

BECOME A STAR DBA

A quick guide to help you become the best Database Administrator (DBA) around

Here is the Easysoft Limited quick guide to help DBAs quickly and easily be at the top of their game. By following these quick tips, you will take control of your database environment and reduce the overall potential for crises to occur.

1. Take an Inventory

As a DBA you will usually have servers to manage, from perhaps just a couple to maybe a thousand or more; we recommend that you spend some of your time understanding what servers you have within your environment and some very basic information about them, we recommend that as a minimum you grab the following information:

- Machine name, manufacturer and model
- Memory size
- Number of CPUs
- CPU speed (maximum clock speed)
- Disk size (are they RAIDed)
- Networks card (how many, what speed)
- Battery backup available
- OS (name and version)

2. Standardise Configurations

As systems grow or as different DBAs stamp their authority and own working practices on their servers you could find that configurations are different on them. When standardising server configurations, consider the role of each server in your organisation as you may decide that the best policy is different server configurations for public versus "not public" servers for example.

3. Create a Customised Maintenance Plan

Server maintenance is crucial to the performance of the business and is usually the domain of either a network administrator or sometimes the DBA, if this does fall within your remit then having a formal, customised plan will help you.

We don't want to worry you too much but without a proper maintenance plan, the application software is likely to not run as it is expected and in very severe cases, the network can even experience partial or total failure leading to severe losses to your business.

So in order to keep the business' computer and server network in a reliable condition, you'll need to ensure that your servers are checked and updated on a regular basis and that the installation of patches are routinely completed.

You're probably best getting the networks guys (server experts) to undertake the work, but someone will need to ensure that the tasks are routinely checked and completed. Make that your task.

4. Ensure the Security of Your System

We seem to be always hearing about high-profile hacking attacks that continue to prove that web security remains one of the biggest issues facing any IT team today. If any external facing servers are your responsibility then you need to get to grips with this, this is especially true if you are looking after web servers as they are one of the most targeted public faces of an organisation.

5. Get on Good Terms with Your Developers

Developers and DBAs (along with network personnel) need to work closely together, spending more time together discussing application performance.

This also stops any future finger pointing which hampers the company's abilities to produce the very best performance.

Patience, information sharing, and collaboration can lead to much faster and more comprehensive performance improvements.

6. Develop a Comprehensive Disaster Recovery Strategy

It goes without saying that if things go wrong (as they sometimes do) then you need to be able to leap into action and resolve issues quickly with a limited amount of downtime.

The key step here is to list all of your critical systems and the threats to these systems.

7. Take and Test Regular Backups

As part of your Disaster Recovery plan I am no doubt sure that creating backups of your data is included.

As a minimum your backup set should consist of:

- The last backup of the control file and ALL datafiles
- All archived redo logs generated from when the last backup was taken
- Configuration files such as odbc.ini, tnsnames.ora, listener.ora etc)

The frequency of your backups is based on a number of factors; if users generate a significant amount of data changes then you'll have more frequent backups. Also if you make any changes to databases or systems then you really should make backups before you start.

If your database is mainly read-only, and if updates are issued only infrequently, then you can probably get away with backing up the database less frequently.

8. Monitor and Maintain Performance

Keeping a constant eye on your Server performance is possibly one of the most important responsibilities of your role.

Modern Server monitoring tools will provide you with an easy way to maintain a good vigilant approach as they can provide you with real-time alerts, and report functionality can keep you up to date with any potential problems.

9. Know Where to Find Information

You're going to know your own role fairly well, but do you know who to contact, where your corporate information is held?

Not only do you know to know the who, what and where internally, but DBAs are expected to constantly keep-up with the rapidly-changing technology. Have you signed up for the news channels from your database vendors and signed up for the relevant groups, forums and blogs around the internet?

Thank you

This has been a quick look at the important tips that we think will give you a good head start in your DBA role. The role of a DBA can be a stressful and rewarding you, enjoy it, and remember if Easysoft Limited could be of any assistance in your data access tasks, just get in touch.