

THE UNIVERSITY OF NORTHERN IOWA
Q8775

SECTION I
PROPOSAL INFORMATION AND INSTRUCTIONS

1.0 **Introduction** The University of Northern Iowa is seeking bids for a dedicated computer cluster to be used for high-performance computing applications.

All questions and comments in reference to this Request for Proposal must be directed to:

Jon Westhoff
Purchasing Agent
103 Gilchrist Hall
University of Northern Iowa
Cedar Falls, IA 50614-0008
Telephone 319-273-6246
jon.westhoff@hotmail.com

1.1 **Parties to the Purchase** Bidders must identify all parties who will be involved with performance of the purchase. By submitting a proposal, the bidder warrants that all parties to the contract have received a copy of this RFP and that the bidders' response is acceptable to these parties.

1.2 Each Company, by submitting a proposal, acknowledges its representative has:

1.2.1 Read and completely understood the proposed Purchase Documents contained in this RFP. The Purchase Documents shall consist of this RFP (Proposal Information and Instructions, Terms and Conditions of the Purchase, Scope of Work, Proposal Content, Form of Bid, and all exhibits and attachments), any subsequent Addenda issued by UNI, Bidders response to this RFP, and any agreement that results from this RFP.

1.2.2 Based their proposal upon the requirements described in the proposed Purchase Documents.

1.3 **Receipt and Opening of Proposals**

1.3.1 **Proposals must be received in the UNI Office of Business Operations, 103 Gilchrist Hall, Cedar Falls, Iowa 50614-0008, by 3:00 P.M., central time, on November 17, 2009.** Any proposal received after the time specified for the receipt of proposals may not be considered and may be returned unopened to the sender as non-responsive. One (1) original and one (1) copy of the bid are to be submitted to UNI Purchasing Services in response to this RFP.

1.3.2 UNI reserves the right to accept or reject any or all proposals and to waive any irregularities, technicalities, or informalities in proposals if such waiver does not substantially change the offer or provide a competitive advantage to any Company. UNI reserves the right to request additional documents or proposal clarifications after the due date and time for proposal submission.

1.3.3 Company's legally authorized representative shall sign the proposal. The official name, address, telephone, and fax number and e-mail addresses are to be stated on the proposal form.

1.3.4 No responsibility will be attached to any person for premature opening of a proposal not properly identified.

1.3.5 The laws of the State of Iowa require the contents of all proposals be placed in the public domain and be open to inspection by interested parties. Trade secrets or proprietary information that are recognized as such and are

protected by law may be withheld, if clearly identified as such in the proposal. Proposals marked entirely confidential or proprietary may be rejected. Pricing information and other offers cannot be considered proprietary information.

Failure to list all proprietary sections of the submitted proposal in the space provided shall relieve UNI personnel from any responsibility, should such information be viewed by the public, a competitor, or be in any way accidentally released.

1.3.6 All opened proposals become the property of UNI and will not be returned to the offeror.

1.3.7 Prior to the date and time designated for receipt of proposals, proposals submitted early shall be withdrawn only by written notice to UNI. Such notice shall be received by UNI prior to the designated date and time for receipt of proposals.

1.3.8 Withdrawn proposals may be resubmitted up to the time designated provided that they are then fully in conformance with these Proposal Instructions and Conditions.

1.3.9 No proposal may be modified or withdrawn for a period of ninety (90) calendar days after the scheduled closing time for receipt of proposals.

1.3.10 All erasures or corrections are to be initialed by the person(s) signing the proposal.

1.3.11 Failure to comply with the requirements of this RFP or evidence of unfair bidding procedures may be cause for rejection of the proposal. Failure to supply information requested may also be cause for rejection of the RFP as being non-responsive.

1.3.12 This Request for Proposal does not commit UNI to make an award, nor will UNI pay any costs incurred in the preparation and submission of proposals, costs incurred in making necessary studies for the preparation of proposals, or any travel or personnel expenses associated with trips to UNI.

1.4 Addenda Any and all interpretations, corrections, revisions, and amendments shall be issued by UNI Purchasing Services to all known holders of the Proposal Documents in the form of written addenda.

1.5 Proposal Obligations The Contractual Agreement (Agreement) shall incorporate the selected Company's proposal, including any clarification to the proposal(s) requested by UNI and submitted by selected Company, except as amended by mutual agreement. The Agreement shall form the contractual obligation of UNI and the selected Company.

1.6 Exceptions to Purchase Documents Company shall clearly state in the submitted proposal any exceptions to, or deviations from the Scope of work (Section III), and any exceptions to the provisions, terms, and conditions of this RFP included in Section I and terms and conditions of the potential agreement described in Section II. Such exceptions or deviations will be considered in evaluating the proposals. Any exceptions should be noted on Attachment A and returned with the submitted proposal. Companies are cautioned that exceptions taken to this RFP may cause their proposal to be rejected at the sole discretion of UNI.

1.7 Qualification of Company UNI shall make such investigations as deemed necessary to determine the ability of Company to provide the expected goods or services. UNI reserves the right to reject any proposal if the evidence submitted by, or investigation of, such Company fails to satisfy UNI, in its sole opinion, that said Company is properly qualified to carry out the obligations specified herein.

SECTION II TERMS AND CONDITIONS

2.1 Definitions

The University The University is the University of Northern Iowa (UNI). The term University means the University or the University's authorized representative.

The Company The Company is the person or organization to which the University will issue a contract purchase order, when/if award of this Request for Proposal is made. The term Company means the Company or the Company's authorized representative.

The following conditions will apply to any contract awarded as a result of this RFP:

2.2 Assignment This contract may not be assigned or transferred by either party without the prior written consent of the other party.

2.3 Non-appropriation of Funds Notwithstanding other provisions of any award resulting from this RFP, if funds anticipated for the fulfillment of this agreement are at any time not forthcoming or insufficient, either through the failure of the Iowa Legislature or the federal government to provide funds or the program under which funds were provided is altered, then UNI shall have the right to terminate this agreement without penalty by giving not less than thirty (30) days written notice documenting the lack of funding or program change.

2.4 Immunity from Liability Every person who is a party to this Agreement is hereby notified and agrees that UNI, and its agents, successors, and assigns are immune from liability and suit for or from Company's activities involving third parties and arising from this Agreement.

2.5 Indemnification To the extent permitted by Iowa law, University hereby agrees to indemnify, protect and hold harmless Company, its officers, directors, shareholders, employees, and agents, and each of them, in their corporate and individual capacities, from any expense, liability or damage any of them may incur, including as a result of claims, demands, costs, awards or judgments of any kind or nature, by anyone whomsoever, arising out of or otherwise connected with this Agreement, provide such claims are due to the negligent acts of University. Company agrees to defend, indemnify and hold harmless the State of Iowa, University of Northern Iowa, its Board of Regents, faculty, students, employees and agents from all liability, injuries, claims or damages (including claims of bodily injury or property damage) and loss, including costs, expenses, and attorneys' fees, which arise from it's operations or the negligent acts of Company, its officers, directors, employees, and agents under this Agreement.

2.6 Code of Fair Practice Company shall not discriminate against any employee or applicant for employment because of race, color, religion, sexual orientation, gender identification, marital status, national origin, sex, age, or physical or mental disability, or status as a US veteran. Company shall take affirmative action to ensure that applicants are employed and that the employees are treated during employment without regard to their race, creed, color, religion, national origin, sex, age, or physical or mental disability or status as a Vietnam-era/disabled veteran, except where it relates to a bona fide occupational qualification. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or terminations; rates of pay or other forms of compensation; and selection for training, including apprenticeship. If applicable to this agreement, Company shall comply with the provisions of Federal Executive Order 11246 as amended by Executive Order 11375. In the event of Company's non-compliance with this section 2.7 or with any of the aforesaid regulations, this contract may be canceled, terminated or suspended in whole or in part, without penalty to the Board of Regents, State of Iowa, the University, or the State of Iowa, and Company may be declared ineligible for further contracts with Board of Regents, State of Iowa, institutions.

2.7 Subcontractors Company is specifically advised that any person, firm, or other party to whom it awards a subcontract under this Agreement must be approved in advance and be acceptable to UNI. The Company is responsible for all acts of its Subcontractors, as well as the Subcontractors' performance of delegated duties. Company shall be solely responsible

for payment to all subcontractors or secondary suppliers that the Company may engage for the completion of any contractual agreement with UNI.

2.8 Laws Terms and provisions of this Agreement shall be construed in accordance with the laws of the State of Iowa, and any and all litigation or actions commenced in connection with this Agreement shall be instituted in the appropriate courts in the State of Iowa.

2.9 Advertising Company shall not use or reference the name University of Northern Iowa as a part of any commercial advertising without prior written approval of UNI's central administration and its Trademark and Licensing Office.

2.10 Taxes UNI is exempt from State and Local Sales and Use Taxes on the services. A Tax Exemption Certificate will be furnished upon request.

2.11 Termination

2.11.1 If Company is adjudged bankrupt or makes a general assignment for the benefit of creditors, if a receiver is appointed on account of Company's insolvency, if Company repeatedly refuses or fails to supply enough employees, management staff, or equipment to adequately provide timely delivery or services for UNI, or if Company is otherwise guilty of a substantial violation of the Purchase Documents, UNI may terminate the Agreement after giving Company a minimum thirty (30) days written notice, without penalty to UNI.

2.11.2 In any case where Company has failed to provide items or services or has provided nonconforming items or services, UNI shall provide a Cure Notice. If after notice Company continues to be in default, UNI may procure services from another source and terminate the Agreement, without penalty to UNI.

2.12 Severability of the Agreement In the event any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision, but shall be construed as if such invalid or unenforceable provision had never been contained. Further, in the event that any provision shall be held to be unenforceable by virtue of its scope, but may be made enforceable by a limitation thereof, such provision shall be deemed to be amended to the minimum extent necessary to render it enforceable under the laws of the jurisdiction in which enforcement is sought.

2.13 Most Favored Nation The selected Vendor represents that the terms, conditions and prices established under the subsequent Agreement resulting from this Request for Quotation are equal to or better than those offered to the Regent institution's peer institutions, comparable universities, colleges, community colleges or teaching hospitals. If, during the term of the Agreement, the selected Vendor offers more favorable terms, conditions or prices to a peer institution, comparable university, college, community college or teaching hospital, the selected Vendor agrees to notify the University. The Agreement resulting from this Request for Proposal shall be amended to reflect the more favorable terms, conditions or prices.

2.14 Open Competition

2.14.1 **Where, in these contract documents, reference is made to materials, trade names, catalog numbers or articles of certain manufacture, it is done for the purpose of establishing a basis of comparative quality, type or style and not for the purpose of limiting competition.** It shall be understood that such method of description is not intended to exclude other items, processes, similar designs, or kinds of materials, but is intended merely as a means of establishing a standard of comparison. Other manufacturing processes may be used, if, in the opinion of UNI, they are acceptable in serviceability, durability, quality, functional capabilities and design.

2.14.2 UNI reserves the right to reject any substitute article or material, and/or the associated bid which, in UNI's opinion, does not meet the standard of quality established by such a reference in the contract documents.

2.14.3 Vendors offering other than the items specified shall submit, with their bid, catalog cuts, brochures, and detailed specifications covering the items on which they are bidding. **Any deviation from the contract documents contained in this bid shall be noted by the vendor on the Bid Compliance Form. (See Attachment A.) Where the vendor proposes to substitute an article or material, the vendor shall be prepared to submit samples, upon request, for UNI's inspection.**

2.14.4 The vendor is expected to comply fully with the contract documents in this bid solicitation. In the event the vendor's materials or equipment do not conform, and those deviations have not been stated on the Bid Compliance Form, the vendor will be responsible for furnishing materials and equipment, which fully conform at no change in their bid price.

2.15 Amendments to the Agreement- When awarded, the Agreement shall not be changed, modified, altered, or amended in any respect without the mutual consent of the parties hereto, which consent shall be evidenced by a written amendment to the Agreement executed by both parties.

2.16 Access to Company Records/Audits- The Company agrees to keep and provide full access to all records that pertain to UNI throughout the period that the Agreement remains in effect and for a minimum of seven years after the Agreement is terminated, unless required to retain for a longer period by state or federal status.

2.17 Insurance- Company shall purchase and maintain, throughout the term of this Agreement, comprehensive general liability insurance, including contractual liability, slip and fall coverage and comprehensive automobile liability insurance to protect Company from all claims for bodily injury, including accidental death, personal injury, and property damage arising from operations under this Agreement, whether such operations be by Company, subcontractor, agent, or by anyone else directly or indirectly employed by Company. In addition, Company shall purchase and maintain errors and omissions insurance to protect UNI from any losses associated with Company's acts. All statutory insurance requirements, including worker's compensation, shall be met. All required insurance policies shall be issued by reputable insurance companies duly authorized to engage in the insurance business in the State of Iowa. Limits of such insurance shall be as stated below:

Worker's Compensation Statutory
Comprehensive General Liability \$1,000,000 each occurrence*
Commercial Auto Liability \$1,000,000 each occurrence*
Errors and Omissions \$1,000,000 each occurrence*
*\$2 Million aggregate

The State of Iowa, the University of Northern Iowa, and the Board of Regents, State of Iowa, shall be named on such policies as additional insureds. Failure to maintain insurance coverage throughout the life of any resulting contract, consistent with the provisions of this Section, shall be considered a breach of contract. As evidence of the above, the Company will submit certificates of insurance on an annual basis. The certificates shall also provide that should the policy be cancelled or materially changed, thirty (30) day written notice prior to the effective date for the change or cancellation, shall be given directly to UNI.

Company agrees to waive all rights of subrogation against UNI, the State of Iowa, the Board of Regents, State of Iowa, the Regent institutions, their employees and agents for any claim filed against Company or other firms associated with the Agreement.

2.18 Guarantee- In filling this order, Company warrants and guarantees to University that the articles are in compliance with sections 5 and 12 of the Federal Trade Commission Act; the Fair Packaging and Labeling Act; the Federal Food, Drug and Cosmetic Act; the Consumer Product Safety Act; the Federal Insecticide, Fungicide and Rodenticide Act; the Federal Hazards and Substance Act; the Fair Labor Standards Act; the Wool Products Labeling Act; the Flammable Fabrics Act; the Occupational Safety and Health Act; and the Federal Anti-Kickback Enforcement Act; Debarment and

Suspension policies (E.O.s 1249 and 12689); Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333); Rights to Inventions Made Under a Contract or Agreement in accordance with 37 CFR part 401; Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as amended; Davis-Bacon Act, as amended (40 U.S.C. 276a to a-7); Buy American Act.

2.19 Export Control- Company acknowledges that a foreign national(s) may use the device/technology/and or data you propose, at the University. Company shall comply with all U.S. export controls laws and regulations, including but not limited to the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this Agreement. In the absence of available license exemptions/exceptions, Company shall be responsible for obtaining the appropriate licenses or other authorizations, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance. Company shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions. Company shall be responsible for obtaining the appropriate licenses or other authorizations, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance. Company shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions. Prior to disclosing or transferring to University any hardware, technical data, software or product utilizing any such data which is subject to export controls under federal law, Company shall notify the University in writing of the nature and extent of the export control. The University shall have the right to decline any such technical data or product utilizing such data. In the event Company sends any such technical data or product that is subject to export control, without notice of the applicability of such export control, the University has the right to immediately terminate the Agreement.

2.20 Energy Star Purchases- Whenever possible, UNI will purchase equipment that is rated energy efficient by this joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy.

2.21 Hazardous Material- All packaging, transportation and handling of hazardous materials shall be in accordance with applicable federal and state regulations including, but not limited to, the Material Safety Data Sheet provision of O.S.H.A. Hazard Communication Standard 29 CFR 1910.1200, and Iowa Administrative Code, Section 530.

2.22 Clean Air and Water Certification – Company certifies by filling this order, that its facility(s) is not on the Environmental Protection Agency (EPA) List of Violating Facilities. Company will immediately notify University Purchasing Services of the receipt of any communication indicating that any company's facilities are under consideration to be listed on the EPA List of Violating Facilities.

2.23 Federal Subcontract – If this agreement constitutes a subagreement under a prime contract with a federal agency, the terms and conditions of the prime contract shall prevail.

SECTION III SCOPE OF WORK

The University of Northern Iowa is seeking bids for a dedicated compute cluster to be used for high-performance computing applications. Please see the following specifications:

3.1 General Requirements:

- 3.1.1 Computational capacity – must be able to support storage, memory, and computational required of large-scale scientific computations.
- 3.1.2 Network topology – must be configured for either InfiniBand or 10GigE connections across all compute nodes.
- 3.1.3 Storage capacity – a minimum of 5TB network-attached storage.
- 3.1.4 All hardware to include drivers compatible with GNU/Linux 2.6.28 *vanilla* kernel
- 3.1.5 3-year warranty on all hardware, with next-day replacement

3.2 Computational node requirements:

- 3.2.1 Blade format with standard vendor-independent rack-mountable chassis
- 3.2.2 Dual Xeon 5520 processors minimum per blade.
- 3.2.3 24GB memory per node minimum with an optional upgrade path to 48GB that retains the original 24GB configuration.
- 3.2.4 A minimum of 4 blades must possess a minimum 48GB of memory.
- 3.2.5 Hot-swappable 73GB or larger 15K SAS drive per blade.
- 3.2.6 Quotes must include a minimum of 12 computational nodes.
- 3.2.7 Blade chassis must be able to accommodate a minimum of 16 computational nodes.

3.3 Submit and management node:

- 3.3.1 One additional system is to be used for job creation, job submissions, cluster and network management, and user authentication.
- 3.3.2 The node must be able to access storage and compute nodes via the GigE network. The local storage configured minimally – in terms of capacity and redundancy – as 1TB RAID1 SATA with a hot-swappable spare. The unit must otherwise be configured (CPUs, memory, and motherboard chipsets) identical to the computational nodes.

3.3.3 24GB of memory minimum, with an optional upgrade path to 48GB that retains the original 24GB configuration.

3.3.4 This unit can be either blade format or vendor-independent rack-mountable casing.

3.3.5 All power cords, cables, and mounting hardware must be included.

3.4 Network requirements:

3.4.1 GigE or better subsystem for control and monitoring.

3.4.2 Infiniband or 10GigE (or comparable fabric in throughput and latency) backplane connecting all compute nodes.

3.4.3 The networking subsystem must be able to support a full chassis of computational nodes. For example, if the bid contains the minimum of 12 computational nodes in a chassis that accommodates additional nodes, the networking subsystem must support switching fabric, cables, and miscellaneous components to support the chassis configured at full computational node density.

3.4.4 All switches, power cords, cables, mounting hardware, and software must be included. Network subsystem must be able to be mounted in an industry-standard vendor-independent rack.

3.5 Storage requirements:

3.5.1 The solution must include all necessary hardware and software to support iSCSI storage. Storage unit must consist of 5TB storage configured as RAID 5 with at least one hot spare. LUNS to consist of 10K RPM SAS drives or better.

3.5.2 The storage subsystem must be able to support a full chassis of computational nodes. For example, if the bid contains the minimum of 12 computational nodes in a chassis that accommodates additional nodes, the networking subsystem must support switching fabric, cables, and miscellaneous components to support a fully-dense chassis.

3.5.3 All power cords, cables, software (if required), and mounting hardware must be included.

3.6 Quote requirements:

3.6.1 Quotes must include full power requirements, cooling requirements, and power connection specifications.

3.6.2 Quotes must include a description of hardware options and costs required to increase all compute blade capabilities to 48GB.

3.6.3 If applicable, quotes must include per-blade costs to add additional computational nodes to bring the system to full density. For example, if the vendor quote consists of 12 computational nodes in a chassis that has the capacity of 18-blades, the cost of purchasing 1-6 additional nodes must be noted the pricing section.

3.6.4 Quotes must include a UPS subsystem capable of supporting the full system resources for 5 minutes.

3.6.5 Options, not required, but that would improve and extend the practical uses of the system at UNI:

3.6.5.1 Processors which are faster or more dense (cores) than the Xeon 5520 would be considered favorably over total number of blades, in which case 48GB per blade becomes a minimum requirement.

3.6.5.2 Write-cache enabled storage with appropriate storage array controller battery backup module (BBM).

**SECTION IV
PROPOSAL CONTENT**

- 4.1 Form of Proposal** – Form of Proposal, page 10, completed and signed by your Company’s authorized representative.
- 4.2 Pricing-** Include as **Supplement 1** of response. If company has suggestions for supplies and/or equipment that may enhance the cluster, please incorporate these as options, including itemized price. Please itemize all pricing. Shipping-FOB Destination must be included in the price.
- 4.3 Cluster Profile** – Include as **Supplement 2**. Company should provide a detailed list of the cluster capabilities.
- 4.4 References** – Please provide three academic references for which you have provided specified equipment. Equipment must have been purchased a minimum two years ago. Please include Client name, address, telephone number, email, and fax. Include as **Supplement 3**.
- 4.5 Warranty-** Provide standard warranty information. Provide details about associated costs, if necessary, to extend the warranty to at least one year. Include as **Supplement 4**.
- 4.6 Attachment A** – **List any and all exceptions/alternates to this RFP in this attachment.**

**SECTION V
FORM OF PROPOSAL**

5.1 Bidder agrees to all Proposal Specifications/Scope of Work in Section III of this RFP

Yes _____

No _____ **Note:** If **No**, please list exceptions on Attachment A

5.2 Bidder agrees to all Terms and Conditions contained in Section I and II

Yes _____

No _____ **Note:** If **No**, please list exceptions on Attachment A

5.3 Proprietary Information Please list all information or sections that you consider proprietary. Note that pricing and financial arrangements cannot be considered as proprietary information.

The sections of this proposal listed below represent trade secrets or proprietary information.

Section	Page No.	Section Page	No.

5.4 Payment Terms: _____

5.5 Vendor Information

Business Name: _____

Federal I.D. Number/SSN: _____

Official Address: _____

Firm's State or Foreign Country of Residence _____

Telephone Number _____

Fax Number _____

Email _____

Authorized Signature _____

Typewritten or Printed Signature _____ Date _____

