



The service that never sleeps™

Health Check for Oracle JDE

Created by dbconnect.com for dbconnect.com on Thursday, August 09, 2012 5:44 AM

Result Summary:

Security: 27 out of 100	Performance: 59 out of 100
Topology: 69 out of 100	JDE-Specific Items: 80 out of 100
Backup and Recovery: 100 out of 100	Overall Score: 67 out of 100

Top Areas of Concern:

- Critical Security Vulnerability: Possible default passwords found
- Critical Security Vulnerability: Unencrypted credit card data found
- Critical Security Vulnerability: Public database links found
- Critical Performance Issue: Database locking
- Critical JDE Issue: Missing indexes

Contact us to discuss the results of your health check report.



6508 Constitution Drive • Fort Wayne, IN 46804 • (260) 755-2102 • (877) 325-9985 • nightowl@dbconnect.com





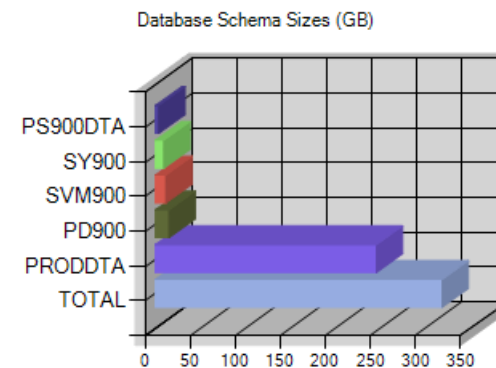
Database Environment

DB Name: **JDEPROD**

Platform: **Microsoft Windows x86 64-bit**

Oracle Version: 11.1.0.7.0 Enterprise Edition

JDE Version: **EnterpriseOne Release E900**



Oracle patches or upgrades required: **No Oracle 11gR1 patches required. Upgrade to 11gR2 as soon as possible to remain supported.**

RAC database? **No**

Database auditing enabled? **SOX Yes**

Archivelog enabled? **SOX Yes**

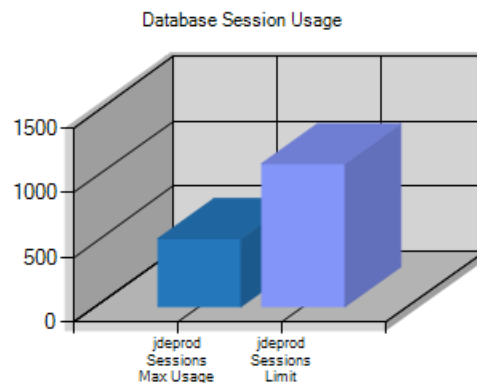
User profiles used? **SOX Yes**

Password complexity enforced? **SOX Yes**

Invalid objects in database? **Yes**

Database options used

- Advanced replication
- Application Role
- Backup Encryption
- Bit-mapped indexes
- Block Change Tracking
- Block Media Recovery
- Change Data Capture
- Coalesce Index



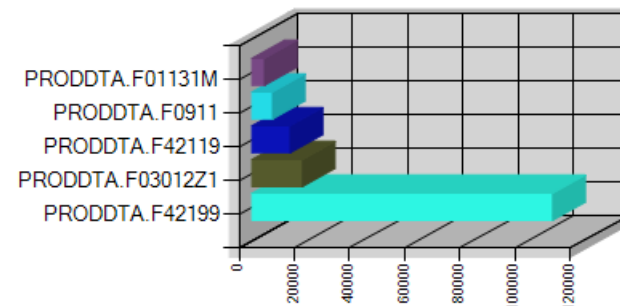
User accounts with DBA privileges: SOX

JDE
RCARTER
SYS
SYSTEM
WATCHDOG

JDE service accounts: SOX

JDE
WATCHDOG

Top 5 JDE Tables in Size (MB)

**Top 10 SQL Statements (Execution Time):**

```
BEGIN SYS.KUPW$WORKER.MAIN('SYS_EXPORT_SCHEMA_02', 'SYSTEM', 0); END;
```

Elapsed Time (ms):
655500797278

Executions: 70

Disk Reads: 1819669971

Buffer Gets: 1885466718

```
BEGIN SYS.KUPW$WORKER.DISPATCH_WORK_ITEMS(); END;
```

Elapsed Time (ms):
655427172915

Executions: 70

Disk Reads: 1819659563

Buffer Gets: 1885288236

```
select /*+ no_parallel(t) no_parallel_index(t) dbms_stats cursor_sharing_exact use_weak_name_resl dynamic_sampling(0) no_monitoring
*/count(*), count(SLAITM), count(SLLOCN), count(SLLOTN), count(SLFRGD), count(SLTHGD), count(SLFRMP),
sum(sys_op_opnsize(SLFRMP)), count(SLTHRP), sum(sys_op_opnsize(SLTHRP)), count(SLEXDP), sum(sys_op_opnsize(SLEXDP)),
count(SLDSC1), count(SLDSC2), count(SLLNTY), count(SLNXTTR), count(SLLTTR), count(SLEMCU), count(SRLIT), count(SLKTLN),
sum(sys_op_opnsize(SLKTLN)), count(SLCPNT), sum(sys_op_opnsize(SLCPNT)), count(SLRKIT), sum(sys_op_opnsize(SLRKIT)),
count(SLKTP), sum(sys_op_opnsize(SLKTP)), count(SLSRP1), count(SLSRP2), count(SLSRP3), count(SLSRP4), count(SLSRP5),
count(SLPRP1), count(SLPRP2), count(SLPRP3), count(SLPRP4), count(SLPRP5), count(SLUOM), count(SLUORG),
sum(sys_op_opnsize(SLUORG)), count(SLSOQS), sum(sys_op_opnsize(SLSOQS)), count(SLSOBK), sum(sys_op_opnsize(
```

Elapsed Time (ms): 1332641824

Executions: 1

Disk Reads: 13860189

Buffer Gets: 20561785

```

SELECT
SDCORD,SDKCOO,SDPDTT,SDPRP5,SDOORN,SDRCTO,SDLITM,SDRFRV,SDSPATTN,SDRSRT,SDCARS,SDASN,SDFUP,SDKITID,S
DAEXP,SDPDDJ,SDPMTO,SDRLIT,SDRORN,SDLOCN,SDPRIO,SDDRQJ,SDUOM4,SDPSN,SDAAID,SDKCO,SDMCU,SDSRP1,SDPOE,
SDNXTR,SDUORG,SDUOM,SDOPDJ,SDCOMM,SDDELN,SDRSDJ,SDVR03,SDAN8,SDDGL,SDFRMP,SDSHPN,SDFEA,SDANBY,SDPM
TN,SDUOM2,SDPEFJ,SDZON,SDFUC,SDTHRP,SDSO15,SDPRP2,SDRKIT,SDSOQS,SDDCTO,SDDSC2,SDRKCO,SDSHAN,SDQTYT,S
DOPTT,SDUNCS,SDTORG,SDNUMB,SDADTM,SDOKCO,SDDOC,SDURAT,SDPRP4,SDPA8,SDIVD,SDVR02,SDSHCCIDLN,SDDCT,SD
CRCD,SDADDJ,SDSRP2,SDPRP3,SDDRQT,SDTPC,SDOGNO,SDSRP3,SDAITM,SDOCTO,SDPPDJ,SDPRP1,SDCNDJ,SDITM,SDURRF,
SDSRP5,SDPEND,SDSHCN,SDLOTN,SDMOT,SDSOCN,SDDMCT,SDSQOR,SDTRDJ,SDUPC1,SDFRTH,SDSRP4,SDLTTR,SDDOCO,SD
RLLN,SDVR01,SDLNTY,SDLNID,SDUPRC,SDSO16,SDSOBK,SDDVAN,SDSFXO,SDTHGD,SDSWMS,SDDSC1,SDFRGD,SDPSIG,SDCR
R,SEMCMU FROM PRODDTA.F4211 WHERE ((((((SDNXTR >= :1 AND SDDRQJ <= :2 ) AND SDDRQJ >= :3 ) AND SDDCTO LIKE :4 )
AND SDLITM = :5 ))) UNION SELECT
SDCORD,SDKCOO,SDPDTT,SDPRP5,SDOORN,SDRCTO,SDLITM,S

```

Elapsed Time (ms): 2757030662 Executions: 3 Disk Reads: 5138005 Buffer Gets: 16044307

```

SELECT * FROM PRODDTA.F42199 WHERE ( SLDCTO = :KEY1 AND SLADDJ < :KEY2 AND SLNXTR > :KEY3 AND ( SLEMCU =
:KEY4 OR SLEMCU = :KEY5 ) AND SLPID LIKE :KEY6 ) ORDER BY SLDOCO ASC,SLDCTO ASC,SLKCOO ASC,SLLNID ASC,SLUPMJ
ASC,SLTDAY ASC

```

Elapsed Time (ms): 1597249246 Executions: 2 Disk Reads: 696713 Buffer Gets: 1646774

```

UPDATE PRODDTA.F42199 SET
SLKCOO=:BND1,SLDOCO=:BND2,SLDCTO=:BND3,SLLNID=:BND4,SLSFXO=:BND5,SLMCU=:BND6,SLCO=:BND7,SLOKCO=:BND8,SL
OORN=:BND9,SLOCTO=:BND10,SLOGNO=:BND11,SLRKCO=:BND12,SLRORN=:BND13,SLRCTO=:BND14,SLRLLN=:BND15,SLDMCT=:
BND16,SLDMCS=:BND17,SLAN8=:BND18,SLSHAN=:BND19,SLPA8=:BND20,SLDRQJ=:BND21,SLTRDJ=:BND22,SLPDDJ=:BND23,SLAD
DJ=:BND24,SLIVD=:BND25,SLCNDJ=:BND26,SLDGL=:BND27,SLRSDJ=:BND28,SLPEFJ=:BND29,SLPPDJ=:BND30,SLVR01=:BND31,SL
VR02=:BND32,SLITM=:BND33,SLLITM=:BND34,SLAITM=:BND35,SLLOCN=:BND36,SLLTN=:BND37,SLFRGD=:BND38,SLTHGD=:BND3
9,SLFRMP=:BND40,SLTHRP=:BND41,SLEXDP=:BND42,SLDSC1=:BND43,SLDSC2=:BND44,SLLNTY=:BND45,SLNXTR=:BND46,SLLTTR
=:BND47,SLEMCU=:BND48,SLRLIT=:BND49,SLKTLN=:BND50,SLCPNT=:BND51,SLRKIT=:BND52,SLKTP=:BND53,SLSRP1=:BND54,SLS
RP2=:BND55,SLSRP3=:BND56,SLSRP4=:BND57,SLSRP5=:BND58,SLPRP1=:BND59,SLPRP2=:BND60,SLPRP3=:BND61,SLPRP4=:BND
62,SLPRP5=:BND63,SLUOM=:BND64,SLUORG=:BND65,SLSOQS=:BND66,SLSOBK=:BND67,SLSOCN=:BND68,SLSONE=:BND69,SLUO
PN=:BND70,SLQTYT=:BND7

```

Elapsed Time (ms): 24660714521 Executions: 35 Disk Reads: 14025682 Buffer Gets: 41959405

```

SELECT IBITM,IBLITM,IBAITM,IBMCU,IBSRP1,IBSRP2,IBSRP3,IBSRP4,IBSRP5,IBSRP6,IBSRP7,IBSRP8,IBSRP9,IBSRP0,
IBPRP1,IBPRP2,IBPRP3,IBPRP4,IBPRP5,IBPRP6,IBPRP7,IBPRP8,IBPRP9,IBPRP0,IBCDGD,IBPDGR,IBDSGP,IBVEND,IBANPL,
IBBUYR,IBGLPT,IBORIG,IBROPI,IBROQI,IBRQMX,IBRQMN,IBWOMO,IBSERV,IBSAFE,IBSLD,IBCKAV,IBSRCE,IBLOTS,IBOT1Y,
IBOT2Y,IBSTDP,IBFRMP,IBTHRP,IBSTDG,IBFRGD,IBTHGD,IBCOTY,IBMMPC,IBPRGR,IBPRPC,IBORPR,IBBACK,IBIFLA,
IBABCS,IBABCM,IBABCI,IBOVR,IBSHCM,IBCARS,IBCARP,IBSHCN,IBSTKT,IBLNTY,IBFIFO,IBCYCL,IBINMG,IBWARR,IBSRNR,
IBPCTM,IBCMCG,IBFUF1,IBTX,IBTAX1,IBMPST,IBMRPD,IBMRPC,IBUPC,IBSNS,IBMERL,IBLTLV,IBLTMF,IBLTCM,IBOPC,
IBOPV,IBACQ,IBMLQ,IBLTPU,IBMPSP,IBMRPP,IBITC,IBECO,IBECTY,IBECOD,IBMTF1,IBMTF2,IBMTF3,IBMTF4,IBMTF5,
IBMOVD,IBQUED,IBSETL,IBSRNK,IBSRKF,IBTIMB,IBBQTY,IBORDW,IBEXPD,IBDEFD,IBMULT,IBSFLT,IBMAKE,IBLFDJ,IBLLX,
IBCMGL,IBURCD,IBURDT,IBURAT,IBURAB,IBURRF,
IBUSER,IBPID,I

```

Elapsed Time (ms): 694803424 Executions: 1

Disk Reads: 23160

Buffer Gets: 23851

```
SELECT JCJOBQUE, JCJOBPTY, JCJOBSTS, JCENHV, JCUSER, JCJOBTYPE, JCSBMDATE, JCSBMTIME, JCJOBNBR, JCEXEHOST,
JCORGHOST, JCPROCESSID, JCACTDATE, JCACTTIME, JCFUNO, JCPRTQ, JCFNDFUF2 FROM SVM900.F986110 WHERE (
JCEXEHOST = :KEY1 AND JCFNDFUF2 LIKE :KEY2 AND JCSBMDATE = :KEY3 ) ORDER BY JCEXEHOST ASC,JCUSER
ASC,JCJOBQUE ASC,JCJOBPTY ASC,JCJOBSTS ASC
```

Elapsed Time (ms): 1378637031 Executions: 2

Disk Reads: 333067

Buffer Gets: 359197

```
SELECT
SDCORD,SDKCOO,SDPDTT,SDPRP5,SDOORN,SDRCTO,SDLITM,SDRFRV,SDSPATTN,SDRSDT,SDCARS,SDASN,SDFUP,SDKITID,S
DAEXP,SDPDDJ,SDPMTO,SDRLIT,SDRORN,SDLOCN,SDPRIO,SDDRQJ,SDUOM4,SDPSN,SDAAID,SDKCO,SDMCU,SDSRP1,SDPOE,
SDNXTR,SDUORG,SDUOM,SDOPDJ,SDCOMM,SDDELN,SDRSJ,SDVR03,SDAN8,SDDGL,SDFRMP,SDSHPN,SDFEA,SDANBY,SDPM
TN,SDUOM2,SDPEFJ,SDZON,SDFUC,SDTHRP,SDSO15,SDPRP2,SDRKIT,SDSOQS,SDDCTO,SDDSC2,SDRKCO,SDSHAN,SDQTYT,S
DOPTT,SDUNCS,SDTORG,SDNUMB,SDADTM,SDOKCO,SDDOC,SDURAT,SDPRP4,SDPA8,SDIVD,SDVR02,SDSHCCIDLN,SDDCT,SD
CRCD,SDADDJ,SDSRP2,SDPRP3,SDDRQT,SDTPC,SDOGNO,SDSRP3,SDAITM,SDOCTO,SDPPDJ,SDPRP1,SDCNDJ,SDITM,SDURRF,
SDSRP5,SDPEND,SDSHCN,SDLOTN,SDMOT,SDSOCN,SDDMCT,SDSQOR,SDTRDJ,SDUPC1,SDFRTH,SDSRP4,SDLTTR,SDDOCO,SD
RLLN,SDVR01,SDLNTY,SDLNID,SDUPRC,SDSO16,SDSOBK,SDDVAN,SDSFXO,SDTHGD,SDSWMS,SDDSC1,SDFRGD,SDPSIG,SDCR
R,SDEMCU FROM PRODDTA.F4211 WHERE (((((SDNXTR >= :1 AND SDDCTO LIKE :2 ) AND SDLITM = :3 ) AND SDPA8 = :4 ))) UNION
SELECT
SDCORD,SDKCOO,SDPDTT,SDPRP5,SDOORN,SDRCTO,SDLITM,SDRFRV,SDSPATTN,SDRSDT,
```

Elapsed Time (ms): 595830055 Executions: 1

Disk Reads: 1817222

Buffer Gets: 5441062

```
SELECT GLKCO, GLDCT, GLDOC, GLDGJ, GLJELN, GLEXTL, GLCO, GLAID, GLMCU, GLOBJ, GLSUB, GLSBL, GLLT, GLPN, GLFY,
GLCRCD, GLAA, GLU, GLGLC, GLR2, GLAN8, GLALT1, GLDCTO, GLLNID, GLBCRC, GLCRRM FROM PRODDTA.F0911 WHERE ( (
GLLT = :KEY1 AND GLOBJ = :KEY2 AND GLPN = :KEY3 AND GLFY = :KEY4 AND GLSUB = :KEY5 ) ) ORDER BY GLCO ASC,GLMCU
ASC
```

Elapsed Time (ms): 2284089182 Executions: 4

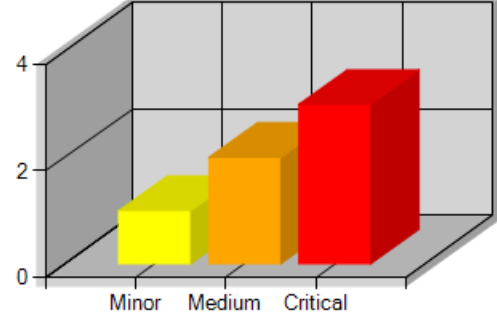
Disk Reads: 141756

Buffer Gets: 149627



Security Health Check

A robust security setup is critical to protect your company's data. JDE contains several vulnerabilities that must be addressed. By following our best practices and using our automated tools to manage Oracle security, we can keep your data safe.



Critical Items:

- Public access to JDE tables?^{SOX} Compliant
- Database accounts have default passwords?^{SOX} Non-Compliant
- Unencrypted credit card data present?^{SOX} Non-Compliant
- Public database links exist?^{SOX} Non-Compliant

Medium Items:

- Password complexity rules enforced?^{SOX} Compliant
- Proper security setup for JDE service accounts?^{SOX} Non-Compliant
- Database Audit trail too large?^{SOX} Non-Compliant

Minor Items:

- Database Audit trail errors in the past week?^{SOX} Non-Compliant

Informational Items:

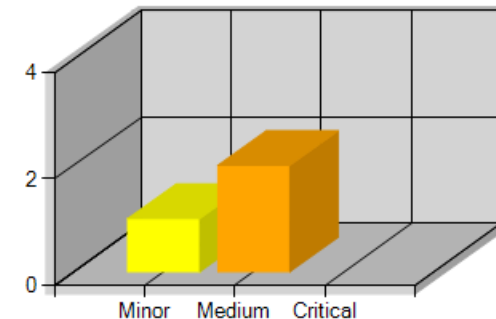
- Default JDE user accounts exist?^{SOX} Yes
- Private database links exist?^{SOX} Yes
- Transparent Data Encryption used?^{SOX} No

Database Topology Health Check



Database Topology Health Check

Proper database design and configuration provides the solid foundation vital to your JDE system. Routine monitoring and maintenance must be performed to maintain your database. Contact us to schedule an assessment and we can help implement the standards and tools to ensure your system is reliable.



Critical Items:

- Is database running on an unsupported version of Oracle? ^{SOX} Compliant
- Is NOLOGGING enabled on any database objects? ^{SOX} Compliant

Medium Items:

- Standard tablespaces configured for all JDE environments? Non-Compliant
- Tablespaces have sufficient free space capacity? Compliant
- Storage parameters configured correctly for all datafiles? Non-Compliant

Minor Items:

- Invalid objects exist in the database? Non-Compliant

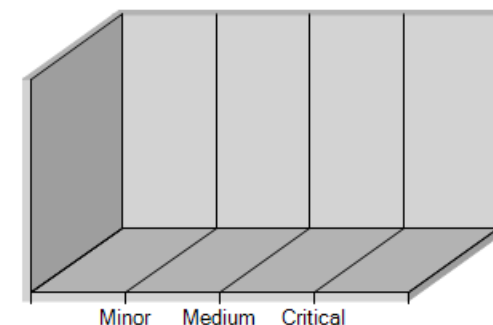
Informational Items:

- Is Oracle Standard Edition used? Yes
- Custom database objects exist in JDE schemas? Yes
- Do any database init parameters need to be reviewed? Yes



Backup and Recovery Health Check

A comprehensive backup and recovery solution should be the highest priority for your IT department. We can help you assess your current needs and design a solution to protect your valuable data.



Critical Items:

- Are the database and archive logs being backed up?^{SOX} Compliant
- Do database block corruption errors exist?^{SOX} Compliant
- Is database running in archivelog mode?^{SOX} Compliant
- Are online redo logs duplexed?^{SOX} Compliant

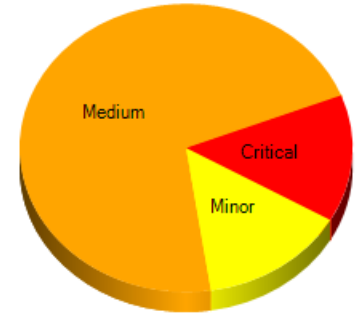
Informational Items:

- Are multiple archive redo log destinations used?^{SOX} No
- Are RMAN incremental backups being performed?^{SOX} No
- Is RMAN block change tracking file used?^{SOX} No
- Are database backups written to tape media?^{SOX} No
- Is Oracle Data Guard used?^{SOX} No
- Is force logging enabled?^{SOX} Yes



Performance Health Check

Poor database performance can bring a business to its knees. We have the experience and expertise to identify the key database and JDE performance metrics to keep your system running efficiently.



Critical Items:

Are there excessive database waits in the system?	Compliant
Is there excessive database locking?	Non-Compliant
Are there blocking locks in the database?	Compliant
Are online redo log files too small?	Compliant

Medium Items:

Are log file sync operations completing efficiently?	Compliant
Is redo log switching occurring too frequently?	Non-Compliant
Are optimizer statistics being gathered on a regular basis?	Compliant
Do indexes need to be rebuilt?	Non-Compliant
Are ad hoc SQL queries being executed in the database?	Non-Compliant
Are there SQL statements eligible for tuning?	Non-Compliant
Are JDE work tables being purged regularly?	Compliant
Are JDE work center tables being purged regularly?	Non-Compliant
Are JDE sales orders being archived?	Compliant

Minor Items:

Do tables with excessive empty blocks exist?	Compliant
Is PCTFREE set appropriately?	Non-Compliant

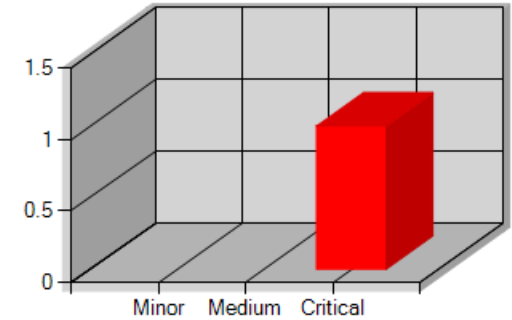
Informational Items:

How many I/O operations are performed per second?	226
Are database system statistics being used?	No
Do custom indexes exist in the database?	Yes



JDE-Specific Health Check

JDE environments exhibit specific behavior patterns that must be monitored and maintained in order to prevent issues from occurring. Our in-depth experience supporting JDE systems allows us to focus on the key areas that are vital to the health of the application.



Critical Items:

- Is Vertex setup and configured correctly? Compliant
- Are any JDE indexes missing? Non-Compliant
- Are any JDE primary key constraints missing? Compliant
- Are there excessive failed JDE jobs? Compliant

Medium Items:

- Is the JDE job queue processing efficiently? Compliant
- Are there an excessive number of JDE jobs running per day? Compliant

Informational Items:

- What is the most frequently executed JDE job? R49590
- Are there long running JDE jobs in the database? Yes
- Is 21 CFR Part 11 table auditing enabled? ^{SOX} No