**Salman Haroon**

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**Professional Summary**

Systems Engineer with over 9+ years of experience in build, configure, technical support and maintenance of UNIX Systems.

* Built RHEL6.X ,7.x VMWARE virtual server systems through HP server automation utility
* Experience in Administration of AIX 4.3 , 5.1 , 5.2 , 5.3, 6.1, 7.1 , 7.2
* Experienced in administering Linux (RHEL) in a test/development/production environment
* Experience with managing server networking (TCP/IP, DHCP, DNS, firewalls)
* Experience creating scripts in a professional environment
* Strong OS and server troubleshooting, OS Patch management, and build Infrastructure skills.
* Experience in installing, configuring, managing, maintaining and developing AIX Systems, Linux (RedHat), Windows 2003 Server, HP UNIX and Solaris
* Experience in Installation of Red Hat Enterprise Linux and VMware interactively and with automated Kickstart
* Experience with disaster recovery and high availability systems
* Built and configured ESX host server and maintained the cloud infrastructure
* Experienced with monitoring tools such as NAGIOS/Zabbix for network services
* Experience managing systems that use network-based storage solutions (SAN and NAS)
* Experienced in installing firmware and kernel patches for critical systems
* Performed post-installation configurations, updating kernel parameters, setting up file systems, applying software policies through HP Server Automation tool per new server
* Installed patches and other software packages using YUM and RPM
* Administered Disks and File systems using VERITAS Volume Manager
* Experience with account and rights assignments
* Expertise in creating scripts with **Korn**, **Perl** which would help in automation and simplification of jobs.
* Installation and configuration of **NIM** master server and clients
* Migration of **AIX** OS from 4.3.3 to 5.1, 5.1, 5.2 to 5.3 and 5.3 to 6.1 7.1 on **pSeries servers.**
* **Migration of AIX Systems from old p4, p5 to p6 p7 to p8 hardware.**
* Experience working on **P550, P560, P595, P570, P575 p770 p870.**
* Design and build **power7 -770** and **power 8 -870** from scratch to meet the business requirements.
* Experience in working with **Live Partition Mobility** to perform migration from one frame to another.
* Experience in **MICRO-PARTITIONING** on P series servers.
* Experience in **PowerHA, AIX versions 6 and 7, PowerVM (VIO), HACMP**, Scripting and knowledge of Red Hat Linux.
* Install and configure multi-node Power HA (active/passive and active/active both)
* Power HA testing.
* Configuration of **HACMP** 4.5, 5.1, 5.2, 5.3 6.1, 7.1 as well as performing failover and failback of **HACMP** Clusters on a regular basis as per the application requirement.
* Migration of **HACMP** from version 4.5 to 5.1, 51.61 ,6.1 to 7.1
* Installation, administration and configuration of **VIO Server** and **VIO client LPAR’S through HMC.**
* Experience in performing **DLPAR** on VIO servers.
* Experience in working with **Shared Ethernet Adapter**, **Link Aggregation** and **NPIV** concepts associated with VIO server technology.
* Installed **DB2, Web Sphere Application Servers** on **Linux and AIX**.
* Installing and Configuring and troubleshooting applications SAP, Oracle, DB2 and Websphere.
* Experience with **LVM**, **NIM**, User & System Resource Management, Job Scheduling and Paging Space Management.
* Experience in creating **CRON** jobs to automate various system administration tasks using Crontab Utility
* Experienced and familiar with tools like **SMIT,** configured public network with**mktcpip**and backup network with**smittychinet**
* Installing new **software** on AIX 4.3/5.2/5.3/6.1/7.1 Boxes, Upgrading the **Maintenance Levels as per application requirement**
* Experienced in monitoring system performance and check the status of the system using utilities such as **TOPAS, GLANCE, NMON, VMSTAT, IOSTAT**, etc.
* Periperal Experience in **EMC Storage Arrays, ADIC tape libraries, VeritasNetbackup**.
* Experienced in configuring **SSH**, **DNS, NIS, NFS, LDAP, sendmail, ftp.**
* Excellent presentation, analytical, documentation and interpersonal communication skills.
* Associated with a major initiative to migrate SAN storage utilized by Solaris and **AIX** servers particularly large Oracle data bases, db2, web and application servers across several **EMC DMX** arrays onto **EMC VMAX** array
* Worked **24X7** and on-call in production support and trouble shooting on AIX pSeries servers.
* Performance and fine-tuning, Applying patches and fixes.
* Installed, configured and supported **Web Sphere** Application Server, IBM HTTP/ Apache Web Servers in AIX and Linux environments. Good knowledge of Samba server.
* Scripting knowledge (**Perl, ksh, bash**) to perform administration and automation tasks.

**Education**

Bachelors in Computer Science and Engineering.

#### Professional Experience

**Magellan Health (Columbia M.D)**

(May 2014 to present)

**UNIX System Engineer**

* Setup automated installs for Linux servers using Kickstart
* Worked on highly virtualized Linux Environment (VMware)
* Troubleshooting on issues belongs to virtual servers
* Installed and configured all the Linux servers in the network per specifications of clients.
* Responsible for supporting Linux servers for production, development and testing.
* Managed Red Hat Linux and VMware ESX servers
* Responsible for Red Hat Enterprise Linux including day-to-day administration duties , working tickets, and completing server builds
* LVM(Logical Volume Manager) administration
* Maintain environment and system support procedures and documentation
* Administered multiple IBM machines (p8-870, p7-770,p7-795,p6-570,p5-520, p5-550, p5-570 and p5-595) running AIX 5.3/6.1/7.1/7.2
* Storage migration i.e. migrating one kind of storage to another according to business needs.
* Server migration i.e. that is moving server from one hardware to another using mksysb etc.
* BOS migration and upgrades i.e. migrating from 5.3 or 6.1 to 7.1 and/or upgrading to the latest TL/SP level.
* Install, configure VIO servers (with required vscsi/npiv and vlan setup) to meet the business requirements.
* Migrate VIO 1.5 to 2.1, 2.1 to 2.2 and upgrade it to the latest level.
* Install and configure multi-node Power HA (active/passive and active/active both)
* Power HA migration i.e. migrating from 5.5 to 6.1 , 6.1 to 7.1
* Power HA testing.
* Responsible for event processing, change management and problem determination in HACMP environment.
* Design and build power7 -770 and power 8 -870 from scratch to meet the business requirements.
* Worked as AIX System Administrator to support RS/6000, P4, P5 550/570/575/595,P6 and Blade Center
* Responsible for Configuration of multiple logical subsystems utilizing IBM HMC,WSM,
* including LPAR configuration, NIM and CSM to install and manage the LPAR Good understanding in Advanced POWER Virtualization on IBM P7 System
* Hands on experience on p7 series hardware which includes hardware planning, racking, cabling, connecting with SAN and HMC, installing OS, upgrading OS to current TL and preparing box for applications and database.
* Expertise in creating standard LPAR, VIO server and VIO clients using HMC on p7 servers.
* Planned/Created/Installed/Configured two Dual Virtual I/O servers with SEA failover, MPIO and link aggregation on p6-570. p7-770
* Installed AIX 5.3, 6.1, 7.1 TL7 SP3 on more the 50+ LPARs using NIM server.
* Responsible for NIM installation, setting up NIM servers, clients, define various NIM resources like lppsource, spot, mksysb, image.data, bosinst.data.
* Back up of HMC critical console data, LPARs profiles, system backup of virtual I/O servers and clients.
* Created /Installed and Managed 50+ LPAR using HMC on p570 and p770 machines.
* Performed performance monitoring using nmon and HP open view utility.
* Extensively working experience in LVM, which includes creating VG, LV and file system.
* Upgraded 50+ production servers from AIX5.3, 6.1, 7.1, 7.2.
* Upgraded the microcode of 570/550 and redundant HMC.
* Very good Experience with data migrations using various third party tools.
* AIX 5x, 6x and 7x installation, up gradation, migration and troubleshooting.
* Perform SAN migration on 60+ database server from DS8300 to NetApp disks storage.
* User Administration password restrictions and security implementations according to Implementation of SOX requirements, LDAP (VAS) user’s administrations.
* Security measures blocking unnecessary ports and restriction user’s remote logins.
* Provided remote technical support for the AIX software team
* Responsible for Installation, up gradation, Configuration Management, Maintenance and Systems Development of AIX Systems, using NIM.

**IBM**

**(April 2013 to march 2014)**

**System Administrator**

* Built and configured ESX host server and maintained the cloud infrastructure
* Built RHEL6.X ,7.x VMWARE virtual server systems through HP server automation utility
* Installed patches and other software packages using YUM and RPM
* Administered Disks and File systems using VERITAS Volume Manager
* Installed and maintained Linux based server applications
* Linux systems administration (CentOS, RedHat)
* Installed and configured Operating Systems Software
* Installed and configured Cluster Services to support highly available Databases
* Provide patch, configuration and vulnerability management services
* Maintained and improved Linux imaging services, virtualize service offerings and move services to the cloud where possible
* Administered multiple IBM machines (p8-870,p7-770,p7-795,p6-570,p5-520, p5-550, p5-570 and p5-595) running AIX 5.3/6.1/7.1
* Server build and maintenance of system/core applications spread across AIX 5L/6.1/7.1 Servers.
* Responsible for NIM installation, setting up NIM servers, clients, define the resources, Alternate Disk Migration with NIM.
* Creating lppsource and SPOT for client on NIM server. Installing OS on NIM clients using NIM Server.
* Virtualization of pSeries p 550 520 570 590 730 750 770 780 frames. Dual VIOS and Multiple VIOClients scenario.
* Installation of VIO2.1 on VIOservers and AIX5L/6.1/7.1 on Lpars. Used NIM Master for installation and migrated VIO 1.5 to 2.1 & upgraded 2.1 to 2.2.
* Defined virtual SCSI, virtual Ethernet adapters, virtual FC adapters and created VIO client adapters from HMC and mapped them.
* Performed planning, installation, configuration and maintenance of IBM HACMP V 5.1, 5.2, 5.3, 5.4, 5.5 and 6.1. Reduce planned downtime, Reduce unplanned downtime, Increase Maintenance availability.
* Experience in Migration of HACMP 5.4 to 6.1 and 5.5 to 6.1 using Node-by-Node migration without changing the cluster setup.
* Extensively used HACMP – CSPOC to create VG’s, LV’s, Filesystems and Managed HACMP Services
* Responsible for AIX v5.x, 6.x, 7.x system administration tools, commands and utilities.
* Extensively used LVM - created VGs, LVs & disk mirroring for IBM p-series servers
* Designing and managing disk space using AIX Logical Volume management. Strong technical skills on AIX LVM and troubleshooting.
* ML, TL updating and APAR, fix installation, and patch update on AIX and devices on requirements basis and on customer specifications.
* Administered the UNIX System for clustered AIX Servers running dynamic LPARs with fiber attached SAN storage.
* Associated with a major initiative to migrate SAN storage utilized by Solaris and **AIX** servers particularly large Oracle data bases, db2, web and application servers across several **EMC DMX** arrays onto **EMC VMAX** array.
* Checking the file systems and increase/decrease the file system if required.
* Fixing mount issues, checking filesystem integrity, running fsck in maintenance mode on rootvg logical volumes if any corrupted lv’s in rootvg.
* Performance monitoring using vmstat, iostat, sar, topas, netstat and nmon and analyzing these reports to figure out any performance issues.
* Configuring NFS on the servers, working with NFS mounts and related issues.
* Creating User, Group home directories and password administering.
* Installing new software / file sets, packages and other third party applications when required by the developer or business.
* Using alternate disk installation method when upgrading or installing TL or ML on AIX Operating system.
* Participated in AIX migration project - Migrating AIX Version 5.3 to AIX 6.1 & 7.1 Operating System.
* Taking regular system backup using mksysb and volume group backup using savevg utilities.
* Creating /removing paging space, checking paging space usage and increase/decrease if required.
* Perform ODM and Powerpath drivers upgrade on VIO-Servers.
* Strong understanding of NPIV on AIX 6.1 7.1 supporting PowerPath5.5 and EMC ODM 5.5.
* Setup and Configured IBM AIX HACMP and GPFS on PSeries servers. Installed and configured Oracle 10g and 11g RAC.
* Install and Configure Oracle 11.5.10 and R12 on AIX 6.1 using HACMP. GPFS. Setup 5 node RAC HACMP AIX 5.2 Cluster using GPFS.
* Managing various scripts to start up and shutdown databases and SAP systems.
* Installed and configured Sudo for users to access the root privileges.
* Decommissioned servers including VIO Clients and dedicated lpar.
* Define/setup network protocols, Network File Services (**NFS**), and Network Information Services (**NIS**).
* Provided support by **24x7** shift rotation basis and pager support.

**RBS CITIZENS BANK, EAST PROVIDENCE R.I**

**(Jan 2012 – March 2013)**

**AIX Administrator**

* Installation & administration of AIX 5.3, 6.1 and 7.1 OS
* Created and configured standard and Virtual I/O LPARs, managing resources, patching, upgrading, monitoring, performance/tuning and problem determination/resolution
* Install and manage P700 frame architecture.Worked on HP UNIX and Linux.
* Worked on TSM client
* Active participation in project planning and deployment
* Configured volume groups and logical volumes, extended logical volumes for file system growth needs using Logical Volume Manager (LVM) commands.
* Performed installation, periodic maintenance updates
* Configured backup/archive policies using ADSM utility and mksysb images of root volume group to meet data archiving requirements and disaster recovery readiness.
* Configured rules for system security, maintenance updates and system failure alerts.
* Created and configured logical partitions (LPAR) on IBM systems using Hardware management console (HMC).
* Performing upgrades applying fixes, patches and APARS to the lpars.
* Rack mounted IBM p630 systems installed and configured AIX 5.3 and applied maintenance levels.
* AIX Migration from AIX 5.1/5.2 to AIX 5.3.
* Responsible for Remote AIX Support With more than 1250 servers.
* Installed racked and configured IBM pseries p4/p5/p6/p7 (p770, p570, p561, p560, p550) for production, staging and test environments.
* Installation and configuration of LPAR’s with AIX 5.3, 6.1, 7.1 on p7 servers.
* Responsible for performance monitoring using AIX utilities and nmon, Site view.
* Performed **HACMP** failover and failback as per the user’s requirement.
* Experience of configuring 4 nodes cluster with multiple RG configuration.
* Extensive working experience on LVM. Creating VG, LV and FS.
* Upgrading and updating TL, APAR and patches on AIX 5.2/5.3.
* Perform User Account management, data backups, and users’ logon support.
* Installation and configuration of NIM master server and clients.
* Creating lpp source and SPOT for client on NIM server.
* Experience of upgrading and updating p550 and p570 systems and devices firmware using HMC.
* Provided UNIX infrastructure, operations and support for IBM RS/6000 (7026-M80) servers and pSeries servers running IBM AIX 4.3.3, 5.1, 5.2.
* Performed installation, periodic maintenance updates and applied APAR fixes.
* AIX systems administration and Disk Management.
* Experience in creating and installing standalone VIO client LPAR and VIO client LPAR using HMC.
* Upgraded and upgrading HMC from version 6 to 7.
* Installation and configuration of VIO Server 1.3 and AIX 5.3 on client LPAR’s using p520 and 570 boxes.
* Upgrading TSM Client from version 5.2 to 5.5
* Managing various scripts to start up and shutdown databases and SAP systems.
* Installed and configured Sudo for users to access the root privileges.
* Define/setup network protocols, Network File Services (NFS), and Network Information Services (NIS). Provided support by 24x7 shift rotation basis and pager support.

**Bank of America, Albany NY**

(Dec 2009 – Dec 2011)

**System Administrator**

* Worked as AIX System Admin with IBM P-series Model servers in an HACMP environment.
* Experience with Red Hat build methodologies, performance tuning, memory management, server maintenance and troubleshooting
* Project lead of the Tivoli Monitoring Project. Configured and installed Tivoli Monitoring 6.2 on IBM's AIX server to monitor AIX operating system, WebSphere, SOA Applications
* Responsible for installation and maintenance of 5.1,5.2 AIX servers
* Installation of patches, packages on AIX, and Windows NT/2000 Servers.
* Adding network printers and conducting day-to-day system administration, including backup/recovery in NAS environments.
* Installation, Administration and configuration of LPAR’s with AIX 5L on p5 servers
* Experience of creating and installing standard LPAR and VIO client LPAR using HMC
* Installation, configuration and administration of IBM Web Sphere Application Server V4.0, on AIX along with DB2 UDB & IBM HTTP server with SSL for secure communication & providing technical support to users
* IBM RS/6000 SP System Software Maintenance AIX System Dump Generation and sending System Dump to AIX System Support Center.
* Network management of TCP/IP networks, IP address management.
* Performing upgrades of OS and applications.
* Tested products for evaluation purposes and documented for necessary changes required as per environment
* Korn& C shell scripting, mainly for scheduling jobs (CRONTAB)
* Inventory management for Software and Hardware.
* Disk Replacement Strategy on AIX.
* Logical Volume Management **(LVM)** of AIX.
* Ensure required daemons are monitored
* Ensure cpu/memory thresholds are accurate
* Set up and configured RS6000 (AIX) servers; troubleshoot conflicts with existing hardware and software; troubleshoot network connectivity.
* Planned and executed upgrading, patching of RS6000 (AIX) servers
* Disk Management on AIX using SMIT
* Logical Volume Management (**LVM**) of AIX.
* Created LV's and Filesystems using SMIT.
* Performed user management per the requirements which also included working on permissions and adding/deleting users from groups and servers.
* Escalation of issues to Level 3 Administrators as part of the ticket escalation procedure.
* Test and install various patches (Fix Packs) on the servers to solve the problems encountered by the applications running on the servers.
* Specifying and procuring new AIX systems, hardware and software upgrades and peripherals.
* Installed AIX on P series servers
* Worked with IBM P-series 660 690, 7028-6c4 7017-S85 Model servers in an HACMP environment.
* Installed Red Hat Linux and HP UNIX on multiple servers.
* Created and used korn shell scripts to install multiple fixes and patches
* Managing the user accounts creation, locking, deletion of old accounts
* Review Disaster Recovery Documentation for Mission Critical and Business Vital Servers
* Monitoring paths for the disks and replacing the disk for a dead path.
* Installed Tivoli Storage Management on the client boxes configured opt and sys files
* Worked with backups and restores using TSM and NETBACKUP
* Ensured mksysb and sysback are taken
* Ensure documentation is current and accurate
* Performance Management & Tuning of AIX UNIX Kernel
* Security, users and groups administration
* Provided support by **24x7** shift rotation basis and pager support
* Monitored trouble ticket queue to attend user and system calls.
* Attended team meetings, change control meetings to update installation progress, and for upcoming changes in environment.