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Experience Summary

- A strong technical leader having 20+ years of industry experience, with expertise in developing and architecting distributed, scalable, enterprise-grade, and commercially successful software products. Has delivered products running on the cloud, on-premises, and hybrid infrastructure.
- Equally comfortable delivering complex product features as an individual contributor and technically leading teams across geographies, and business units to deliver large projects.
- Pragmatic leader, who understands and balances business priorities and technical roadmap.
- Expert in Java technology stack, using which he has developed products in Virtual Desktop Infrastructure (VDI), Cloud, Virtualization, and Telecommunications domains.
- Experienced in developing, designing, and architecting cloud services based on cloud-native technologies. Well-versed in DevOps practices to deploy, run and manage cloud services.
- Experienced in hiring and building teams, working with and technically leading very talented teams. Also Experienced in mentoring and creating the next level of technical leads.
- Experienced in working with customers, internal stakeholders, and executive management in giving product demos, road map discussions & architecture presentations.

Technical Skills

- Design and Architecture: Distributed & Scalable Systems, Integrations with other systems, Solving performance issues, Doing POCs, Problem-solving, Making technology choices
- Cloud Infra & Technologies: Amazon AWS, Azure, Azure VMware Solution (AVS), VMware Cloud on AWS (VMC), Azure Active Directory, Docker, Containers, Kubernetes
- Web Technologies: Web Servers, Servlet Containers, REST APIs, Websockets, Microservices, API gateways, Message buses, Caching, and Identity management. Software/Tools - Apache HTTPD, Ngnix, Tomcat, Kafka, Redis, Microsoft AD/LDAP
- Languages: Java tech stack, Shell/Batch/PowerShell Scripting, C/C++, SQL
- Database, Build, and Version Control: Mongo, PostgreSQL, Oracle; Gradle, Maven, Make; Git, Perforce

Job History & Education

- Working with VMware as Staff Engineer-2 from March 2008 - Till date (~ 14 years)
  - In August 2012 left VMware and joined Plivo as Technical Architect, worked briefly there, and joined VMware back in March 2013
- Worked with Subex as Project Leader from October 2000 - February 2008 (~ 7.5 years)
- Bachelor of Technology in Electrical Engineering with an aggregate of 70% from the National Institute of Technology, Hamirpur (HP), completed in the year 2000.

Selected Career Achievements

- Three granted patents by the United States Patent and Trademark Office (USPTO) a) Multi-virtual-machine snapshot using guest hypervisor and b) Proxy server-assisted product testing c) Unified Application Management For Heterogeneous Application Delivery
- Part of the Program Chair for R&D Innovation Offsite (RADIO) - VMware's internal engineering conference. Responsible for peer review and selection of the papers submitted for RADIO.
- Exhibited research posters at RADIO a) "Containerize your virtual appliances" held at San Francisco, CA b) "Selling Unused Cloud Capacity" held at Monterey, CA
- Published technical white paper Configuring VMware vCenter SSO High Availability for VMware vRealize Automation for vRealize Automation
- Speaker at VMworld Europe held in Copenhagen (Denmark). Gave a session titled "Technical Deep Dive: VMware vCenter Chargeback".
- Demoed Subex's Revenue Operation Center at the International User meet held in Athens, Greece.
- Demoed Subex's products at TeleManagement World Conference held in Nice, France.

Projects@VMware EUC — Apr'2015-Till Date

Lead engineer and one of the architects for Horizon products. Working to define a long-term road map enabling existing Horizon enterprise (HzE) on-prem solution to run on any public cloud, hybrid cloud, or private cloud and connect it to Horizon cloud services (HCS) to make it cloud-managed.

Key Contributions:

- Enhance HzE to work with Azure Active Directory (Researcher, Lead engineer): Many HzE customers are moving from on-prem AD to Azure Active Directory (AAD) for identity, device, and access (to

applications and devices) management. Completed the POC and currently working on the detailed roadmap to support AAD with HzE. Eventually, this will be one of the flagship features of HzE.

- Horizon on AWS (Architect, Lead engineer): Currently working on a joint project with AWS where HzE would be used as a backend for Amazon Workspaces. Responsibilities include interacting with AWS architects, designing the solution, and working on cloud formation templates for deploying HzE on AWS.
- Ease HzE's cloud deployments using Untrusted domains (Researcher, Lead engineer, Evangelist): Took this project from concept to delivery. The objective of this project was to decouple HzE from the customer's Active Directory. This enables HzE to be more widely deployable and operate HzE as a service in the cloud. Currently working on incremental roadmap enhancements for this feature.
- Cloud Connector (Lead engineer): Linux-based appliance which is deployed on-prem, it pairs and connects HzE back to HCS using web sockets. This was a very critical deliverable for our BU as it enabled our BU's vision to manage on-prem HzE deployments from the cloud.
- Cloud-based Subscription Licensing for HzE (Lead engineer): First cloud service built leveraging Cloud Connector. This feature was business-critical for our BU's SAAS journey as it allowed customers to move away from traditional upfront licensing to a pay-as-you-go licensing model.
- Docker-based framework for Hydra microservices to communicate with HzE (Lead engineer): Developed a framework to enable Hydra microservices to deploy a docker container in the Cloud Connector to talk to the HzE and execute their service-specific business logic.
- HCS Microservices (Architect): We had other microservices like Multi-Cloud Workflows, Image management, Universal Broker, and Horizon Life Cycle Management responsible to cloud managing the HzE and Azure pods. My primary responsibilities included providing design inputs, doing reviews, and looking at the bigger picture to ensure things would work end to end.

Projects@VMware CMBU Mar'2008-Mar'2015

Worked on 1) ChargebackManager (CBM), show back and billing solution 2) Application dependency planner (ADP), automated real-time application discovery, and dependency mapper.

Key Contributions:

- VM Instance charging CBM 1.6: Designed and implemented VM Instance charging feature, an essential feature from a competitive angle. Customers were able to do cloud-like costing of VMs based on the size of the VM rather than the usage of the VM.
- vCloud Director (VCD)/vShield Manager (VSM) Integrations CBM 1.5: Interacted with global VCD and VSM teams to understand new features in them and came up with functional specifications, high-level design, and implemented integrations with these products in CBM. This feature resulted in a significant increase in the customer base of CBM.
- CBM 1.0 features: Designed and implemented 1) Load balancing for CBM using Apache HTTPD and Tomcat servers 2) RBAC module for CBM 3) Delivery of CBM as a virtual appliance.
- Passive discovery using Netflow/Sflow data for ADP 2.0: Enhanced ADPs passive discovery mechanism using Netflow/Sflow data. Wrote a Netflow collector which collects Netflow records and processes them to discover machines and applications running in the network.

Projects@Subex Oct'2000-Feb'2008

Subex is a software vendor of Business Support Systems for telecommunication operators. It has products in the area of revenue assurance, fraud, credit risk, and cost management.

Key Contributions:

- Revenue Operation Center (ROC): Project lead for ROC. It provides a centralized, integrated, and configurable view of the KPIs like revenue, cost, profit, revenue loss, fraud loss, and bad debt for the network operator over time.
- Configurable data sources: Project lead for Configurable data sources (an ETL tool). This tool is used to collect data from different network elements and convert it to a format, which is suitable for consumption by other Subex products.
- Reporting for RevMax Suite: Developed a reporting solution for RevMax Suite. We used JasperReports for this project. Instead of writing report definitions in XML which Jasper reports expects, a Report Definition Language (RDL) was developed, easing the task of writing reports.
- Ranger v3 Java Client: Involved in re-architecting the existing Windows MFC client and implementing a new Java Swing client with improvements in usability and performance.
- AutoCode - Bindings for DB Objects: Developed "AutoCode", a code generation tool. Autocode expects a data definition file and generates Java/C++/SQL code for Data Transfer and Data Access Objects.