light (Green/ Orange)</p> <p>14. Fan Status Light (Green/ Orange)</p> <p>15. Battery Status Light (Green/ Orange)</p> <p>16. High Availability LED (Green/ Orange)</p> |
|--|---|

Remark:

The Enterprise ZFS NAS rack mount models comply with ANSI/EIA-RS-310-D rack mounting standards. Before purchasing the server racks for these models, please make sure the server racks conform to the following criteria:

1. Rack size

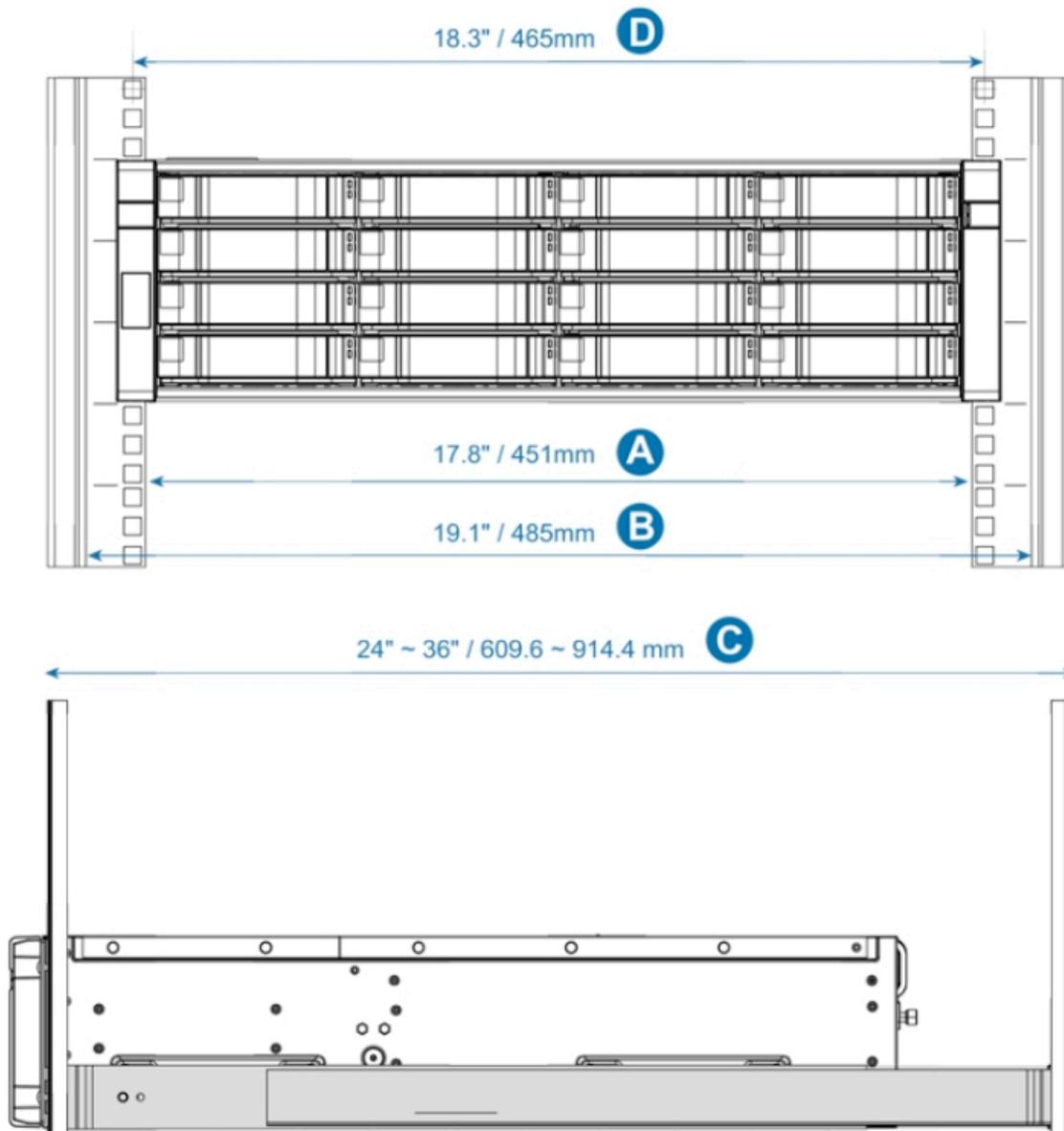
Mounting post width: \geq

451mm Panel width: \geq

485mm

Mounting post depth: 609.6mm~914.4mm

The distance between two rack posts is 465mm (center-to-center measurement of the rack's square holes)



2. The optional rack kits for the Enterprise ZFS NAS rack mount models are compatible with both square-hole and round-hole server racks.



Designs and specifications are subject to change without notice.



Operating System	High Availability
QES 1.1 (based on FreeBSD)	Active-Active/Active-Standby dual controller for NAS Active-Active dual controller for JBOD expander Automatically hardware error detection and failover Automatically fallback when hardware recovered Data port network failover Management port network failover Near zero downtime high availability Dual SAS link loop MPIO and ALUA for iSCSI high availability Link aggregation for network high availability Support SMB3 Continuous Availability (CA)
Supported Client OS	Power Management
Windows 7 (32/64-bit), Windows 8 (32/64-bit), Windows 10 (32/64-bit), Windows Server 2008 R2/2012/2012R2 Apple Mac OS X Linux & UNIX	Wake on LAN Internal hard drive standby mode Automatic power on after power recovery Network UPS support with SNMP management
Supported Browsers	Access Right Management
Microsoft Internet Explorer 10+ Mozilla Firefox 8+ Apple Safari 4+ Google Chrome	Batch users creation Import/Export users User quota management Local user access control for CIFS/SMB and FTP Subfolder permissions support for CIFS/SMB, FTP, and File Station
Multilingual Support	Domain Authentication Integration
Chinese (Traditional & Simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Russian, Spanish, Swedish, Thai, Turkish	Microsoft Active Directory support LDAP client Domain users login via CIFS/SMB, FTP, and File Station
File System	Administration
ZFS	Multi-window, multi-tasking based system management Movable Icons and personalized desktop Smart toolbar and dashboard for neat system status display Smart fan Control SNMP (v2 & v3) Resource monitor Network recycle bin for file deletion via CIFS/SMB and File Station Automatic Cleanup File Type Filter Comprehensive logs (events & connection) Syslog client System settings backup and restore Restore to factory default Command Line Interface (CLI)

Networking	File Server
TCP/IP (IPv4 & IPv6)	Shared folder for CIFS/SMB, NFS and FTP
10 Gigabit NICs with jumbo frame (LACP, Load Balance, Failover, Round Robin)	File sharing across Windows, Mac, and Linux/UNIX
Service binding based on network interfaces	Windows ACL
Proxy client	
DHCP client	
Protocols: CIFS/SMB2/SMB3, NFS v3/NFS v4, FTP, FTPS, TFTP, HTTP, HTTPS, SSH, iSCSI, SNMP, SMTP, and SMSC	
Bonjour Discovery	
Security	FTP Server
Network access protection with auto-blocking: SSH, HTTP(S), FTP, CIFS/SMB	FTP over SSL/TLS (Explicit)
CIFS/SMB host access control for shared folders	FXP support
FIPS 140-2 validated AES 256-bit volume-based and shared folder data encryption	Passive ftp port range control
Importable SSL certificates	
Instant alert via E-mail, SMS, beep	
Storage Management	Backup Station
Storage space utilization monitoring	Remote replication server over Rsync
Storage pool with RAID 0, 1, 5, 6, 10, 50, 60, RAID TP, triple Mirror	Remote replication server over Snapsync
Global hot spare	Scheduled backup
SSD read cache	Snapshot support for Rsync
NVRAM write cache (BBU-protected)	Compression, Dedup, and transfer rate limitation over Snapsync
Scheduled Backup Battery Unit (BBU) learning	Desktop backup with QNAP NetBak Replicator for Windows
Supports share folder/LUN with thin provisioning	Third party backup software support: Veeam backup & replication, Acronis True Image, Arcserve backup, emc retrospect, Symantec Backup Exec, etc.
Supports LUN with instant provisioning	
Supports share folder quota	
Supports space reclaim	
Supports snapshots	
Supports Shared Folder/LUN snapshot Snapshot manager	
Snapshot clone Snapshot agent for Windows VSS and VMware	
Support inline deduplication for Shared Folder/LUN	
Support inline compression for Shared Folder/LUN	
Support inline encryption for Shared Folder/LUN	
Support WORM (Write Once Read Many) for Shared Folder	
Online LUN expansion	
Online Share Folder quota expansion	
Online storage pool expansion	
Hard drive S.M.A.R.T.	
SMART predict data migration	
Time-Limited Error Recovery (TLER)	
Storage expansion via QNAP EJ-1600 series expansion units*	
JBOD ID Reinitialized	
JBOD enclosure roaming	
RAID recovery	
Checksum for end-to-end data integrity	
Silence error detection and self-healing	
Pool scrub for data verification	
Designs and specifications are subject to change without notice.	

Seagate Hard Drives

Different hard drives require different approaches, which describes Seagate hard drives that focus on the Enterprise Performance and Capacity markets. The choices below take into consideration different requirements:

- With the Enterprise Capacity 3.5. HDD, the ST8000NM0075 provides eight terabyte capacity and advanced cache writing.
- Six terabyte capacity with the ST6000NM0024 helps ensure that applications related to bulk-data are handled in a prompt and efficient manner.
- Choosing the ST6000NM0034 also provides for six terabytes, offering dual interface ports and a maximum sustained transfer rate OD of up to 226 megabytes per second.
- The ST4000NM0055 brings with it four terabyte capacity with an MTBF of 2 million hours and provides spindle speed performance of 7200.
- One more four terabyte-capable hard drive is the ST4000NM0034, which is like its fellow hard drives in offering ramp load technology and a reduced consumption of power.
- While the capacity of the ST2000NM0024 is only two terabytes, it does offer consistency in operation, thanks to its rotational vibration tolerance.
- Another two-terabyte model, the ST2000NM0055, offers a 512n SATA format which allows for rapid storage of data.
- With the Helium models, the ST10000NM0016 has 10-terabyte capacity, yet is light enough and uses a minimum amount of power that makes it invaluable when it comes to rack space efficiency.
- For the Archive Hard Drives, the ST8000AS0002 offers a sustainable transfer rate of 190 megabytes per second and has 1.33TB-per-disk hard drive technology in place.

