

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF PUBLIC WELFARE

INFORMATION TECHNOLOGY STANDARD

Name Of Standard: TNS Naming Conventions	Number: STD-DMS008
Domain: Data	Category: Oracle Physical Implementation
Date Issued: 08/09/2010	Issued By Direction Of:
Date Revised: New	 James Weaver, Dir of Div of Tech Engineering

Abstract:

This document outlines the standards for Transparent Network Substrate (TNS) Naming Conventions used in the tnsnames.ora file on Department of Public Welfare (DPW) servers.

General:

The tnsnames.ora file contains entries of database addresses needed to establish connections to these databases.

For server systems, the tnsnames.ora file is located at \$ORACLE_HOME\network\admin\ directory.

Standard:

TNS Naming Conventions

1. The TNS alias requires the form <APP>_<ENV>_TXN for applications which make use of RAC singleton services.
2. The TNS alias requires the form <APP>_<ENV> for applications which make use of RAC non-singleton services.
3. Both TNS aliases (<APP>_<ENV>_TXN and <APP>_<ENV>) are to be included in a TNSNAMES.ORA file for a given application.
4. For non-RAC entries, creating two entries which are same is necessary to maintain uniformity within the application as they are migrated from lower non-RAC environments to higher RAC environments.

5. The standard environment abbreviations are:

DEV – development
INT – integration
SAT – Systems Acceptance Test
TFP – Test for Production
LOD – Load Test
TRN – Training
PRD - Production

6. The application names need to be standardized.

7. The formatting of every TNS entry follows a template which is made available at the beginning of each TNSNAMES.ORA file. Also, see the sample server template TNSNAMES.ORA file named “sampleservertemplatetnsnames.ora” located with the TNS Naming Conventions Standard. The “sampleservertemplatetnsnames.ora” was created in notepad and must be copied and edited in notepad. Using email or Word or any other word processing software introduces hidden characters that corrupt the entries or the TNSNAMES.ORA file.

8. All nodes which run the database instance need to be included in the TNS entry.

9. The TNS entries for any given application are grouped together by environment in the TNSNAMES.ORA file. This includes any temporary TNS entries.

10. For TNS entries which are created temporarily to support a given initiative, a comment needs to be included with the name of person who created the entry, the date of creation of entry and, optionally, a date by which the entry is expected to be removed.

11. Separate TNSNAMES.ORA files are deployed on each client (web server for Database Management Section) to maintain a self documenting approach whereby the TNSNAMES.ORA file indicates which databases a given application is connecting to from a given web server.

12. Add a comment line above the TNSNAME entry to provide the name of the application.

13. Before a change is made to TNSNAMES.ora, make a copy of the original file first and name it TNSNAMES.ORA.mmdyyyy.

Exemptions from this Standard:

There will be no exemptions to this standard.

Refresh Schedule:

All standards and referenced documentation identified in this standard are subject to review and possible revision annually or upon request by the DPW Information Technology Standards Team.

Standard Revision Log:

Change Date	Version	Change Description	Author and Organization
08/09/2010	1.0	Initial	A. Gupta and M. Singh