



## **Remote Diagnostics**

### **What is it? Quite simply - it's a health screening for your database!**

Due to the explosive growth in Oracle-backed websites and the limited supply of experienced Oracle designers and DBAs, many popular websites are beginning to strain under increased traffic. Oracle is widely acknowledged as the best database to support ecommerce websites. However, the very features that make it so powerful and flexible also make it extremely challenging to manage in large, complex, or high-performance systems. Because of the tremendous demand for performance optimization for Oracle-backed websites, Rare & Dear <http://www.rare-dear.com> has developed a Remote Diagnostics service. This service combines many years of in-depth Oracle database expertise (our CTO was one of the three original developers of the Oracle kernel) into a simple, inexpensive package. We use this as the first step in any Performance Optimization engagement; however, it can also stand on its own as a valuable "Second Opinion" on the health of the database behind your website.

We will monitor your Oracle-backed website for a 24-hour period, identify the most likely bottlenecks to optimum performance, and recommend possible corrective action. Below we explain our approach, what you get, and limitations on its use.

#### **The Rare & Dear Remote Diagnostic Approach:**

1. Remotely connect to your Oracle database server (using SSH, SCP or other secure protocol)
2. Take a snapshot of **static** system parameters
3. Install a set of monitor scripts with tables to hold the measurements.
4. Select the time period to be monitored
5. Kick off **dynamic** statistics gathering
6. If your site is a website, then we monitor user **response-time** via the Internet; If it is an intranet site, then you will need to run our user response-time measuring script from inside your firewall
7. End statistics gathering
8. Export data from monitor tables, transfer to R&D, and Import
9. Graph, evaluate, and analyze data
10. Write report with analysis and recommendations

#### **We provide you with a report that includes:**

- Review of database server behavior (I/O wait, CPU utilization, Disk space).
- Examination of Oracle init.ora parameter settings in light of your database performance.
- Evaluation of over 40 different metrics that are indicators of potential bottlenecks to optimum database performance.
- Assessment of table and tablespace size parameters vs. extents.
- Investigation into Oracle tablespace usage patterns.
- Indication of potential poorly tuned SQL statements.
- Warning of possible problems in the way your application code performs Oracle database calls.

#### **Limitations:**

While we believe that the results of our Remote Diagnostics service will be extremely valuable to you in diagnosing or preventing performance problems with your Oracle-backed website (or intranet), we cannot guarantee that we will be able to detect all types of problems. First, not all aspects of your system are investigated. We take a look at only your Oracle database server,

your Oracle database, and your website response time. We address system performance only and do not cover security or backup and recovery. We do not examine your web server(s) if they are separate from the database server(s). We take measurements of the indicators that, **in our experience**, are most likely to cause problems.

For the purposes of this Remote Diagnosis, a specific 24-hour time period is monitored. You should choose a time when your system is likely to experience the worst performance. If this time period does not include periods of peak traffic, then we have no way of knowing how your system responds to such a situation.

Also, while you may make extrapolations from the measurements we provide, we are not in a position to do this for you. If you wish to know, for example, how your system will perform under twice the peak load, we can provide a more complete analysis. Though we can identify many problems through the Remote Diagnostics service, some problems may be more complex than we can handle in such a limited effort. In that case, we are happy to provide more in-depth investigation by one or more members of our Performance team.