

Performance Work Statement (PWS)

Database Administrator Information Technology and Communications Services Naval Postgraduate School

1.0 Background/Introduction: The Naval Postgraduate School (NPS) located in Monterey, California supports the U.S. Navy, other military branches, and foreign military services with postgraduate education for personnel. Additionally, NPS provides significant research capabilities to the Department of Defense (DoD). The Information Technology and Communication Services (ITACS) Department at NPS provides information technology (IT) support to the entire school.

2.0 Scope: The Information Technology and Communication Services (ITACS) division provides support and service for all IT and telecommunications issues for the NPS community. Over years, ITACS has deployed several applications that implement enterprise database platforms (Microsoft SQL Server, Oracle, and MySQL). In order to effectively support various enterprise applications, a Database Administrator is needed to monitor database performance for optimal database operations, support existing databases, plan for future growth, and manage database security. The objective of this contract is to provide a database administrator to support enterprise database management systems. As of the 4th quarter of FY 2015, the DBA supports:

- 2.1** MS SQL Server: 25 unique instances running on 19 database servers (some physical and some virtual)
- 2.2** Oracle: 5 database servers
- 2.3** MySQL: 2 database servers
- 2.4** Approximately 400 databases: ~ MS SQL Server databases, ~21 Oracle database, ~20 MySQL databases
- 2.5** ETL (Extract-Transform-Load): Approximately 70 ETLs
- 2.6** Scheduled Database Jobs: approximately 150

3.0 Tasks

The contractor shall perform the following tasks:

- 3.1** Design, enhance and maintain databases. The contractor shall monitor and improve database performance and capacity of existing enterprise database systems (Microsoft SQL Server, Oracle, and MySQL). The contractor shall monitor database performance and plan for future expansion of database systems, as well as manage and maintain all production and non-production databases.
- 3.2** Ensure that database systems are safeguarded and implement necessary security measures to ensure data integrity. The contractor will be responsible for controlling privileges and permissions to databases and for standards and

design of physical data storage, maintenance, and access and security administration.

- 3.3** Create or modify database objects and/or write SQL code in support of application developers as specified in the NPS JIRA issue tracking system.
- 3.4** Perform data integration by creating or modifying Extract-Transform-Load (ETLs) of data using tools such as Microsoft SQL Server Integration Services (SSIS) and/or Pentaho Kettle.
- 3.5** Create a monthly report that provides update on status, work completed, work in progress, short term goals, and other relevant project information.
- 3.6** Perform fiscal year changeover activities in the financial management system database (i.e., the Kualu Financial System database). The primary activities for fiscal year changeover are to be done during the month of October of each fiscal year. These activities primarily consist of taking data provided by the Kualu Financial System (KFS) functional team and performing data integration tasks.
- 3.7** Assist with migrating KFS from the current version, 4.1.1, to version 5.x. Specifically, the contractor shall migrate the current KFS database to the new version, to include customizations NPS has made to the database.
- 3.8** Assist with migrating KFS and Kualu Coeus (KC) to use a shared, stand-alone instance of Kualu Rice. Specifically, the contractor shall migrate/merge data from the KFS and KC embedded Kualu Rice database tables into the database for the stand-alone instance of Rice and include customizations NPS has made to the embedded versions of the Rice databases in the stand-alone instance.

4.0 Deliverables

The contractor shall prepare deliverables in support of the tasks identified in this PWS.

Task	What will be inspected	Acceptable Quality Level (AQL)	Method	Frequency
3.1	Database Management Systems (DBMSs) administered by Enterprise Information Systems	Production databases backed up at least nightly. Development databases backed up at least weekly or at the frequency requested by the application developer. Logs reviewed each work day and errors investigated and remediated when	Personal observation at NPS	Monthly

		<p>appropriate. Tune DBMSs as needed to improve performance. Technical documentation stored/maintained on the NPS wiki. Investigate issues reported by and utilizing the NPS Nagios monitoring system.</p>		
3.2	DBMSs vulnerability scan results	<p>Category I and Category II vulnerabilities remediated within 30 calendar days of vulnerability scan results being received.</p>	Review of vulnerability scan results	Monthly
3.3	DBMSs, the NPS JIRA issue tracking system, and the NPS Subversion SVN versioning system.	<p>Keep JIRA updated with the latest status. Keep the Director of Enterprise Information Systems (EIS) and application developers informed on progress. 100% functioning SQL code and database objects. SQL code stored in the NPS Subversion SVN versioning system.</p>	Testing by the application developer	Upon completion

3.4	Systems utilizing data integration	100% functioning Extract-Transform-Load (ETL)	Personal observation	Upon completion
3.5	Monthly report	Monthly report shall address progress on tasks 3.1 – 3.4	Provide report in MS Word or Adobe PDF format	Due within 5 business days after the end of the month
3.6	The NPS JIRA issue tracking system	Keep JIRA updated with the status of tasks being performed as part of the fiscal year changeover activities	Personal observation	Upon completion
3.7	The NPS JIRA issue tracking system and KFS version 5.x	Keep JIRA updated with the status of tasks being performed as part of the migration to KFS version 5.x. KFS version 5.x database functioning properly and available to the KFS application.	Personal observation	Upon completion of each task associated with the migration to KFS version 5.x

3.8	The NPS JIRA issue tracking system and database for stand-alone instance of Kualu Rice	Keep JIRA updated with the status of tasks being performed as part of the migration to the stand-alone instance of Kualu Rice. KFS and KC functioning properly when performing Rice-related functions.	Personal observation	Upon completion of the migration to the stand-alone instance of Kualu Rice
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The surveillance method for the deliverables listed above will be personal observation at NPS. If performance falls below the AQL defined above, the Contracting Officer's Representative (COR) shall document the instance(s), coordinate with the Contracting Officer and advise the Contractor. The Contractor will be requested to review the documentation and provide a written response on how performance will be corrected in the future. Re-performance of any work for failure to perform in accordance with the specified AQL or task requirement shall be completed at the Contractor's own expense and at no additional cost to the Government.

5.0 Applicable Documents/Standards

5.1 Standards: All work is to be performed in accordance with DoD and/or Department of Navy (DoN) standards.

5.2 Section 508: All supplies/services acquired under this order shall be compliant with Section 508 of the Rehabilitation Act, 29 U.S.C. 749d, as amended and FAR Part 39.

6.0 Minimum Technical Requirements

- Database Administrator Level II: The contractor shall have at least three years of experience in all areas associated with this contract, including database administration of Oracle, Microsoft SQL Server, and MySQL, SQL programming, and technical documentation.
- At least 2 years of experience with Subversion SVN
- At least 2 years of experience with Microsoft SQL Server Integration Services (SSIS)
- At least 1 year of experience with Pentaho Kettle
- At least 2 years of experience with the Nagios monitoring system
- Educational Requirements: Bachelor's Degree from an accredited college or university in computer science, mathematics, or engineering or a mathematics-intensive discipline, or an applicable training certificate from an accredited institution.

7.0 Period of Performance

The period of performance is for one year commencing on 10/29/2015.

8.0 Place of Performance

The primary place of performance is the Naval Postgraduate School, Monterey, CA 93943.

9.0 Work Week and Hours of Operation:

The Contractor shall provide services during normal working hours excluding federal holidays. Normal working hours are 0800-1630, Monday through Friday, unless requirements dictate otherwise. Exceptions can be permitted by the COR upon request and at the COR's discretion.

Work required on-site at NPS shall be performed by the Contractor, as required.

Following is a list of holidays observed by the Government.

<u>Name of Holiday</u>	<u>Time of Observance</u>
New Year's Day	1 January
Martin Luther King Jr. Day	Third Monday in January
President's Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	4 July
Labor Day	First Monday in September
Columbus Day	Second Monday in October
Veteran's Day	11 November
Thanksgiving Day	Fourth Thursday in November
Christmas Day	25 December

If any of the above holidays occur on a Saturday or a Sunday, then such holiday shall be observed by the Contractor in accordance with the practice as observed by the assigned Government employees at the using activity

10.0 Government Furnished Property

The Government shall provide computer resources including access to workstations, printers, software, data, communication networks, etc. They shall provide initial guidance, technical information, subject matter orientation and documentation such as reference manuals and appropriate publications. The Government will provide the contractor access to systems and software required to complete the assigned tasks. The contractor shall identify and notify the Government of system documentation necessary for the proper performance of this task.

The government shall provide appropriate office space, supplies and equipment to perform tasks at NPS. Any Government-provided property and information shall be used for official Government business only. Any applicable documents that are authorized for use in performance of these services shall be provided, in accordance with security and contract terms and conditions.

11.0 Travel

No travel is anticipated at this time, but there may be circumstances where travel may be required.

12.0 Classification: Sensitive Unclassified. Security clearance is not required. U.S. citizenship is required.

13.0 Privacy Act Statement

“Pursuant to Title 5 United States Code 552a(m)(1), the contractor and all employees of the contractor working under this contract are required to comply with the requirements of 5 U.S.C. 552a (“The Privacy Act of 1974”).”

14.0 Contractor Identification

In accordance with DFAR 211.106, there shall be a clear distinction between Government employees and service contractor employees. Service contractor employees shall identify themselves as contractor personnel by introducing themselves or being introduced as contractor personnel and displaying distinguishing badges or other visible identification for meetings with Government personnel. In addition, contractor personnel shall appropriately identify themselves as contractor employees in telephone conversations and in formal and informal written correspondence.

15.0 Non-Personal Services Statement

Contractor employees performing services under this order will be controlled, directed, and supervised at all times by management personnel of the contractor. Contractor management will insure that employees properly comply with the performance work standards outlined in the SOW. Contractor employees will perform their duties independent of, and without the supervision of, any Government official or other Defense Contractor. The tasks, duties, and responsibilities set forth in the task order may not be interpreted or implemented in any manner that results in any contractor employee creating or modifying Federal policy, obligating the appropriated funds of the United States Government, overseeing the work of Federal employees, or otherwise violating the prohibitions set forth in Parts 7.5 and 37.1 of the Federal Acquisition Regulation (FAR). The Government will control access to the facility and will perform the inspection and acceptance of the completed work.

16.0 Transition Plan.

It is essential to the Government that services required under this PWS are performed without interruption. Consequently, it is imperative that transition to full contract performance be accomplished in a well-planned, orderly, and efficient

manner. The transition period shall begin 30 days prior to full contract performance as required by the solicitation/contract, which is anticipated to be 21 August 2015. The purpose of this orientation is primarily to:

- Observe work accomplished by current contractor personnel.
- Obtain security clearances.
- Accomplish necessary training of contractor employees.
- Establish workstations.
- Transfer Government Furnished Property.

17.0 Transition Activities.

At the conclusion of any performance period, including option periods or extensions, the services provided under this PWS may be awarded to another contractor. The contractor in place shall be required to assist in the transition activities.

18.0 Data Rights

It is the Government's intent to retain unlimited rights to all software, documentation, and data first produced in performance of the purchase order.

19.0 Disclosure of Information

DFARS 252.204-7000 -- DISCLOSURE OF INFORMATION (DEC 1991)

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information, regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless—

(1) The Contracting Officer has given prior written approval; or

(2) The information is otherwise in the public domain before the date of release.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least 45 days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.