

# TECHNICAL INSTRUCTION (TI)

<b>Issue Date of TI</b>	
<b>TI No.</b>	TI-4523-011 Oracle Upgrade by CDS
<b>Contract No.</b>	N00178-05-D-4523
<b>Task Order No.</b>	FC01
<b>Revision Date of TI</b>	NA
<b>Government Agency</b>	NSWC Crane
<b>Vendor</b>	Referentia Systems, Inc.
<b>Vendor POC</b>	Kevin Jordan, (505)345-1641, kevin.b.jordan1.ctr@pacom.mil or at kjordan@referentia.com
<b>Human Capital Checklist Approval Number</b>	N/A
<b>Task Description</b>	<p>This TI establishes the tasks to be accomplished in support of an upgrade of an existing Oracle 10g database to 11g running on Oracle Linux 5 and to STIG the new 11g installation to comply with existing security policies. The upgrade will be performed on a new Linux server. SSC-PAC will build the new server by cloning the current production server. Thus, at the operating system level the new server will already meet the STIG regulations.</p> <p><b>Methodology</b></p> <ol style="list-style-type: none"> <li>1. After the new server is built and ready for installation, CDS will install the 11g database products onto the new Linux server. This installation consists of all necessary programs and executables to operate the database and includes tools and migration programs. Included in the installation is Oracle's Database Upgrade Assistant (DBUA), which will be used to upgrade the database from 10g to 11g. DBUA will upgrade the database files and data dictionary to version 11g and update the server parameter file (spfile).</li> <li>2. After the upgrade, CDS will verify the upgrade was successful and then remove the 10g installation.</li> <li>3. CDS will run the UNIX and Oracle STIGs on the New Linux Server.</li> <li>4. Once the STIG process is completed, CDS will notify SSC-PAC. The SSC-PAC staff will test and verify the application is working properly.</li> <li>5. CDS will also recommend daily operational procedures, backup and recovery and other maintenance tasks.</li> </ol> <p><b>Requirements</b> Tasks that CDS will perform:</p>

- Install Oracle 11g on the New Linux Server. The specific 11g version (11.1.x or 11.2.x) will be specified by SSC-PAC.
- Upgrade database from Oracle 10g to 11g using the Database Upgrade Assistant on the New Linux Server
- Uninstall Oracle 10g installation from the New Linux Server.
- STIG the 11g Oracle installation on the New Linux Server.
- Perform the Oracle STIG on the New Linux Server.
- Perform the UNIX STIG on the New Linux Server.
- Document STIG results.
- Provide recommendations for monitoring, backup and recovery, and space management.
- Provide daily status report to SSC-PAC while CDS is working on-site at NCTAMSPAC.

STIG Results shall include the raw results and the following information for those controls that have findings:

- IAC Involved
- Severity Level (High, Med or Low)
- MAC Level
- Category level of finding
- Finding
- Description of finding
- Reference
- Corrections / fixes required
- Mitigation results (Open, Not a Finding, N/A)

Assumptions:

- UNIX STIG will remain after the clone is performed to the New Linux Server (except for STIG of Oracle installation since that will be deleted and a clean 11g installation will be performed).
- SSC-PAC will provide to CDS the results from the previous Oracle STIG performed on the 10g database. This should include the STIG checklist and any other documents related to the 10g STIG.
- SSC-PAC will provide to CDS the results from the previous UNIX STIG performed on the Old Linux Server. This should include the STIG checklist and any other documents related to the UNIX STIG.
- SSC-PAC will clone the Old Linux Server to the New Linux Server.
- Database only needs to be upgraded once since the data is only retained for a short period of time. Switch over to the New Linux Server can be done with the old data since it will be updated with new data and the old data will be overwritten.

	<ul style="list-style-type: none"> <li>• SSC-PAC will perform all the testing of the application.</li> <li>• CDS will assist application vendor to troubleshoot post-upgrade performance issues.</li> <li>• If there are any problems with the application caused by the 11g upgrade or 11g STIG, SSC-PAC will be responsible for coordinating with the application developers to resolve the issue.</li> <li>• Application is certified for the specified version of 11g that SSC-PAC instructs CDS to install.</li> <li>• SSC-PAC has the proper Oracle License for the New Linux Server.</li> <li>• SSC-PAC has the proper Oracle Software Update License to perform an upgrade to 11g on the New Linux Server.</li> <li>• SSC-PAC has the proper Oracle Software Support License for the New Linux Server.</li> <li>• Root password will be provided to CDS on-site consultant.</li> </ul>
<b>Applicable Documentation</b>	
<b>GFI, GFE, GFM</b>	The Government will provide, on an as needed basis, access to all government information necessary to complete the requirements of this TI.
<b>Duty Location</b>	NCTAMSPAC, Wahiawa, HI.
<b>Temporary Duty/Travel Requirements</b>	None.
<b>SLIN Number(s)</b>	
<b>Period of Performance</b>	18 Jan 2010 - 31 Mar 2010
<b>Data Deliverable (s)</b>	The contractor shall provide a report with the STIG results to SSC-PAC.
<b>Security Classification</b>	IAW Paragraph 6.3 of basic Task Order. SECRET
<b>Hazard and Safety Information</b>	IAW Paragraph 6.9 of basic Task Order.
<b>Requiring Technical Activity (RTA)</b>	Mr. James R. Williams, PACFLT N6T, james.r.williams@navy.mil, Phone: 808.474.5717.
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