



Edward Whalen
Sr. Database Architect
(281) 793-7707

PROFILE:

Edward is a Sr. Database Architect with over 24 years of experience in operating systems, computer hardware and database technologies. Edward is experienced with designing and implementing enterprise disaster recovery (DR) plans on UNIX, Linux and Windows operating systems. He is also an author of more than nine books and numerous technical papers on Oracle and Microsoft technologies. Ed is an expert on Oracle performance tuning, Oracle RAC, SAN implementation, and application workload testing. Edward currently holds a clearance at the Top Secret level.

SKILLS:

Databases: Oracle11g, Oracle10g, Oracle9i, Oracle8, MS SQL Server 2008, MS SQL Server 2005, MS SQL Server 2000, MS SQL Server 7.0, MYSQL

Oracle Applications: Oracle 9i/10g/11g RAC, RMAN, Oracle Data Guard, Oracle Application Server, Oracle eBusiness Suite, Oracle Advanced Security

Other Skills: Data Warehousing, Business Intelligence, ETL, Database Security, Virtualization

Operating Systems: Red Hat Linux, Oracle Enterprise Linux, Linux, Windows, Solaris, HP/UX and AIX,

Storage Systems: EMC, IBM and HP Storage Arrays

Programming Languages: C, Perl, Shell, FORTRAN, WSC

Security Clearance: US citizen with Top Secret (TS/SSBI) and ATF clearance

EXPERIENCE:

Performance Tuning Corporation, Austin TX

Sr. Database Architect

Jan 1997 – Present

Responsibilities include: consulting, mentoring, customer and employee training, speaking engagements and technical content development. Areas of expertise includes: Oracle and MS SQL Server database design, performance optimization and troubleshooting, Oracle 11g/10g/9i RAC on Linux, UNIX and Windows, application workload testing, TPC benchmarks, application migrations, business intelligence and business continuance planning. Application experience includes: deployment and tuning of Oracle eBusiness Suite, JD Edwards, and PeopleSoft on several major hardware and operating system platforms. Provided consulting services to companies such as: Thomson Financial, Citigroup, Salesforce.com, FBI, Bureau Public Debt, Dell, AMD, Oracle and Microsoft, to name a few.

Performance Tuning Corporation - Consulting Engagement Highlights

Carfax - Performance Tuning

Nov 2008 - Dec 2008

Analyzed performance issues with their storage system and provided solutions which were implemented. Performed overall performance tuning assessment and reported on specific areas of improvement. Assisted in development of automated installation process for Linux systems using PXE, Tftpboot and Kickstart. These tools allowed Carfax to perform one button installation of Linux for Oracle systems. In addition, Oracle NUMA support was analyzed and configured for the Carfax systems.

HP/EDS, worldwide – Remote Oracle Training

June 2008 - Oct 2008

Developed and delivered several custom Oracle classes and labs to HP/EDS employees worldwide. Courses were delivered remotely to students in the US, Europe, Middle-East, Japan, China and Australia. These courses included both official Oracle Education classes; such as Oracle RAC, Oracle Grid Control and Oracle Data Guard and PTC's customized classes. Developed and presented an Oracle 11g New Features class to HP employees worldwide.

FBI - Quantico – Oracle Performance Tuning

July 2007 – Aug 2007

Performed an analysis of Oracle Text systems, including performance tuning to solve specific performance problems. Provided sizing and capacity planning recommendations and delivered an Oracle RAC training class. A Top Secret clearance was required for this engagement.

US Naval Facilities, Guam - Oracle Training

April 2007 – April 2007

Mentored, provided knowledge transfer and delivered customized Oracle training at client's facility. PTC's standard Oracle course materials were customized to customer requirements. Provided formal knowledge transfer on database monitoring, tuning, and backup and recovery, database maintenance, problem troubleshooting and initiating support help from Oracle.

Group 5 Construction, South Africa - Assessment

May 2007 – May 2007

Conducted a detailed health check, and performance assessment of customer's JDE systems and SQL Server database systems. Recommended changes to improve architecture, database and hardware configuration to improve SQL Server system performance. Analysis focused on SQL Server performance problems and known issues as described by the Customer.

FBI - HQ (J. Edgar Hoover Bldg) – Oracle Advisor

Dec 2007 - July 2008

Acted as the lead advisor or subject matter expert on Oracle project. Architected and configured 11-node and 7-node Oracle 10g RAC clusters. Assisted in planning and execution of data migration. Assisted ETL engineers with optimizing ETL processes and Informatica application. Performed system tuning and problem resolution as required. Performed security audit of database, operating system and SAN storage in order to meet DISA standards. Installed and configured multiple Oracle Grid Control servers. A Top Secret clearance was required for this engagement.

Salesforce.com – Proof of Concept

Aug 2007 – Sept 2007

Installed and configured an Oracle 10g RAC cluster on Linux. Assisted Salesforce.com staff with analysis of performance and stability of Oracle RAC on Linux versus Oracle RAC on Solaris systems. This effort involved installation of the RAC cluster, data migration and performance testing. In addition, debugged the customer's application during migration from an Oracle 9i RAC cluster to an Oracle 10g RAC cluster.

FBI - Quantico – SQL Server Performance Tuning

April 2006 - May 2006

Performed an analysis of SQL Server systems and provided sizing and performance tuning expertise to solve specific performance problems. In addition to performance tuning, sizing and capacity planning consulting was also provided. The application involved both OLTP and full-text functions. Advice was provided on the SQL Server 2008 full-text indexing features. A Top Secret clearance was required for this engagement.

T-Mobile – Performance Assessment

Oct 2004 – Jan 2005

An assessment was performed on the T-Mobile wireless internet application. This application utilized Oracle 9i and Quest SharePlex in order to provide a distributed environment. This assessment was performed to assess the efficiency and stability of the database, as well as the skills and knowledge of the personnel. This assessment provided management with information to improve the skills of the staff and the application.

Realty Data Corporation – Oracle RAC Deployment and Migration

April 2006 – June 2006

Deployed Oracle RAC cluster using Cisco Infiniband for storage, network and RAC interconnect. Planned and executed data migration of a 1.8 TB database. Implemented Oracle Data Guard between two sites in different states. Installed and configured Oracle Grid Control and required agents.

Bureau of Public Debt – Performance Tuning and Troubleshooting

June 2005 – April 2006

Performed performance tuning and troubleshooting of customer's Oracle eBusiness Suite RAC environment. Evaluated system architecture and made recommendations for new hardware and software purchases. Assisted with customer's backup and recovery strategy and implementation.

Medimedia – Oracle Forms Migration

Aug 2005 – Oct 2006

Developed and executed migration plan for large scale Oracle Forms migration. Installed multiple Oracle systems and performed a migration from Oracle Forms 4.0 to Oracle forms 10g. Performed performance tuning and provided support throughout the life of the project. Delivered custom training on Oracle Forms and Oracle Internet Application Server.

Nomura Financials – Oracle Performance Tuning**Nov 2004 – Sept 2005**

Participated in development of 5-node Oracle RAC cluster Proof of Concept. Created several RAC clusters using EMC SAN storage, Hitachi SAN and Network Appliance NAS storage. Developed and ran performance tests to compare performance of each storage subsystem to support final purchase decision. Additional consulting was provided to architect, tune and support the customer's database and applications.

Harris County Tax Collector – Performance Evaluation**Sept 2004 - Sept 2005**

Performed a functional audit and performance evaluation of customer's current and planned application deployment. This effort involved the development of a load test driver using PERL which was used to generate test results. The software was evaluated for its ability to achieve the needed load.

Thomson Financial – SQL Server Performance Tuning**May 2003 – Nov 2004**

Performed SQL Server tuning on Thompson Financial's analytics product. Performed hardware and application sizing for hardware selection. Assisted with a benchmarks designed to help Thomson choose a new storage system. Provided ongoing SQL Server tuning training and mentoring.

Casa Ley – J.D. Edwards on SQL Server Performance Tuning**Aug 2003 – Nov 2003**

Performed performance tuning on Casa Ley's J.D. Edwards system. Tuning consisted of SQL Statement hints, indexes, database layout and hardware tuning. The customer's application had issues with both HR queries and fixed assets. Provided sizing and capacity planning recommendations.

AMD – TPC-C Benchmark**April 2003 – Dec 2003**

Assisted in the development and audit of AMD's first TPC-C benchmark for Opteron Servers. This benchmark was run on Microsoft SQL Server on Windows and was one of the first benchmarks to use the AMD Opteron NUMA processor. At the time of publication, this benchmark achieved a world record for the class of machine. Assisted with benchmark design testing and final TPC audit and Full Disclosure Report (FDR).

Bell Atlantic / Verizon – Performance Tuning**Jan 2000 – Feb 2002**

Consulting was provided at the Bell Atlantic Call Center. The call center was run using a custom made application using SQL Server 7, then SQL Server 2000. Provided consulting to improve system performance, establish performance metrics and provide upgrades as needed. Services included upgrading SQL Server, configuring Transactional Replication and performance tuning.

Dell Computers – TPC-C Benchmark**Jan 1997 – July 1997**

Assisted Dell Computer in the design and execution of their first TPC-C benchmark. This benchmark was performed using Microsoft SQL Server on Microsoft Windows and achieved a world record in price/performance. Also, provided mentoring and follow-on support to Dell's TPC-C Measurement Team.

Compaq Computer Corporation, Houston TX**Database Performance Engineer****Aug 1993 - Dec 1996**

Responsibilities include database benchmarking on Compaq hardware, hardware evaluation, and database integration. Responsibilities also include the writing of performance tuning papers and presenting these papers to the Compaq field organization and conferences, as well as customer visits and customer briefings. Specific responsibilities include being primary Compaq representative on the Transaction Processing Performance Council and chair of the TPC-C subcommittee, new hardware evaluation and feedback, and responsibility for all Compaq TPC-C benchmarks.

Systems Engineer**Oct 1989 - Aug 1993**

Responsibilities include UNIX product planning and strategy, software development, installation and quality. Specific responsibilities involve multiprocessor UNIX internals, performance analysis and enhancements, and problem resolution. Responsibilities also include performance tuning and enhancements of RDBMS products on Compaq platforms. Accomplishments include developing the multiprocessor support for the Compaq ProLiant 4000 and involvement in the invention of the UNIX Post-Wait Semaphore.

Engineer**Jan 1989 - Oct 1989**

Responsibilities include development, maintenance and support of Engineering Software including support for Supercomputer applications, program development environment, operating system, and general utilities. Interfacing with hardware and software vendors is also involved.

System Support Analysis IMSL, Inc.**Jan 1988 - Dec 1989**

Responsibilities include system administration, tools development, and network support on SUN, DEC VAX, APOLLO, and IBM PC computer systems.

Computer System Administrator Texas Accelerator Center**Oct 1986 - Dec 1987**

Responsibilities include system administration, software development, and networking on a DEC VAX, Hewlett Packard, and IBM PC systems.

Research Assistant University of Oklahoma High Energy Physics Lab.**May 1984 - Oct 1986**

Responsibilities include system management, maintenance and running of DEC, and Cromemco microcomputers including board level repairs. Also, construction and debugging of a 3081/E Mainframe emulator designed by the Stanford Linear Accelerator Center, as well as design and construction of an interface to the 3081/E with a DEC MicroVAX

PUBLICATIONS:

Books:

- *Oracle10g Linux Administration*, Oracle Press 2004
- *Oracle Performance Tuning*, Addison Wesley 2002
- *Microsoft SQL Server 2005 Administrator's Companion*, Microsoft Press 2006
- *Microsoft SQL Server 2000 Performance Tuning Technical Reference*, Microsoft Press 2001
- *Microsoft SQL Server 2000 Administrator's Companion*, Microsoft Press 2000
- *Microsoft SQL Server 7 Performance Tuning Technical Reference*, Microsoft Press 2000
- *Microsoft SQL Server 7 Administrator's Companion*, Microsoft Press 1999
- *Oracle Performance Tuning and Optimization*, MacMillan Publications - March 1996
- *Teach Yourself Oracle8 in 21 Days*, MacMillan Publications – November 1997
- *Oracle8 Server Unleashed*, MacMillan Publications – June 1998

Technical Papers:

- *Enabling the Maximum Availability Architecture on Linux*
- *Advantages of Running Oracle 11g on Microsoft Windows Server x64*
- *Performance Tuning Oracle RAC on Linux*
- *SQL Server 2005 Business Intelligence using Dell Hardware*
- *Overview of I/O Performance and RAID in an RDBMS Environment*
- *SQL Server 2000 I/O Configuration in a SAN/NAS Environment*
- *Performance Implications of Various Cursor Types in MS SQL Server*
- *Oracle 9i I/O Configuration in a SAN/NAS Environment*
- *Oracle Magazine – November/December 1997*
- *Using PXE Boot and Kickstart to install Linux for Oracle*

EDUCATION:**UNIVERSITY OF OKLAHOMA, M.S. Engineering Physics,****Dec 1986**

Masters thesis involved the construction and interfacing of an IBM 3081 emulator to a MicroVAX II via a DRV11-WA DMA controller. Course work involved digital electronics, computer programming and solid state physics. Elective course emphasis in Japanese language.

UNIVERSITY OF OKLAHOMA, B.S. Engineering Physics, Minor in French.**May 1984**

A well-rounded engineering curriculum with emphasis in electrical engineering as well as a broad physics background stressing application and design.