

Date Tue, 14 Dec 1999 163143 -0700  
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Subject: Blue Alert- Y2K Problem in Oracle

**Title: Blue Alert- Y2K Problem in Oracle Reporting Tool**

Date December 9, 1999 Identifier 1999-RL-HNF-0051

**Lessons Learned Statement:** Reports generated by Oracle SQL\*Report® (v3.0.5.80) may erroneously indicate year 1900 instead of year 2000 unless date parameters in the user's personal computer are set correctly.

**Discussion of Activities:** On December 1, 1999, a user of the Access Control/Entry System (ACES) experienced a problem running a report that selected data beyond January 1, 2000. The report generator, Oracle SQL\*Report® (v3.0.5.80), processed any dates in year 2000 (e.g. 1/1/2000) as 1900 (1/1/1900). The affected ACES report had not been changed since Y2K testing earlier this year. Some other ACES reports that had worked earlier had similar results when re-tested.

**Analysis:** Vendor technical support helped identify a problem with a parameter setting on the client machine (i.e. user's PC) for National Language Support (NLS=American . . . ), which caused the date to default to a two digit year. Oracle suggests that whenever the NLS language support parameter is set in the client registry, the NLS\_DATE\_FORMAT parameter also be set. Since this problem only affected report parameter selection, it did not cause any data to be corrupted.

**Recommended Actions:** An additional setting (NLS\_DATE\_FORMAT=DD-MON-RR) was added to the Windows® Registry on the client PC so the century would be interpreted correctly. (Any other valid Oracle date format that interprets the century correctly would be appropriate. This is the default format selected at Hanford). The parameter must be set in the proper registry key to work properly. Anyone making this modification should contact Oracle to ensure they input this parameter setting in the appropriate registry key. Both Oracle parameters (NLS\_LANG and NLS\_DATE\_FORMAT) are part of the Windows® Registry. This registry may be updated automatically by a number of Oracle software products during the installation on the PC. The user does not normally edit this file. This parameter can be automatically updated for all affected users at Hanford by network technical support staff. Other companies that do not have the same computer support infrastructure will need to establish processes to add NLS\_DATE\_FORMAT=DD-MON-RR or other appropriate date format entry to the PC registry key HKEY\_LOCAL\_MACHINE/SOFTWARE/ORACLE on each Oracle client computer. Note that this default setting might affect other Oracle applications using default date formats. Other Oracle applications and tools were tested with the new registry entries implemented and none were impacted.

Estimated Savings/Cost Avoidance Costs avoided are expected to be negligible as only the report generating function was affected. No data corruption occurred.

Priority Descriptor BLUE/Information

Work / Function Business and Support Services, Information Technology

Hanford Functional Categories N/A

Hazard Other

ISM Core Function Feedback and Improvement

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References N/A

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