

# Willard Baird II

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## PROFILE

Talented Information Technology Leader with over ten years' experience. Highly skilled in building infrastructure based on Information Assurance Architecture principles. Expertise in distributive team leadership, security, architecture, management, highly available infrastructure and business continuance. Proven communicator, published book author, conference speaker, manager and Adjunct Professor.

## EXPERIENCE

**Senior Enterprise Architect for United Technologies Fire and Security** 2010 February - current

**Technologies:** Oracle 11g RAC, Advanced Security Option, Oracle 11g Cluster, Solaris, Oracle Enterprise Manager, RMAN, AWR/ADDM/Statspack, Oracle Unbreakable LINUX, ASM, MEGA Architecture tool

### Contributions:

- Own and define global strategy on enterprise computing architecture and database technology
- Lead on re-architecture project of the Oracle Application ERP, BAAN ERP and a Data Warehouse from Solaris to Oracle Unbreakable LINUX, achieved savings of \$500K annually
  - Led a team of offshore DBAs and interfaced with multiple vendors to build and deliver six Oracle Rac clusters and multiple application server environments
- Oversee the governance activities associated with ensuring enterprise architecture compliance related to security and disaster recovery
  - Implemented a security framework on the Oracle ERP that resolved a Payment Card Industry (PCI) issue
  - Developed pre-audit checklist and led business impact analysis and disaster recovery process for all UTC/FS businesses
  - Developed DBA secure process control
  - Team Lead for the architectural design and testing of the disaster recovery process for the critical business systems
    - Led tabletop exercises to prepare team for the actual disaster recovery test
    - Achieved business recovery time and recovery point objectives
  - Security tools used to provide evidence of security compliance on infrastructure
    - NESSUS scanner
    - Oracle scripts
    - Oracle Advanced Security Option/Oracle built-in auditing
    - Event tracker software to monitor operating system key files
- Worked closely with vendors, business leaders and IT leadership to identify and manage the organizational impact (on skills, processes, or structures) and financial impact of the Enterprise Architecture
- Optimized backup and recovery process which led to an annual savings of \$95k
- Optimized use of storage area network which led to an annual savings of \$600k
- Developed an architectural roadmap for 2014 to include Virtualization, Oracle 11g advance features, server and storage optimization strategies

**Senior Enterprise Architect for GE Security, a division of General Electric (GE)** 2009 October – 2010 February

**Technologies:** Oracle 10g RAC, Solaris, Oracle Enterprise Manager, RMAN, Statspack, Red Hat LINUX, ASM

### Contributions:

- Owned and defined strategy on enterprise computing architecture and database technology
  - Worked with vendors to develop a road map for database infrastructure optimization

- Oversaw the governance activities associated with ensuring enterprise architecture compliance related to security and disaster recovery
- Working across teams and vendors developed Disaster Recovery test plans and verification of procedures
- Developed architectural road map for all major ERP and Data Warehouse environments
- Consulted/collaborated with Data Warehouse team to re-architect and optimize database design and ETL process
- Identify and managed the organizational impact (on skills, processes, or structures) and financial impact of the Enterprise Architecture

#### Enterprise Solutions (combination of four GE businesses)

##### **Enterprise Database Architect**

2008 July – 2009 October

**Technologies:** Oracle 10g RAC, Solaris, Oracle Enterprise Manager, RMAN, Statspack, Red Hat LINUX, ASM

##### **Contributions:**

- Define the standards and best practices for GE Enterprise Solutions Infrastructure architecture (security, disaster recovery, highly available, scalable, high performance enterprise environments)
- Responsible for architecture and risk assessment of new vendor products
- Managed a team of offshore DBAs in projects and system support with GE project management standards
  - Met or exceeded database support metrics month over month
- Achieved \$700K annual savings by re-architecting disaster recovery and optimizing Oracle licenses
- Oracle Tech Counsel infrastructure leader
  - Presented details on disaster recovery project
  - Presented Oracle database security best practices

##### **Database Project Lead**

2007 November – 2008 July

**Technologies:** Oracle 10g RAC, Solaris, Oracle Enterprise Manager, RMAN, Statspack, Red Hat LINUX, ASM

##### **Contributions:**

- Architected new, multi-terabyte Baan ERP conversion delivering high availability database and resolving a Sarbanes-Oxley deficiency
- Architected new Data Warehouse grid design using Oracle RAC on Solaris and Red Hat LINUX. Installed and configured ASM delivering high availability, disaster recovery and improved performance by 1000%
- Implemented a robust backup plan using Oracle's RMAN utility
- Managed a team of distributed outsourced DBA's that consistently met the deadlines of the various projects

#### T2 Consulting Service, Tampa, FL

##### **Data warehouse Architect**

2007 October – 2007 November

**Technologies:** Oracle 10g RAC, Red Hat LINUX, Oracle Enterprise Manager, RMAN, Statspack, ASM

##### **Contributions:**

- Performance testing and review of Transparent Data Encryption (Oracle add on) to ensure PCI compliance

#### Level (3) Communications, Inc. (purchased Progress Telecom), Broomfield, CO

##### **Security and Business Continuity/Disaster Recovery Lead for Oracle 2007**

January – 2007 October

**Technologies:** Oracle 10g RAC, Solaris, Oracle Enterprise Manager, RMAN, Statspack, ASM

##### **Contributions:**

- Drafted security policy for all Oracle databases to ensure Sarbanes-Oxley sec. 404 requirements were met
- Developed a plan to harden existing O/S infrastructure to meet Sarbanes-Oxley section 404 requirements
- Reviewed all current BC/DR plans for the Oracle systems and developed test procedures for same

##### **Promoted to Lead Metro Database Manager**

2006 March – 2007 January

##### **Contributions:**

- Developed database migration and data center management plans for all acquired Metro Telecom infrastructure and interfaced with multiple teams to complete the project on time and within budget
- Managed a team of distributed DBAs and outsourced personnel to build Highly Available databases for 70% of the converted Metro Telecom databases. This resulted in \$500K savings in reduced support costs

Progress Telecom, Saint Petersburg, FL

**Principal DBA/Infrastructure Architect- UNIX/Security Lead Administrator**

2001 – 2006 March

**Technologies:** Oracle, Sun 2.8, Sun Cluster 3.0, Oracle 9i, Oracle10g RMAN, LINUX EXPORT/IMPORT, Oracle Enterprise Manager, Quest tools

**Contributions:**

- Successfully managed multi-year architecture build out with numerous outside vendors and internal groups
- Security Officer for all Oracle databases
  - Maintained strict audit procedures and ensured zero defects
  - Performed penetration tests against the critical Oracle infrastructure
- Successfully planned and managed resource capacity and annual budget requirements
- Achieved \$100M software license costs reductions due to the new architecture
- Created a disaster recovery (DR) document that recommended five different approaches to managing Disaster Recovery, implemented, tested and supporting resulting strategy

Intermedia Communications, Tampa, FL

**Senior Database Manager**

**2000 - 2001**

**Technologies:** Oracle, HP-ux 9.xx- 10.xx, Sun 2.6, Sun Cluster, Oracle Parallel Server, Microsoft NT client/server, Oracle 7.x through 8i

**Contributions:**

- Direct supervisor of ten Oracle DBAs. Mentored staff on advanced database techniques and achieved 99.9% up-time with 24x7 proactive monitoring for first time in organization
- Audited Oracle software licenses and achieved \$200K of budget savings
- Successfully navigated complicated organizational structure to communicate at all levels of the organization and manage Backup and Recovery, Performance tuning, capacity planning, Disaster Recovery and business continuity plans

Florida Power (Progress Energy), Saint. Petersburg, FL

**Lead Database Administrator**

**1997 - 2000**

**Technologies:** Oracle, HP-ux 9.xx- 10.xx, Sun 2.6, Microsoft NT client/server, ER/WIN ENTERPRISE MANAGER Oracle 7.x through 8i

**Contributions:**

- Performed capacity planning, tuning, security audits and made architecture recommendations that lead to a successful implementation
- Developed enterprise wide database standards, change control procedures, security policy and backup and recovery procedures
- Architect for data warehouse, aided design in the logical model and designed the physical model using Oracle8i's advanced data warehouse features and star schema database design
- Mentored database team in advance Oracle database administration techniques
- Promoted to Senior Systems Consultant

Catalina Marketing Saint. Petersburg, FL

**Lead Oracle Database Administrator**

**1996 - 1997**

**Technologies:** Oracle, Dec-Alpha, Microsoft NT client ERWIN

**Contributions:**

- Implemented database level security policy
- Created and implemented a training course for new Oracle application programmers
- Created database standards, role based security, change control procedures and backup and recovery plan

Citicorp, Tampa, FL

**Senior Database Administrator/UNIX Administration/Manager**

**1995 -1996**

**Technologies:** Oracle, Hp-ux 9.x, Microsoft NT server

**Contributions:**

- As manager of the open systems database environment responsibilities included UNIX, ORACLE development, production and disaster recovery systems

- Responsible for the configuration of the development, unit acceptance test and production database environment. The configuration included the development of standards and analysis of software products and the purchase of selected products
- Promoted to database manager

#### **Database Administrator/Backup UNIX Administrator**

1992 - 1995

**Technologies:** Oracle 6 and 7, HP-UX 9.x

##### **Contributions:**

- Procedures/standards evaluated by Software Engineering Institute (SEI) to a level 3
- Developed standards for the Oracle database
- Performed risk assessment on production databases
- Implemented change procedures to manage database modifications
- Developed database security policy and interfaced with Internal Audit teams

#### **Database Analyst**

1988 – 1992

**Technologies:** IBM 3090, OS/MVS, IDMS, JCL

##### **Contributions:**

- Performed both physical and logical design for projects
- Developed special training programs for applications development staff and user community
- Wrote numerous utilities programs to automate time consuming tasks.
- Data Administrator of all elements of the data Dictionary

#### Computer Task Group Tampa, FL

#### **Programmer/Analyst**

1984 - 1988

**Technologies:** IBM 3090, OS/MVS, IDMS, JCL

##### **Contributions:**

- Performed logical database design for customer projects
- Responsible as Project Leader for a large sub-application written in IDMS/ADSO
- Project lead for a major restaurant chain, developed a quality assurance tracking system.
- Duties included: database design, overall responsibility for other programmers on the project

#### **Miscellaneous Experience**

- **Adjunct Professor** at University of South Florida (USF) 1990- 2002, 2006-2013. Taught Introduction to Computers/Intro Database/Advance Database (helped design course), Information Security/Advanced Ethical Hacking, Information Resources (Capstone course)
- **Awards** - Recipient of Oracle Select Star award, CIO award for disaster recovery project
- **Oracle Beta Tester** - Participated in Oracle's first end-user beta test program for Oracle 10g
- **Professional instructor** for Oracle produced course for USF 1999-2003
- **Writer** - Published author on database topics since 1993 (DBMS, DMR, Oracle Tech journal), author of Oracle Certified Professional (OCP) a textbook on preparing to take the Oracle certification exams
- **Conference speaker** - International Oracle Users Group (IOUG) 96,97,99,03 Openworld/Oracleworld 98,00,01,02
- **MIS Training Institute (MISTI)** - 2003, 2005, 2006-2011 Ethical Hacking, 2013 Oracle Security Audit and Penetration Tests
- **Computer Security Institute/NETSEC** 95, 96, 97, 98, / COMPUTER SECURITY 97
- **Panel expert on Oracle Architecture:** Openworld 00, 01, 03
- **IOUG Instructor** - Developed one-day course specializing in Oracle and web database security 2004

#### **Education**

- M.S., Masters of Information Systems from the University of South Florida graduated with honors
- Oracle Certified Professional (OCP) 8i, 9i and 10g
- Certified Information Systems Security Professional (CISSP)
- Certified Business Continuity Professional (CBCP)
- B.A., Business Administration from the University of South Florida in M.I.S. and marketing