

PERSONNEL QUALIFICATIONS

MINIMUM PERSONNEL QUALIFICATIONS. Personnel meeting the following qualifications will be required to satisfy the NRL's research and development requirements. The size and composition of the contractor's staff will likely be dynamic. The contractor is expected to reassign staff members to other work when their skill sets are no longer needed to meet the support requirements of this contract. In addition, it is desirable for the contractor to maintain a pool of qualified personnel such that new support requirements can be met quickly.

A final SECRET or Interim SECRET clearance is required for all personnel categories. Some labor categories may require a TOP SECRET/SCI clearance for some or all of the personnel in that category.

Labor Category A (Task 3.0.2) Program Manager

Education: Baccalaureate degree in Business Administration or a technical degree in related fields identified in Labor Categories B through O is required.

Experience: No less than five years experience in the management of Department of Defense (DoD) research contracts. Must have demonstrated the ability to manage personnel; manage budgets; balance priorities; communicate problems and results; manage programs to ensure that implementation and prescribed activities are carried out in accordance with specified objectives; direct and coordinate program activities; and exercise control over personnel responsible for specific functions or phases of program; selects personnel according to knowledge and experience in area with which program is concerned; understands and monitors the security clearance process for employees and subcontractors and ensures that clearances are initiated, updated and completed in as timely a manner as possible. Reviews reports and records of activities to ensure progress is being accomplished toward specified program objective and modifies or changes methodology as required redirecting activities and attaining objectives. Prepares program reports. Controls expenditures *in* accordance with budget allocations. Ensures compliance with government reporting requirements. The person who fulfills this category will be designated key personnel.

A final TOP SECRET/SCI clearance is required.

Labor Category B (Task 3.0.1) Program Analyst

Education: Baccalaureate degree in Management Studies, Business or related field is required.

Experience: No less than two years experience in updating, maintenance, and distribution of financial and technical reports related to military research on-site contracts and database analysis.

Labor Category C (Task 3.0.1) Subcontract Administrator

Education: Baccalaureate degree in business or finance is required.

Experience: No less than five years experience relating to subcontracting, purchasing, pricing, and accounting is required. Must have a working knowledge of the Federal Acquisition Regulations (FAR), DoD FAR Supplement, and company internal purchasing policies and procedures.

Labor Category D (Tasks 3.0.1, 3.0.2) Technical Assistant

Education: Associate degree in business, management or information technology.

Experience: No less than five years experience in project or resource management is required. Must be experienced with desktop publishing, the Internet, various financial and management software, and PC systems. Must possess the ability to develop and maintain program management plans and provide technical program management.

Labor Category E (Task 3.0.1) Administrative Support

Education: High school diploma or equivalency.

Experience: No less than two years experience in general office setting. Ability to use general office equipment, personal computer and experience with Microsoft Office suite.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category F (Tasks 3.1.1, 3.1.2, 3.1.3, 3.1.5) Senior Systems Engineer - Research Networking

Education: A PhD or a Masters Degree (with an additional 3 years of experience as described below) in computer science, electrical engineering, computer engineering, or systems engineering (or equivalent) is required.

Experience: No less than ten years experience in the design of high-performance networks consisting of more than 50 workstations, 5 high-performance multi-processor compute servers, distributed file systems (AFS, Lustre, DFS, etc.) and security authentication protocols such as Kerberos. Specific experience in protocols such as InfiniBand, Fiber Channel, RDMA, ATM, HIPPI/GSN, etc. are required. Ability to understand Unix kernel operation and design/write device drivers for interfacing to novel I/O devices that bypass the networking stack. An ability to document the design architecture then meet a development schedule is required. The person who fulfills this category will be designated key personnel.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category G (Tasks 3.1.1, 3.1.4, 3.3) Senior Research Scientist - High Performance Computing (HPC)

Education: A PhD or a Masters Degree (with an additional 3 years of experience as described below) in computer science, electrical engineering, computer engineering, or physics (or equivalent) is required.

Experience: No less than ten years of experience with parallel programming and advanced algorithm development on current generation HPC environments. Must be published and recognized in this research discipline through participation in IEEE, ACM, NSF Fellow or other organizations and published in leading refereed journals. Experience in implementing complex scientific and engineering models that require HPC. Experience with advanced physics problems, motion imagery, mathematics, fluid dynamics or similar where the application of Fast Fourier Transforms (FFT) and/or other complex scientific libraries are needed on HPC. Experience in programming large memory machines. Experience in optimizing HPC resources cache, I/O, InfiniBand, High Definition (HD) imagery systems and advanced data and image compression. Past experience that required successful work in supporting scientific users of HPC and assisting in adaptation and transition of scientific and engineering problems from concepts at the lab bench then scaled to HPC to address large problem sets. Demonstrated

success in executing a balanced HPC environment that includes the HPC machines, I/O, distributed data and interconnecting networking. The person who fulfills this category will be designated key personnel.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category H (Tasks 3.1. 1, 3.1. 2, 3.1.5, 3.5, 3.6) Senior Systems Analyst/Engineer

Education: A Masters Degree or Baccalaureate degree (with an additional 2 years of experience as described below) in Computer Science, Computer Engineering, Electrical Engineering or Systems Engineering is required.

Experience: No less than six years of hands-on management of large enterprise Information Technology (IT) infrastructures with at least two years of experience in an open-source environment, supporting 1,000 users or more. Experience in implementation and management of large distributed file systems such as AFS, CXFS or Lustre. Experience as a team lead for system management duties in a UNIX environment to include, but not limited to, Solaris 9/10, Redhat, Suse and/or Debian. Extensive experience in installing and configuring Apache, sendmail, Ethernet and ATM, SQL databases (including MySQL, Oracle, Sybase, or PostgreSQL), Microsoft Windows server (current generation), Microsoft Exchange server (current generation), Perl, PHP and associated open-source modules. A thorough understanding of system security practices and procedures, and experience in configuring secure systems. Experience with configuring Apache for PKI authentication, installation and configuration of LDAP servers, and the integration of LDAP into a web-enabled environment. Experience in integrating Microsoft Windows and Apple Macintosh client applications in an enterprise IT infrastructure. Specific experience in protocols such as InfiniBand, Fiber Channel, RDMA, ATM, HIPPI/GSN, etc. are required. Experience developing real-world programs using CVHDL, etc. Ability to write, modify or troubleshoot scripts necessary for software installation and system analysis. Ability to create and maintain Standard Operating Procedures (SOP) and useful documentation of code and workflow processes. The person who fulfills this category will be designated key personnel.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category I (Tasks 3.1.1, 3.4.1, 3.4.2, 3.6) – Junior Systems Analyst/Engineer

Education: Baccalaureate degree in Computer Science, Computer Engineering, Electrical Engineering, or Systems Engineering is required.

Experience: No less than three years of hands-on experience with large enterprise Information Technology (IT) environments with at least 500 users. Experience with installing, configuring and supporting Unix servers running various operating systems to include, but not limited to, Redhat, Solaris 9/10, Suse and/or Debian. Experience with installing open-source modules for products such as sendmail, Perl, PHP, MySQL and Apache. Experience installing and managing SQL databases (including MySQL, Oracle, Sybase, or PostgreSQL), Microsoft Windows server (current generation), and Microsoft Exchange server (current generation). Experience with LDAP concepts and CAC PKI authentication. Experience in integrating Microsoft Windows and Apple Macintosh client applications in an enterprise IT infrastructure. Experience developing real-world programs using C and common scripting languages. Proven experience troubleshooting existing code and correcting errors, and establishing and improving workflow performance in a digitization operation. Ability to create and maintain Standard Operating Procedures (SOP) and useful documentation of code and workflow processes.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category J (Task 3.1.5) Senior System Engineer Program Manager

Education: A Masters degree or Baccalaureate degree (with an additional 2 years of experience as described below) in computer science, electrical engineering, computer engineering, or systems engineering is required.

Experience: No less than five years of experience in the area of assistance in executing large-scale demonstrations and programs across multiple agencies is required. Specific experience in high-performance network, high-performance computing and compute services is required. The person who fulfills this category will be designated key personnel.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category K (Tasks 3.1.2, 3.1.3, 3.1.5, 3.1.6) System Design Engineer - Information Assurance (IA)

Education: A Masters Degree or Baccalaureate degree (with an additional 2 years of experience as described below) in computer science, electrical engineering, computer engineering, or systems engineering is required.

Experience: No less than ten years experience in the area of Information Assurance is required. Experience in securing systems connected to the public Internet and understanding how to detect unusual access patterns. The ability to understand, how to use and implement cryptographic protocols is critical, along with the ability to design IA systems that operate at extremely high speeds (40-Gbps and higher).

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category L (Task 3.1.1) System Design EngineerControl Plane Protocols

Education: A Masters Degree or Baccalaureate degree (with an additional 2 years of experience as described below) in computer science, electrical engineering, computer engineering, or systems engineering is required.

Experience: No less than five years experience in developing and deploying control plane protocols including Session Initiated Protocol (SIP). Experience with deterministic packet control techniques including Quality of Service (QoS), Quality of Protection (QoP) and Multi-level Precedence and Preemption (MLPP) over optical, copper and wireless networks. Recent active participation in the Internet Engineering Task Force (IETF). No less than three years experience in programming using C++ and/or other development languages in a UNIX environment.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category M (Tasks 3.1.3, 3.2.1, 3.2.2) Senior Network Engineer

Education: A Masters Degree or Baccalaureate degree (with an additional 2 years of experience as described below) in computer science, electrical engineering, computer engineering, or systems engineering is required.

Experience: No less than eight years of hands-on management of large enterprise Information Technology (IT) networks with at no less than three years of managing networks with 2,000 or more users. Experience as a team lead for network service provision with Apache, remote dial-in, sendmail, BIND, ssh, and DNS. Expertise required for daily use of UNIX to include but not limited to Solaris 9/10, Redhat, and Suse. Experience in installing and maintaining IPv4 and IPv6 protocol suites. Experience in configuring and trouble-shooting bgp, ospf, VPN, IPSec, Ethernet and ATM. Experience in integrating wireless service in a fixed IT infrastructure. No less than three years experience in integration and use of security tools and vulnerability analysis tools to include ISS, NetRanger, nmap

or similar. No less than three years experience in configuration, installation and use of Intrusion Detection Systems (IDS) and Intrusion Protection Systems (IPS). Experience in preparing and maintaining network configuration control, standard operating procedures and planning documentation. The person who fulfills this category will be designated key personnel.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category N (Tasks 3.1.5, 3.2.1, 3.2.2) Junior Network Engineer

Education: Baccalaureate degree in computer science, electrical engineering, computer engineering, or systems engineering is required.

Experience: No less than three years of hands-on experience with large enterprise Information Technology (IT) networks with at least 1,000 or more users. Experience in configuring and supporting network service provision with Apache, remote dial-in, sendmail, BIND, ssh, and DNS. Expertise required for daily use of UNIX to include but not limited to Solaris 9/10, Redhat, and Suse. Experience in installing and maintaining IPv4 and IPv6 protocol suites. Experience in configuring and trouble shooting bgp, ospf, VPN, IPsec, Ethernet and ATM. Experience required in maintaining, repairing, trouble shooting and optimizing broadband, baseband, and fiber optic Local Area Networks (LAN). Must have demonstrated proficiency in the use of signal generators, spectrum analyzers, signal analysis meters, time-domain reflectometers (TDR) and cable scanners. No less than three years experience in integration and use of security tools and vulnerability analysis tools to include ISS, NetRanger, nmap or similar.

May require a final or Interim TOP SECRET/SCI clearance.

Labor Category O (Task 3.5) - Web Application Developer

Education: Baccalaureate degree in Computer Science, Information Science or Systems Analysis, or related degree with relevant education and experience.

Experience: No less than four years of hands-on experience developing dynamic web applications, utilizing Perl, ColdFusion or PHP. A thorough understanding of HTML, XML, Cascading Style Sheets (CSS), Javascript, and SQL databases (including MySQL, Oracle, Sybase, or PostgreSQL). Experience with various authentication methods, including CAC, PKI and LDAP. Experience in creating

and manipulating graphics and images for optimal presentation in a web-based environment. Ability to create, manage and support SQL databases, through all aspects of development and deployment. Ability to translate user requirements into code to produce user- friendly web applications that automate processes for a wide user audience of 1,000 or more. Ability to create and maintain Standard Operating Procedures (SOP) and useful documentation of code and workflow processes. Must be able to present a portfolio or demonstrate previously completed user interface designs.