MUHAMMAD AQEEL

PERSONAL HISTORY

Father's Name: Muhammad Khalil
Address: House No. 289 Street No. 2C Phase 5A Ghauri Town Islamabad.
Phone No: 0300-5361046
E-mail Address: aqeelmail@gmail.com
Date of Birth: 02-02-1975

PROFESSIONAL EXPERIENCE

Senior Software Architect (Configuration Management) EnterpriseDB

EnterpriseDB is the world wide provider of PostgreSQL based enterprise class products and services. I am part of EnterpriseDB for last 12+ years where I worked in Database Server Core team and Configuration Management team.

➢ Designed and developed new build farm system for EnterpriseDB to build their products, generate installers, RPMs and Debian packages and run regression tests and report the build and regression status including all logs on a dashboard application. Developed automated scripts to prepare virtual machines for build and regressions, backup SCM, created Jenkins jobs and written Makefiles and bash scripts to build products and generate installers, RPMs and Debian packages. This new build farm system can build multiple products on different platforms in parallel and allows developers to build from a given commit ID, tag or branch at anytime.

➢ Worked to develop EnterpiseDB Cloud applications using Docker containers, OpenShift and Kubernetes. Developed docker containers for EnterpiseDB Postgres Advanced Server (EPAS) and Backup and Recovery Tool (BART).

➢ Developed PIP package for pgAdmin4 community.

➢ I am also responsible for building and packaging of different products mainly Postgres Plus Advanced Server, PostgreSQL Standard Server, XDB

Replication Server and their associated tools. We deliver these products for different platforms like Linux, Windows, Solaris Intel, Solaris SPARC, HPUX and Mac OS X. Developed and managed Debian packages, installer and RPM for different EnterpriseDB products. EnterpriseDB offers RPMs for CentOS6, CentOS7, Suse, PPC64LE, Debian packages for Debian 9 and Ubuntu platforms and installers for Windows, Linux, Solaris Intel, Solaris SPARC and HPUX platforms. I am part of team which had delivered 11 major and more than 60 minor releases of these products over the span of last 12 years.

➢ Developed a geographically distributed old build system which provides nightly builds of our products and their installers for all supported platforms, installs them on testing machines and runs regression test suites and delivers detail reports. Reports the state of source code from where nightly build was initiated and complete error messages in case of build failure. This system uses bash scripting for Linux, Solaris, OSX and HPUX while batch scripting and vb scripting for Windows.

➢ Building, customizing and deploying third party packages which are required to build our products for all supported platforms. Developed shell scripts to build these packages on each platform.

➢ Preparing and setting up build farm VMs which are used by our build system to build and test our products.

➢ Development and maintenance of installers of 20+ different products for all supported platforms using BitRock InstallBuilder. Our installers can be installed as well as can be used to only unpack files without any configuration. We provide shell scripts and VB scripts to configure those extracted files on later stage as user requirement arise. Earlier we used InstallShield and InstallAnywhere in order build installers for these products.

➢ Developed Auxiliary test suite containing hundreds of test cases testing Postgres Plus Advanced Server and other products.

➢ Developed Java Web services and JSP pages which are used to send appropriate configuration information based on data provided by installers during installation.

Lecturer

I worked as Lecturer in different leading universities and institutes of Rawalpindi/Islamabad for more than 7 years. Following is the list of them.

- University of Arid Agriculture, Rawalpindi (Visiting Faculty)

- The University of Lahore (Visiting Faculty)

- Federal Urdu Univrsity of Arts, Science and Technology, Islamabad (Visiting Faculty)

- Preston University Islamabad (Visiting Faculty)

- Punjab College of Information Technology Rawalpindi (Visiting Faculty)
- Nicon College of Computer and Management Sciences Rawalpindi (Permanent Faculty)

- APTECH Computer Education Mall Road Rawalpindi (Permanent)

I taught different subjects like Java Programming, .NET Programming, Distributed Systems, Object Oriented Programming, Web Application Design and Development etc.

COMPUTER KNOWLEDGE & SKILLS

❑ Worked in.

- AWS services like VPC, EC2, S3, ELB, EBS, auto scaling groups and ECS.

- Dockers, OpenShift and Kubernetese

- Jenkins

- Ansible

- Building and debugging C/C++ applications using GCC, GDB, CC, Makefile, CMake, NMake, MinGW, Cygwin, IBM Advance Toolchain, Solaris SunStudio12 and MS Visual Studio .NET under all major platforms including Linux, Solaris, IBM PowerPC, Windows and Mac OSX.

- Installer development using BitRock InstallBuilder, InstallShield 11 Premier Edition and InstallAnywhere

- Building RPMs for CentOS 6/7, SuSe and PPCLE platforms

- Building Debian packages for Debian 9 and Ubuntu

- Repository management using CVS and GIT

- Shell, Perl, batch and VB scripting

- Programming in languages Java, C, VB.NET and C#

- Postgres Plus Advanced Server, PostgreSQL, Oracle's SQL, PLSQL

- Web Servers like Apache, Tomcat jakarta

- Web Programming in JSP, Servlets and ASP.NET

- VMware Fusion, OpenStack

- Operating systems CentOS 6/7, Suse, Ubuntu, Debian, Solaris Intel & SPARC (10 & 11), HPUX,Windows, Mac OS X

ACADEMIC RECORD

MS (CS) (Gold Medalist)   **Shaheed Zulfikar Ali Bhutto Institute of Science & Technology, Islamabad**

MS (IT)   **Preston Institute of Management Science and Technology (PIMSAT), Karachi**

B.Sc.   **Government Gordon College, Rawalpindi**
Pure and Applied Mathematics, Physics

Higher Secondary School   **Government Gordon College, Rawalpindi**
Mathematics, Physics, Chemistry

Secondary School   **F.G. Public Secondary School, Mahfooz road Rawalpindi**
Mathematics, Physics, Chemistry, Biology

CERTIFICATES:

- AWS Certified Cloud Practitioner

- Successfully passed RedHat OpenShift Certification exam to earn NFRs for EnterpriseDB containers project.

- Sun Certified Java2 Programmer: SCJP

- Oracle Development from COMSATS Institute of Information Technology Islamabad

- Certificate for J2EE from Nicon, Rawalpindi

PUBLICATIONS

- ❏ A Fault-Tolerant Legion Authentication System. IEEE -- ICET 2006. 2nd International Conference on Emerging Technologies, Peshawar- Pakistan, November 13-14, 2006.

- ❏ Optimal Resource Selection by Using Fuzzy Numbers. IEEE – ICEE 2007. International Conference on Electrical Engineering, Lahore- Pakistan, April 11-12 2007.