

You'll Love Being The DBA: Smoothing the Transition



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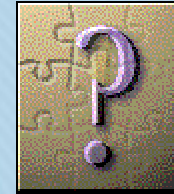
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Welcome!

- **Current Database Administrator?**
 - **Prospective Database Administrator?**
 - **Project Manager, Tech Lead, Management?**
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- **Small shop?**
 - **Oracle Applications shop?**
 - **Discoverer shop?**

Why it's great to be the DBA



- **Databases and their needs are very interesting**
- **DBAs make important contributions**
- **The DBA gets a unique view out to the customer and a unique view in to the infrastructure**
- **Working closely with a world-class vendor... makes a DBA feel like a world-class provider**

Adding a DBA During Major Change

ANYTIME

- **Can free up the current DBA**
- **Fresh ideas from the new DBA**

DURING REIMPLEMENTATION

- **Double coverage**
- **Double research capacity**
- **New decisions with less baggage**

Characteristics of the Candidate DBA

- Desire to take the job
- Programming experience
- Sense of caution
- Looking for something new
- Values the DBA's contribution

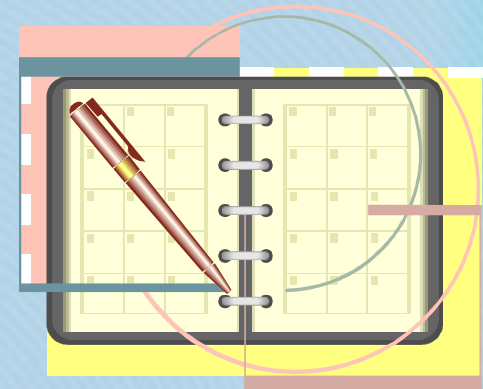


In retrospect: sharing tuning experiences exposed candidates to the DBA role

Appreciating My Candidate DBA

- **Smart and dedicated**
- **Enthusiastic about the new systems**
- **Willing to start meetings early in the process**
- **Patient with my chalk talks and labs**
- **Documented everything for his future use**

Agenda



- 1. Structuring Knowledge Transfer**
- 2. Manage Knowledge Transfer**
- 3. Topics: DBA knowledge**
- 4. Evaluation of the process**

Structuring Knowledge Transfer (1)

- 1. Start immediately: add the new DBA to monitor lists**
- 2. Meet on recurring schedule, as soon as assigned**
- 3. Plan work sessions and labs**
- 4. Keep running lists of outstanding topics**
What comes to mind while performing work sessions
- 5. Share problems and keep each other informed**
Problems on the old system might appear on new system



Structuring Knowledge Transfer (2)

Step into the background - get an OK to:

- **Have tasks for new system go through new DBA**
- **Let new DBA negotiate new processes with system administrators and others**
- **Let new DBA document processes and procedures for new system**

Structuring Knowledge Transfer (3)

One picture is worth a thousand words.

One experience is worth a thousand pictures.

(So: let the new DBA do lots of driving)

**** (Mentioned in Covey's 8th Habit)***

Managing Knowledge Transfer (1)

Generally...

- **Assess the new DBA's background**
- **Set the recurring schedule**
- **Find an older test system for experiments**
- **The new DBA should collect and store new systems documentation and personal notes**



Manage Knowledge Transfer (2)

For each discussion session...

- Plan the session and bring copies of outline**
- Prepare your discussion and points to cover**
- Select topics as they arise in the new system**

Manage Knowledge Transfer (3)

For each lab session...

- **Stick to one operation**
- **Practice existing procedures and new topics too**
- **Follow best practice of scripting change first**
- **Leave extra time for questions and errors**



Topics: DBA knowledge (1)

Critical Topics

- On-site documentation
- File layout and site cloning procedure
- Isolating redo log and archived redo log files
- Understanding Oracle recovery - *time*
- Site startup and shutdown commands
- Password management
- What Goes Wrong in upgrades

About Documentation

For our own work:

- **Procedures - how we work**
- **Inventories – what we have**
- **Control Sheets – obligations**
- **Logs – what we did**

As part of IT:

- **Security and Risk Management**
- **Configuration documentation**
- **Other site-specific**

Address Local Solutions

- ***Patch Management***
 - **Storing logs**
 - **Checking results**
- ***Monitoring and Alerting***
 - **Space management scripts**
 - **ORA-xxxx in Alert Logs**
- ***Performance***
 - **OS and database statistics**
 - **Volume and application statistics**

What Could Go Wrong at Go-Live

- ***Space issues***
 - **Extents too small**
 - **File Space: logs, tmp**
- ***Memory issues***
 - **Shared memory sizing**
 - **Pinning, PGA size, statistics**
- ***User-related***
 - **Timeout settings**
 - **End-dated records, outdated fields**
- ***Unresolved old issues - locks***

Topics: DBA knowledge (2)

Typical DBA Topics

- **Accounts: sys vs system**
- **Redo log size**
- **Detecting/repairing sizing issues**
- **Listener and tnsnames**
- **About shared memory and pinning**
- **Security considerations**



Topics: DBA knowledge (3)

Typical DBA Topics (continued)

- **Interpreting the alert logs**
- **Certify and its uses**
- **RDA utilities**
- **Site backup methods and schedule**
- **Shutdown abort, immediate, normal**

Topics: DBA knowledge (4)

Other DBA Topics

- Editors and similar tools
- Operating system commands
- Monitoring and appropriate responses
- cron or Enterprise Manager scripts
- Local password policy/procedure
- opatch utility (patching database)
- About the installer

/etc/oraInst.loc



Topics: DBA knowledge (5)

Lab Topic Suggestions

- **Change to/from archive log mode**
- **Change passwords and change them back**
- **Recovery using archived log files**
- **Make size and tablespace adjustments**
- **Apply changes to cron jobs**
- **Locate various log files**

Topics: DBA knowledge (6)

Specific for Oracle Applications...

- **Layout of OA software and \$ORACLE_HOMEs**
- **apps vs applsys, applmgr vs oracle**
- **Researching patches, using patch utilities**
- **Foundation and other specialized schemas**
- **How to use pre-clone and clone scripts**
- **autoconfig and other utilities**

Topics: DBA knowledge (7)

Specific for Discoverer...

- **Layout of Discoverer software**
- **Changing the prefs file**
- **Infrastructure and mid-tier**
- **Jinitiator and its role**
- **How the meta-layer interacts with accounts**
- **How to install and patch**



Evaluation of the process

- **Finished ahead of plan:**
 - Start in March (on target)
 - Evaluate in July (on target)
 - Full responsibility in September (months ahead)
- **Occasionally, I'm asked for advice or history**
- **New system works well !**



Afterwords:

- **Include the topics “init.ora” and spfile**
(accidentally left off because in E-business init.ora is discussed as part of autoconfig)
- **Discuss .profile scripts**
(good topic raised by an attendee)
- **Discuss Discoverer accounts and metalayer owner**
(an expansion suggested during discussion)
- **Thought question:**
What’s your most optimum org chart for DBA and applications staff, given the frequent case that System Administration is on its own?