DHAWALKUMAR BHUPENDRABHAI PATEL

Email: dhawalpatel1981@yahoo.com

Summary:

- > 10 years of experience in Architecting, Developing, Performance Engineering Innovative Business
 Support Systems(Care and Billing) including recent Micro services Migration Solutions for Large
 Telecommunication Industries including AT&T USA and Reliance Communications India.
- Chief Architect of Innovative Products in R&D Division like Amdocs ChatBot, Amdocs Order Capture Microservices.
- Responsible for the Management of <u>Software Architecture & Development along with Production</u> <u>support of Telco Care (CRM) and Amdocs Billing applications (AT&T U-verse and Wireless</u> <u>Business</u>) serving 100+ million AT&T customers.
- Responsible for multi-year SLA- based managed services in production support and operations of U-verse Billing (ABP), CRM, and Wireless CRM for AT&T
- Competent and Proven Architect for Delivering Large, Highly Scalable, Distributed, Highly
 Available, Resilient, Fault-tolerant Application Architecture, Design, Code and Production Support
 to maintain and exceed the Availability SLA requirements for AT&T Business.
- Enthusiastic and passionate about building software and building great teams to deliver high quality products to customer and thereby increasing revenues.
- Provided Multi-Applications Performance Expertise to various Clients US Cellular, AT&T USA,
 Claro, AT&T Mexico
- Strong Enterprise Applications Performance Monitoring and Analysis skills.
- Long term focus on Increasing the Performance of Clustered, Multi-tier, Distributed and multi-threaded parallel processing Applications using: robust error recovery, scalable high performance, security, extensibility, component architectures, design patterns & anti-patterns, and object oriented design.
- Managed and delivered flawless application releases with zero defects in UAT Phase.
- Strong Academic background with Top Ranking in Graduate and Under-Graduate studies.
- Multiple Technical Research Paper Publications in International Conferences and Technical Journals.

EDUCATION

2003-2005 M.S, Computer Science (Master of Technology in Information and Communication Technology),

Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, India

1998–2002 Bachelor of Engineering in Information Technology (Gold Medalist),

RESEARCH PUBLICATIONS:

- 1. Technical Paper Published in Springer Verlag LNCS 2006 at Paris. Link: http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/p/Patel:Dhawal.html
- 2. M. Tech Thesis Paper Published in IEEE at COMSWARE 2006 titled "Non-Uniform Information Dissemination for Performance Discovery in Computational Grids" at Delhi. Link:

http://ieeexplore.ieee.org/Xplore/login.jsp?reload=true&url=http%3A%2F%2Fieeexplore .ieee.org%2Fiel5%2F11046%2F34859%2F01665229.pdf%3Farnumber%3D1665229&a uthDecision=-203

TECHNICAL SKILLS

• <u>Technologies</u> J2SE 1.6, J2EE (EJB, WebServices, JMS), Java Web Start, Web

Services SOAP/JMS and SOAP/HTTP, JCA Architecture, Spring Framework, GigaSpaces, RESTful Services, UXF, Serverless (FaaS), Azure Cloud, AWS Cloud, Webhooks, WebSockets,

Event-Stream Processing with Apache Spark.

Micro services Technologies: Service Discovery (Eureka, Consul), Containers (dockers),
 Container Orchestration (K8s), OpenStack platform, HAProxy solutions like NGINX, Spring Boot, AT&T DME2, AT&T

AJSC

• Application Servers: Oracle Weblogic Server 9.2, IBM WebSphere Server 6.0,

Gigaspaces Container (XAP 9.0)

• <u>Middleware Technologies</u>: RestFul/Web Services development with Apache Axis 2,

Apache CXF, Spring Boot, Apache Kafka, Apache Spark, Spring

Cloud components like Hystrix, Feign,

- <u>Performance Monitoring Tools</u>: IBM Support Assistant Workbench 4.1, JProfiler, JRockit, JConsole, HP-UX tools like glance, Wily Introscope, AppDynamics, HPJMeter from HP, ThreadAnalyzer from IBM
- <u>Kernel and Operating System Knowledge</u>: Virtual Partitioning, Thread Scheduling algorithms, CPU Scheduling, Java Virtual Memory Layout, Kernel-level System Thread dump analysis, top,svmon,sar, pstat, prstat, topas, nmon tools
- Expertise and Experience in working with Clustering, Fail-over, High Availability
 Configuration of Application servers, Advanced Java topics like
 Garbage Collection algorithms, JVM Tuning, Thread Scheduling
- Extensive experience in JVM Performance Tuning and Troubleshooting.

WORK EXPERIENCE

8/2017 – Present Amdocs Inc, San Jose, CA, USA

Role: Chief Software Architect, R&D Division, Digital Experience

- Provide Technology Leadership and support to the engineering teams and support the creation of a scalable, secure, flexibly deployed and extensible solutions
- Architecture, design and development of Amdocs digital experiences for an Omni Channel 360-degree view & engagement of a customer interaction.
- Design and Architect the Micro-Services architecture based transformation of the legacy CRM system with cloud migration and deployment strategy (across various cloud models Azure/AWS, Hybrid), with all new capabilities on an enterprise grade Micro Services API Architecture framework developed using Java Spring.
- Design API's, functionality and integrations with Facebook Graph API, Twitter API, and Legacy CRM API's. Design the API platform enterprise features, such as logging, tracing, token management (OAUTH), security management, Role Based Access, SSO, Service Licensing and usage (SaaS), with fully automated CI/CD process on Docker & Kubernetes. Leverage Kafka for ESB, Couch base as persistence store.
- Evaluate & engage with Azure & AWS working with customer needs & vendor preferences, hence architect the system a cloud vendor agnostic system.
- Chief Architect of Amdocs Telco ChatBot Product with FaaS (Serverless) Technology in Azure Cloud with three dimensional capabilities including Interaction, Intelligence and Integration. Embedded use of Natural Langauge processing engines, Building Context bearing conversations with various graph-based algorithms in chatbot.
- Design various customer interactions especially with Chat Bots (Microsoft Bot Framework & LUIS), Live Chat and Customer Journey and sentiment analysis, for effective customer experience across Mobile, Web, Phone and Social Media.
- Provide RFP & RFI support for new deals for various large customers.
- Help build an overall omnichannel strategy, technology evolution, guidance and vision for Amdocs customers in the 2-3 year time frame.
- Work cross functionally with Product Owners, Sales leads and Product Managers to support innovation and new feature creation, strategy and pre-sales support along with Enterprise IT & Security teams.

1/2015 – 8/2017 Amdocs Inc, St. Louis, Missouri, USA

Position: Development Manager/Software Architect

- Managing team of Individual contributors/Development Experts/Leads of Development and Production Support Team for Mission Critical Care Applications of AT&T - U-verse <u>CRM, Amdocs Billing Platform, Mobility Clarify CM</u> (Enterprise CRM for AT&T) and Billing Suite of Uverse Business.
- Responsible for the Migration of AT&T Care applications to <u>Micro services</u> and serve as an SME for <u>Service Discovery</u> part of the migration from Client Business Group.
- Responsible for the Management of <u>Software Development</u>, <u>Performance Engineering</u>,
 <u>Architecture</u> and <u>Production support</u> of Telco Business Care and Billing applications
 (CRM for U-verse and Wireless Business for AT&T) serving 100+ million AT&T
 customers.
- Responsible for multi-year SLA- based managed services in production support and operations of U-verse CRM, Wireless CRM, and Billing for AT&T
- Responsible for Architecting Large, Highly Scalable, Distributed, Highly Available,
 Resilient, Fault-tolerant Application Architecture, Design, Code and Production Support
 to maintain and exceed the Availability SLA requirements for AT&T Business. For e.g
 Application Throttling for CRM & Enabler Solution, Application HA Solutions like
 Active/Warm-Standby for CRM, Application Resiliency Projects like Removal of Load
 Balancers and replacing with scalable technologies, Layer 7 ELB content based health
 check for smart load balancing, Migration to Cloud Project, Micro services Journey,
 FOSS Migration project like Apache CXF for LS CRM/ OMS, WAS/WLS Removal
 etc.
- Oversee and Manage Critical Paths to the Development projects.
- Overseeing the Migration Projects like OS upgrades, Application Major Version upgrades,
 DB Migration, Third Party Vendor and J2EE Container Upgrades and analyzing the impacting to other Enterprise Applications.
- In-Charge of **Production Architecture**, **Implementation and Production Capacity Planning**.
- Engaging with Customer Executive Management and Technical Directors in defining future strategy to make the Mission Critical Applications (Billing, CRM for Wireline and Wireless Telco Business) more scalable, resilient, fault tolerant and reduce the MTTR and MTBR and converting the ideas into implementation in production.
- Overseeing the activities across various teams to make sure Production implementation is
 a success and giving feedback to Business Analysts and Solution Architects for any
 improvements needed in CRM and UXF based on the production implementation.

12/2011-2015 Amdocs Inc., St. Louis, Missouri - USA

Position: Development Expert/Application Performance Expert/Team Lead

- Providing 24x7 Tier-2 Production Support and Development of Various Large Scale Enterprise Applications (U-verse CRM, UXF, Mobility Clarify CM) for the Largest Telecommunication Provider of USA.
- Leading/Driving the Outages/Triage related investigation and overseeing all the activities to ensure the issue is resolved by delegating the tasks to Developers, directing other teams accordingly to ensure the issue is resolved along with meeting SLAs.
- Providing Technical guidance and explaining advanced concepts of Amdocs Products and Implementation to others in work area.
- Software Architect for Production and Development Designs for UXF, Uverse CRM, and ClarifyCM
- Preparing the Proof-of-Concepts and executing it from Inception of the idea till Implementation in Production environment.
- Provide Expertise and controlling the design decisions for production architecture to make Software Application Resilient, Fault-Tolerant, Highly available for Production Environment.
- Leading the Technical Projects, reviewing the technical designs and providing guidance to software Developers for future projects in improving the Stability and Performance of the applications.
- Researching new technologies, Coming up with new innovative ideas and POCs and overseeing the implementation of new POCs and ideas to improve CRM Product and production support.
- Providing Expert Recommendations for Stability and Performance to Other Amdocs AT&T Applications like LS Enabler, LS BIBA, LS OMS, Premier eBill, Balance Manager Mission Critical applications.
- Providing Cross-Applications Development/Production Support Expertise and dictating the technical architecture Design decisions for LS CRM, Mobility CM and UXF Applications for Production
- Providing Expert Inputs to ensure the Production Defects are resolved in a manner that the Code Deliveries are meeting to the Coding Standards, Project Standards, Customer Standards, and free from any defects and performance issues.
- Providing the Code review comments/suggestions to the developers.

- Leading the effort to improve the overall Application Stability of Enterprise Applications and improving the Application Response times, Throughput etc.
- Applying theoretical expertise and innovative technologies in Software to improve the overall User Experience.
- Closely and Pro-actively monitor the System to ensure high MTBF and MTTR as low as possible. Suggesting any changes or improvements in increasing the System Monitoring and Alerting for Enterprise Applications

LANGUAGES: Java, SQL, UNIX Shell Scripting

ENVIRONMENT: HP-UX, Oracle 9i, WebSphere Application Server, Oracle Weblogic Application server, Apache AXIS 2, Progress Artix Middleware

TOOLS/APPLICATIONS: Amdocs CRM 7.5 Suite, Amdocs Integration Framework, Amdocs Customer Information Hub, Amdocs Security Manager 7.5, WinDBG Core dump analyzer, IBM Support Assistant Workbench, IBM Thread Dump Analyzer, HPJMeter GC Analyzer and Heap analyzer, IBM AIX System monitoring tools, VisualVM, Jconsole, JProfiler, YourKit Analyzer, JProbe Heap Analyzer, Eclipse Heap Analyzer, Eclipse J2SE Development IDE.

<u>06/2008-11/2011</u> Amdocs Inc., St. Louis, Missouri - USA

Position: Senior Subject Matter Expert

Projects:

AT&T LightSpeed U-verse CRM, AT&T Mobility CM:

- 1. Providing 24x7 Production Support to AT&T U-verse CRM
- 2. Joining Outage/Triage related Calls and troubleshooting the issue with Client and working with other external systems of AT&T as per the direction of management of the team.
- 3. Review design documents and design to ensure that the future release is stable before it goes live in production. Work with development team to get the potential issues resolved.
- 4. Planning Production Readiness activities and providing expert inputs to the developers to ensure the smooth rollout of new releases.
- 5. Working with Multiple Teams like DBA team, Infrastructure, Tier-1, SCM team, Pre-Production Team to ensure successful and stable Production new release.
- 6. Conducting Knowledge Sharing sessions with onsite and Offshore Production Support teams.
- 7. Reviewing Test cases prepared by Developers and System Test Engineers and ensure overall quality of the code deliveries is meeting the SLAs and quality standards.
- 8. Solving unique problems related to different Amdocs Applications Functionality and

- Stability, through evaluative judgment and precedent. Independently applying sophisticated analysis in evaluating issues, developing new concepts, methods and techniques to propose Optimal solutions.
- 9. Performing Critical Systems Evaluation by Thread Dump Analysis, Core Dump Analysis, JVM Heap Leak Analysis, JVM Tuning, Application Servers issues and Database Server Issues using WinDBG Debugger, and Dr Watson Thread dump Analyzer, IBM Support Assistant, Heap Analyzer etc
- 10. Serve as Technical Point of Contact for troubleshooting Amdocs CRM Desktop related issues like Screen freeze, deployment issues, Desktop Configuration for CRM, Desktop Resources consumption etc. Serving as a Technical POC for all the AT&T Call Centers of CRM for any CRM Desktop issues.
- 11. Lead the Network Latency Issue Investigation during Outages related to CRM.
- 12. Identifying the bottlenecks in the system during Load Test/Stress Testing, analyzing the Reports of Stress tests and leading the overall investigation till the resolution for the identified bottlenecks in Load Test environments.
- 13. Closely working with Amdocs Product Support Team and Third Party Vendor Software Support Teams (i.e IBM Websphere, Oracle Weblogic Product Support, Progress Support teams) to ensure issues are handled until its final resolution.
- 14. Reviewing Code fixes for Production Deployment
- 15. Designing and Developing Solutions and Leading them to constantly improve the support to AT&T Business
- 16. Co-coordinating with Offshore Production Support Team for continuing improvements in the activities
- 17. Representing CRM on Production Related Calls with Client AT&T.

LANGUAGES: Java, SQL, UNIX Shell Scripting

ENVIRONMENT: HP-UX, Oracle 9i, WebSphere Application Server, Oracle Weblogic Application server, Apache AXIS 2, Progress Artix Middleware

TOOLS/APPLICATIONS: Amdocs CRM 6 Suite, Amdocs CRM 7.5 Suite, Amdocs Integration Framework, Amdocs Customer Information Hub, Amdocs Security Manager 7.5, Eclipse J2SE Development IDE.

07/2007-06/2008 Amdocs, Inc., Development Center, Pune, India

Position: Sr. Subject Matter Expert

- Development of new software releases of Amdocs CRM 6.0 for AT&T U-verse Project, USA
- Joining Conference Calls with AT&T Client to understand the CRM related Defects
- Getting involved in Business and Technical Requirement Analysis meetings for future releases with the Client AT&T.
- Customizing the Amdocs CRM 6 application to the requirements and design with respect to code, database modeling, and configuration changes
- Involved in Entire Software Development Life Cycle of AT&T U-verse CRM Release 6.0- Release 8.0 of AT&T
- Writing Technical Requirements, Functional Design and Detailed Design Documents for new software releases for Amdocs CRM 6.0 to AT&T.
- Conducting Design Review sessions with other Development teams (ISRAEL and USA Team).
- Developing Tools to support various development and support activities in the project.
- Share Amdocs CRM functional knowledge by getting involved in Knowledge sharing sessions.
- Keeping up to date with the latest software technologies and applying in the implementation.

LANGUAGES: Java, SQL, UNIX Shell Scripting

ENVIRONMENT: HP-UX, Oracle 9i, WebSphere Application Server

APPLICATIONS: Amdocs CRM 6 suite, Amdocs Rule Manager, Amdocs Notifier,

Amdocs Event Processor, Amdocs Business Objects, Amdocs CRM Integration Gateway,

Microsoft Visio.

05/2006-06/2007 Amdocs, Inc., Development Center, Pune, India

Position: Subject Matter Expert

- Resolving/Fixing the Production Code/Development Defects for Amdocs CRM 6 Delivery to AT&T (AT&T U-verse CRM)
- Customizing the Amdocs CRM 6 application (i.e Data Model or Configuration) if required for any type of production code fix deliveries.
- Carrying out UNIT testing of the Code Deliveries in Local Environments
- Coordinating with System Test Team of CRM for resolving any System Test QC Defects.
- Understanding/Learning the overall architecture of the AT&T Enterprise applications.

LANGUAGES: Java, SQL, UNIX Shell Scripting

ENVIRONMENT: HP-UX, Oracle 9i, WebSphere Application Server

APPLICATIONS: Amdocs CRM 6 suite, Amdocs Rule Manager, Amdocs Notifier,

Amdocs Event Processor, Amdocs Business Objects, Amdocs CRM Integration Gateway

06/2005-05/2006 Reliance Infocomm. (Reliance Communications), Navi Mumbai, India

Post Graduate Engineer Trainee – CRM Development

- Getting involved in the requirements discussions sessions with other Enterprise Applications for Reliance Wireline Products in Enterprise Business Sector.
- Understanding and analyzing the Impact on Clarify CRM due to new/changing Requirements for Wireline Products
- Developing Functional Design (i.e Product Modeling, Product Configuration, Design Data Model, GUI Impact etc) and laying out the implementation changes for new/changes in the requirements for Clarify CRM.
- Writing technical/functional design documents for Clarify CRM for Wireline Products.

WIRELINE PRODUCTS DESIGNED FOR CRM: IPTV, LCO, MPLS VPN, SPRI, Wireline Voice –PTN

APPLICATIONS: Clarify® eFrontOffice 10.1 Suite (now Amdocs), Amdocs Clarify eSupport 10.1, Amdocs Clarify Business Objects 10.1, Amdocs ClearCallCenter, Amdocs ClearSales, Amdocs ClearSupport, Amdocs ClearLogistics, Amdocs ClearContracts, Amdocs Policies and Customers, Amdocs Product Manager 10.1

PROGRAMMING LANGUAGES: Java

07/2002-05/2003 SARDAR VALLABHBHAI PATEL INSTITUTE OF TECHNOLOGY (Affiliated with Gujarat University), Vasad, India

Undergraduate Faculty - Lecturer

- Prepare and deliver lectures to undergraduate students of Information Technology and Computer Engineering
- Designing the Question Papers for Undergraduate programs for the University.
- Handled the tasks of establishing the structure and content of discussion sections and grading policies
- Evaluate and grade students' class work, laboratory work, assignments, and papers
- Responsible for providing guidelines to students to help them complete course projects
- Prepare course materials such as syllabi, homework assignments, and handouts
- Compile, administer, and grade examinations, or assign this work to others
- Keep abreast of developments in IT field by reading current literature, talking with colleagues, and participating in professional conferences

- Initiate, facilitate, and moderate classroom discussions
- Supervise undergraduate and/or graduate teaching, internship, and research work
- Participate in campus and community events

COURSES TAUGHT:

Distributed Databases, Advanced Database Management Systems, Data Structures and Algorithms and Software Engineering, C/C++ Programming Languages

AWARDS:

- 1. Was Awarded "Amdocs Values Award for Efficiency and Effectiveness" for AT&T in 2009 by AT&T Client Business Unit President Yaron Ravkai.
- 2. Appreciation Letters from AT&T Customer.
- 3. **Stood** academically **first** in the **undergraduate** program (B.Engg) and was awarded a Gold Medal for excellence in academics.
- 4. Employee of Month several times in SDS for Professional and Technological Achievements.