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**RESUME**

**Experience**

February 2012 – Current : Software Engineer, Oracle, Bangalore

(Systems BU - Formerly SUN Microsystems)

Specialization in Solaris Kernel’s core networking components like TCP/IP, MAC, and network level virtualization.

**Project details**

* Flows

With the existing Solaris flowadm command, users can fine-tune network resources like BW, CPUs, hardware tx-rx rings etc. of NICs based on ULP attributes like src/dst address, port no, protocol etc. As part of this project rewrote a feature that allows users to create such flows on alternative boot environments (BE) of the OS, from the current BE without actually booting into the alternate BE.

* NFS Performance Improvement

NFS clients on Solaris Containers/Zones showed high latencies while flushing dirty pages to the underlying filesystem. Worked on creating a per-zone task queue, that schedules tasks asynchronously so that there is very little/or no latency.

* DataCenter Viewer

This project deals with creating a pictorial model of various components in any given Datacenter/server running Solaris. As part of this project, Solaris APIs are used to model various components like drivers, networking, file systems etc. as objects, and then use these objects to create a schematic from which administrators would get a holistic understanding of how the Datacenter was configured. I single-handedly designed and implemented this tool using python.

* TCP Timestamp tunable

A post to BugTraq mailing list disclosed a possible vulnerability in many TCP implementations. I worked on mitigating the vulnerability, while adhering to the respective RFCs.

**Key responsibilities & competencies**

* MAC layer and TCP/IP layers of the Networking stack and other Solaris kernel modules.
* Fixing bugs in the production releases and adding features to the development releases.
* Fixing complex panics/crashes/hangs in both x86 and SPARC architectures.
* Security issues/projects and networking performance bugs.
* Have used various sniffing tools like wireshark and snoop and tracing tools like dtrace to observe and analyse networking issues.
* Have worked on features for high availability like IPMP, aggregation, VRRP and virtualization technologies like LDoms, VNICs, zones, and flow control.
* Have attended and given TOIs/ unconferences to colleagues in the US and Europe.
* Have trained Solaris Network Administrators, Technical Writers and customers about new features.
* Worked extensively with other Unix-like environments, like bsd/linux and have compiled and ported multiple third party tools on them.
* Authored various cheat-sheets and articles for other teams to use.
* Maintaining several servers in the local lab that creates configurable/on demand virtual machines for team members to use - VirtualBox for x86 and Oracle VM for SPARC.
* Indepth knowledge of Solaris kernel implementation.

**Career highlights at Oracle :**

* Got promoted in the first year of joining Oracle.
* Attended conferences and gave training at Oracle’s US facility.

* Conducted product promotion presentations for the Oracle Users Group community from various countries at Hyderabad.
* Received several appreciations/certifications/awards for solving highly complex issues.

**October 2010 - January 2012 : Huawei Technologies, Bangalore**

Software Engineer (C developer) on Linux environment .

**Project details**

* SNMP

Worked at Huawei's research facility in Bangalore. For the most part researched, designed, prototyped and implemented several features of the SNMP protocol to support Huawei's OS (VRPV8) which is deployed on their routers and switches (NE5k series). VRPV8 is a multi-process, multi-thread architecture deployed on a Multi-processor environment, which supports many high-end features like virtualization and high-availability.

Major contributions to the project were :

1. Connect SNMP Agent to a Manager via Socket - Designed and coded based on FSM of Socket component in VRPV8.
2. Worked on mcHuawei (Huawei's MIB Lex and YACC compiler) - Wrote a feature that converts RFC MIB files to a generic format which can be modified by L2/L3 protocols for their customized needs.
3. Supported Multi-VB Get-Bulk operation - Worked on SNMP target side code, to support get-bulk operation, so that a manager can query the router database with multiple fields multiple times.

4) Supported private VB Traps/Informs - Worked on SNMP target side code, to support Huawei's private VBs to be sent as trap/informs to  
specific managers.

5) Actively involved in Bug-fixing and resolving crashes.

6) Individually set up CT framework for SNMP. Also worked

extensively in UT for improving code quality.

**Key responsibilities & competencies :**

* Developing a Common routing platform for most Huawei

Network andCommunication equipment (Hands on experience with

NE5k series of Routers).

* SNMP protocol to support VRP V8 (Versatile Routing Platform).
* Developing features, fixing defects and resolving crashes.
* Actively involved in design phase brainstorming and writing SRS, HLD and LLD.
* Worked extensively in development phase testing like UT, CT (CxxTest framework) and IT.
* Knowledge of working in a Multi-process, Multi-thread architecture and Multi-processor environment and worked on OS, IPC, Networking and DB concepts.
* Experience supporting High Availability on high-end Embedded Systems.
* Software processes like Agile Software development life cycle.

**February 2010 – July 2010 : TelecomOne Teleservices , Bangalore.**

* Worked with the post processing team in the RF Department.
* Telecom software and ‘Gladiator’ engine.
* Creating and designing GAP and SWOT analysis reports for GSM layer 1 and layer 3 messages.
* Technologies worked on include GSM, CDMA, GPRS, EDGE, UMTS, WCDMA.

**Skills / Strengths**

* Delivering bug free, maintainable and performance optimized features/projects on-time.
* Very good at designing scalable and maintainable software.
* In-depth knowledge of OS concepts/C language.
* Can debug bugs/panics/hangs promptly and on short notice.
* Fast learner, smart worker and excellent team player.
* Good at presentation and mentoring.

**Educational**

B. Tech - Calicut University (Electronics and Communication Engineering 2009, First Class)

**Contests & Participations**

* First prize for College Debugging in C Competition
* First prize for College Technical Quiz Competition
* Won multiple Math Skill Contests
* CBSE South Zone India Swimming Bronze Medalist
* Captained High School Basketball Team

**PRIYESH. V.P**