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About Me

I am currently working as a **Senior Software Engineer (SRE)** with **Oracle Public Cloud** managing and maintaining mission critical **Edge Services (LBaaS/Dyn).**

I joined Oracle in 2012 and worked across few divisions of Oracle Public Cloud Infrastructure as it evolved for the past 6 years starting as a **Database Automation Engineer to Devops(Managing/Maintaining CI/CD pipelines on Chef Infrastructure)** to the latest being SRE discipline with Load Balancer Cloud Service. My primary responsibilities included managing, supporting and on-boarding Cloud Services and it's rollouts, doing security remediations including automations, addressing high profile customer escalations, planning upgrades, identifying edge cases and resolving complex Network layer issues, administration of Dyn DNS Zones, working closely with architecture teams to address design gaps and creating tools/automations and publishing SOP's for L1/L2 support teams.

I recently earned **Red Hat Certified Engineer certification in RHEL7** and have a strong passion in Linux, Networking (Any-casting, BGP, ASN, Routing, DNS, ASN, VPC) along with scripting and automation on large scale environments.

Prior to joining Oracle, I worked at Ford Motor Credit for 9+ years and the time was split between working as an **Oracle Systems DBA** for 4+years and as an application **DBA for Teradata Database** for 5 years. During then I earned **Oracle Certified Professional and Teradata Certified DBA from Teradata.**

During this time I also pursued and received **"Masters in Information Systems"** from EMU, USA.

I also made a contribution to **Open Source,** RMAN Oracle Backup solution fully scalable and deployable by companies without having the need for code changes http://sourceforge.net/projects/oraclerman/

Before becoming a DBA**,** I worked in **Data mining** as a DataWarehouse Developer for 2+ years and during the time earned **Teradata Certified SQL Specialist and Teradata Certified Physical Implementation Specialist certifications**.

I began my career as Software Engineer in a startup firm primarily as a **Java Programmer (Core Java Networking**/Web Servlets) and continued to be a programmer for about 2+ years. I also earned **Sun Certified Java Programmer** during this period.

Technologies:

Proficiency : Linux (RHEL, OEL), Bash, Networking Topologies (DNS, SSL,TLS, HTTP(s), NAT, BGP, IPv6, NFS), Database (Oracle)

Experience: Databases(Oracle, Teradata), Languages(Python, Java, Perl), Tools (Ansible, ClusterSSH, Terraform, jq), Webtier (NGINX, Apache, Weblogic, Tomcat), Security(OVAL/OSCAP,PCI/GRE Tunneling), Networking (Tcpdump/Wireshark, EBTables, Firewalls) and DataFormats(JSON, XML, YML, HTML) , Docker, Confluence, Jira, GIT

Familiarity : Ruby, ELK (Elastic Search, Kibana), MySQL/MariaDB, Cassandra, ISCSI, AWS, Google Cloud

Oracle Corporation – Principal Software Engineer (SRE lead for Edge Services-LbaaS/Dyn) [Jun2012-Present]

Responsibilities:

- Project Lead for migration of Internet Facing Customer Zones to Dyn/Akamai from Legacy IPC systems backed by Ultra DNS, including the implementation in Dyn.

- Identified and resolved the edge-case (DNS wild carded FQDN on a global zone) that impacted the Identity Cloud Service Production Launch of a critical region.

- Proactive discovery of Duplicate IP's address detection which resulted in massive amount of provisioning failures in Java Cloud Service on the NFS/ZFS backed interfaces (perl script).

- Led the PCI Compliance region setup from ground-up for LBaaS, co-ordinating addressing several CVE/OVAL vulnerabilities via Ansible Playbooks.

- Main contributor to the Security setup/implementation of Dom-U isolation on XEN (vif-*) scripts using **ebtables** over iptables on Exalogic Racks to prevent **ARP Spoofing and NFS hacking**.

- Played a lead role in high profile customer escalations that involves Complex Network Issues involving static routing issues, BGP Upstream errors, DNS Latencies, MTU (Jumbo Frames).

- Worked as a Devops Engineer for the launch of the DCS/MCS Cloud Services in Internal compute, managing the fleet writing Chef Cookbooks and LCM support using Python (FAB) scripts.

- Worked closely with DNS Architects, Security Admins and Auditors to mitigate the gaps to help identify gaps and re-architect the systems for better customer experience and scalability.

- Architected and implemented JCS Upgrades using mcollective, bash and was the main contributor to the plugin that facilitated the multi-region upgrades via a single script.

- Did a single click script for Data Guard Installation (bash + perl) which helped to cut down the man-hours from days to just few hours.

- Lead engineer for setting up Ansible Playbooks to remediate PCI vulnerabilities and in rolling out GRE,NTP, SIEM, PBRUN and LDAP using sensible playbooks.

- Contributed to the Security review/scan via OSCAP/OVAL reports and security vulnerability mitigations to address the operational challenges and streamline the image the CICD pipeline.

- Was involved in quick response/rapid recovery of mass outage scenarios like SSL cert expirations via tools like ansible.

- Setting up of numerous bash/jq simple cookie-cutter scripts to facilitate L1 team for Service LCMs.

- Worked on several critical issues evolved on OVMM/OVS/ZFS Filers including network connectivity, firewall, routing, NFS issues and FS crashes/repairs on **Exalogic platforms.**

- Cross-platform proficiency and exposure in several Networking Topologies including BGP, Thousand Eyes, ASN Routing, MTU/Jumbo Frames, TCPDUMP, IPV6, Linux Security - OVAL/OSCAP, Chef, Python Fabric, NFS , Weblogic, NGINX, LDAP, Apache, haproxy and Docker.

Ford Motor Credit [Oracle Systems DBA/Teradata Application DBA] - [Sep2002 – Jun2012]

Worked as a **Systems DBA for Oracle** with **24 x 7** support of **200+** databases. Also provides additional application DBA support for Teradata and MS SQL Server 2005/2008 Databases consisting of OLTP and OLTA applications.

Responsibilities:

- Architected and implemented **Oracle Backup process (RMAN) using Perl/Linux Shell Scripts** (bash) to replace TSM backups in SuSe Linux - Projected Savings for the company was 96K+ (96,000USD)/Year on a recurring basis.

- Proposed, designed and finally implemented an optimization solution that resulted in cutting down 144 JCL jobs to just 8 Jobs + a Stored Procedure and CPU savings were then estimated was 120,000USD/Year.

- Used Oracle's SCN technology to implement a Teradata Standby Database, link here.

- Did POC and the initial setup of Oracle ASO (Advanced Security Option) using TDE (Transparent Data Encryption) as part of Europe Datacenter Consolidation.

- Automated Oracle Database Server Migrations/Upgrades from 32bit SuSe (SLES9) to 64bit SLES10 servers saving amount of downtime.

- Automated User Security Management by designing/architecting Oracle Stored Procedures resulted in an estimated 160+ man hours per year and thus reducing DBA workload.

- Responsible for setting policies, exploring new features, monitoring incidents, performance monitoring, change/configuration management, security/audit (SOX) report generation and capacity planning reviews.

- Coordinated implementation of Data Cipher scripts for masking the Personal Identifiable Information (SSN, DOB etc.) as part of Database Security during data propagations.

- Established/Debugged and found solutions with custom Java Scripts for testing Character Set Conversion issues (UTF8/Unicode) as part of Asian/European Data Center Consolidation.

- Involved in performance tuning/debugging in all levels - System, SQL, Linux, Database, and Network for application issues.

- Support/Maintenance and minimal scripting of JCLS that does IBM-DB2 BMC Unloads to Teradata using Fast Loads and Multi Loads.

- Assisting application teams extensively in identifying bottlenecks, transaction deadlocks, tuning the SQL's, data propagations (export/import), data recovery in both Oracle.

- Developed multithreaded Java Program for performing Load Tests and obtain performance statistics for internal DBA Analysis.

Software Engineer (Java, Oracle, Teradata Development Projects) [Jun 2000- Aug2002]
Worked at Merck-Medco, The Limited, Intelisys Electronic Commerce doing Java, Teradata and Oracle Development Projects.

Software Engineer (Java Programmer) [Nov 1999-May2000]
Worked at Kalki Communication Technologies (India) as a Java Programmer.

- Developed a fully functional chat server (similar to yahoo chat then) for a local web portal using Java Networking packages.