

Final

TECHNICAL INSTRUCTION (TI)

Issue Date of TI	19 Dec 2007
Revision Date of TI	Sept 30, 2008
TI No.	TI-4523-03 – Rev 3 ACE 07 (Modified tasking for the PACOM demonstration, clarified CIT development efforts, and extend the Period of Performance end date to 3-29-2010 to coincide with the end of Term 1.)
Contract No.	N00178-05-D-4523
Task Order No.	FC01
Government Agency	Naval Surface Warfare Center, Crane Division
Vendor	Referentia Systems, Inc.
Vendor POC	Jim Fordice, ofc: (505)345-1641, cp: (505)730-8497, jfordice@referentia.com
Task Description	<p>The contractor shall develop a Program Management Plan (CDRL A002) that will include at a minimum: Summary of the overall technical approach and tasks that will be performed throughout the project, Plan of Action and Milestones (POAM) (CDRL F001). Contractor shall conduct Program Reviews (CDRL A006); provide a Work Breakdown Structure (CDRL B002); submit Monthly Status Reports (CDRL A001). Contractor shall submit financial reports (CDRL B001), and conduct In-progress technical reviews (CDRLs A003, A004, A005). Contractor shall submit Meeting Minutes/Trip Report (CDRL A005). Contractor shall submit a Final Technical Report (CDRL F002). The contractor shall provide and OPSEC Plan (F003). (Section 3.1 of Task Order N00178-05-D-4523). Monthly Financial report will show % of funding spent for each Task.</p> <p>The contractor shall work with the USPACOM Technical Point of Contact (TPOC) and other government agencies, as designated by the TPOC, to deploy Spiral 1 of ACE.</p> <p>The contractor shall provide deliverables demonstrating project management activities consisting of development of a Program Management Plan that shall include a summary of the overall technical approach and tasks that will be performed throughout the project and a Plan of Action and Milestones (POAM).</p>

The contractor shall establish and maintain a password secured web portal that supports information sharing between the parties involved in this TI.

Task deliverable:

- a) Latest version of posted materials in electronic copy.

The contractor shall perform demonstration and installation at C3F. Demonstration support shall include planning, engineering, development, integration, configuration, accreditation support to the government C&A lead, pre-install test and evaluation, management activities and coordination, installation, and training. The contractor shall perform installation of upgraded virtualization client terminals and other ACE hardware at Third Fleet Headquarters and provide accreditation support including the steps necessary to receive an Interim Authority to Operate (IATO) and complete the Fleet Readiness Certification Board (FRCB) approval process. Tier 2 and 3 help desk support during the demonstration and evaluation period and the collection of user feedback is also required. The contractor shall coordinate with and support PACOM in the identification, assessment, planning and transition of ACE toward a Program of Record.

Task deliverables shall include:

- a) Upon completion of the Spiral 1 demonstration the contractor shall provide a final report indicating how well the system met user requirements, whether system security requirements were met and recommendations for improvements in future spirals).
- b) Technical report the SSAA
- c) Technical report FRCB package (Architecture Diagrams, Floor Plans, Program Descriptions, etc.)
- d) Installation Guide/Procedures
- e) Data Collection and Assessment Plan(s)
- f) Assessment Report
- g) Trouble Tickets, Written resolutions of problem identified by trouble tickets

The contractor shall provide support to PACOM for demonstration and evaluation of ACE related technologies such as the High Assurance Platform (HAP), NetTop, Virtual Secure Enclave (VSE), Coalition Integration Technology (CIT) and others as directed by the TPOC. The contractor shall install the technologies in the PTIC and other locations as directed by the TPOC. Demonstration tasks will

include attending planning meetings as determined by experimentation or operational venue authorities.

Task deliverables:

- a) Final technical report on the performance and merit of the demonstrated technologies.

The contractor shall conduct an ACE Administrative Tools and Services Assessment. The contractor shall perform an assessment of requirements, ACE technology enterprise scalability, and efforts to design and prototype administrative tools needed to support wide-scale deployment of CIT capabilities including pushing information up to an Enterprise Network Management System (ENMS), addressing multi-enclave information flows, and improving CND capabilities. The contractor shall assess Virtualization Management Framework tools including those needed to support: Configuration Management, Patch Management, Security Update Management, User Account Management, VM Image Management (Update Server), VPN and encryption key management/distribution, Policy and Identity transfer between COIs, and other administrative capabilities. The contractor shall perform an assessment and evaluation of security enhancements and services, such as Trusted Personnel identification and Authorization Service (TPIAS).

Task deliverables:

- a) Final Technical Report
- b) Data Collection and Assessment Plan

The contractor shall investigate and develop techniques for multi-enclave network and service monitoring and management capabilities for the Enterprise and IPsec environments. The contractor shall perform an assessment of requirements and tool development for network service policy enforcement, a determination of how best to manage network assets at the enterprise level and within the ACE IPsec environment, and methods for troubleshooting ACE traffic on the network.

Investigations and capability development shall include visualization methods, configuring and sharing of Differentiated Service Code Point (DSCP) mark and remark tables, aids to enhance the decision and trust level within the multi-enclave marked packet environment, enhanced analysis, improved reporting, and other enterprise and security related capabilities as required. The contractor shall investigate methods for creating, monitoring and debugging multicast traffic, including GRE tunnels over IPsec. The contractor shall perform an assessment of capabilities to support additional

devices, including switches and routers as found in distributed architecture models, such as the DISA core network and the ACE demonstration site environment. A prototype shall be developed that incorporates methods for network 'self test' to improve deployment configuration planning and live network evaluation to verify proper operating conditions.

Task deliverables:

- a) Test Plan/ procedures
- b) Test Results
- c) Final Technical Report, including validation of recommendations
- d) Engineering Notebook of details developed from the investigations of different techniques.

The contractor shall maintain the PTIC built under TI-4523-002 as a pre-deployment, test, integration and demonstration facility for development and demonstration of ACE capabilities, such as TPIAS, the Virtualization Management Framework and related capabilities. The contractor shall establish standard test methodologies and procedures. These efforts shall consist of development of tools to evaluate various aspects of the ACE Spiral architectures including integrating test and troubleshooting tools for distributed and remote data center configurations, evaluation and demonstration of capabilities for server virtualization within the single domain environment, evaluation of capabilities to virtualize servers across multiple domains, build out of architectures and capabilities in the PTIC and demonstration. The PTIC shall be available for demonstrations or tours as requested and scheduled in advance by the USPACOM TPOC. Configuration control of the PTIC shall be under the direction of the USPACOM TPOC.

Task deliverables:

- a) Final Report
- b) Test Plan and procedures
- c) Test Report
- d) Architecture Drawings
- e) Configuration Management Plan and procedures

The contractor shall upgrade the portable demonstration capability developed in TI-4523-002 to reflect new features and capabilities as directed by the TPOC. These efforts shall consist of development of briefing and demonstration multimedia materials for each demonstration, by working with the USPACOM TPOC. USPACOM

	<p>will provide at least one government person to coordinate with the demonstration sites. The mobile demonstration platform shall be used in conjunction with the PTIC to provide a second site for evaluation of ACE and related capabilities and training/education purposes. As a part of this effort the contractor will propose exercises and other venues for demonstration of ACE technologies such as multi-enclave network and service monitoring and management capabilities.</p> <p>Task deliverables:</p> <p>a) Briefing and demonstration materials</p> <p>The contractor shall deliver the necessary training materials associated with those products procured as part of this TI to ensure that the features and concepts of the system products and functions are clearly understood, used, and maintained appropriately. This effort shall consist of development of the training materials necessary to support a system administrator's course and a user's course as needed for demonstrations. Multimedia versions of training materials shall support posting on a centralized server as a web based learning tool. The contractor shall develop presentation materials, such as multimedia animations, posters and brochures.</p> <p>Task deliverables:</p> <p>a) Training Materials (User Guide, System Administrator's Guide, Lesson Plans)</p> <p>b) Briefing and demonstration materials</p> <p>The contractor shall provide on-site support to USPACOM J621 to assist in the development, integration, and management of ACE related efforts.</p>
GFI, GFE, GFM	Will be furnished on an as required basis.
Duty Location	Contractor Facility, Honolulu, HI, San Diego, CA and USPACOM HQ
Temporary Duty Location (travel)	San Diego, Washington D.C., Germany, and other CONUS/OCONUS locations, as required.
SLIN No.	100001 (Year 1) 300001 (Year 1)
Performance Period	19 Dec 2007 – March 29, 2010 (period of performance during the Award Term is contingent upon award of that award term, first award term begins March 30, 2009 if awarded)

Data Deliverable	<p>The contractor shall provide the following deliverables for this TI:</p> <ol style="list-style-type: none"> 1. Status Report A001 Monthly 2. Program Management Plan A002 3. Conference Agenda A003 ASREQ 4. Conference Presentation Materials A004 ASREQ 5. Report (Record of Meeting/Minutes) A005 ASREQ 6. Progress Report/Program Review A006 ASREQ 7. Training Materials A009 8. Funds and Man-hour Expenditure Report B001 Monthly 9. Contract Work Breakdown Structure B002 10. Plan of Action and Milestones (POAM) F001 11. Technical Report /Final Report and demonstration F002 12. OPSEC Plan F003
Requiring Technical Activity (RTA)	Brant Ackerman, (808) 477-9552, brant.t.ackerman@navy.mil
Task Order Manager (TOM)	Brant Ackerman, (808) 477-9552, brant.t.ackerman@navy.mil