**MOHAMMED A SHAIK**

**Email:** [**mohammsh28@gmail.com**](mailto:mohammsh28@gmail.com)

**Phone: +12035437046**

**SUMMARY:**

* Nine years of progressive experience in the information technology field and seven and half year hands-on experience with Storage Area Networks (SAN).
* Excellent Experience in administration, maintaining and troubleshooting of EMC Symmetrix-**VMAX, DMX, VNX**, **CLARiiON**, **XTREM-IO, PURE FlashArray**,**NetApp** and **HP 3PAR**.
* Hands on experience with the latest Flash array’s Xtrem-IO and PURE. Involved in setting up of **PURE Flash array model m70**.
* Implemented **EMC DPA** (Data Protection Advisor) in the current environment.
* Hands on Experience with Backup devices **DataDomain** and **Avamar**. Scheduled Backups using **NetWorker version 8.2**
* Excellent experience with **SYMCLI**, **NaviSphere** Manager, **NAVICLI**, **Cisco DFM** and **Connectrix Manager**
* Experience in implementing EMC Business Continuity solutions using **Time Finder** Clone/Mirror/Snap on VMAX, DMX, using **Unisphere** for VMAX and **SMC**, SYMCLI.
* Experience in design and implementation of remote replication techniques and disaster recovery solutions using **SRDF/S/A/AR** on VMAX, DMX arrays.
* Excellent experience in Microsoft, Solaris and Linux platforms as it relates to disk allocation, managing LUN's and **HBA** configuration.
* Involved in Installation & configuration of **PowerPath** on UNIX, Linux and Windows servers for **Path Failover** and **Load Balancing**.
* Experience in SAN expansion in Brocade and Cisco fabrics and SAN migration between **Brocade** and **Cisco**.
* Proficiency in managing HP 3PAR Storage arrays like F200/400, T400/800,V400/800.
* Experience in working with **Unisphere** for managing VMAX, VNX, **Celerra** systems and CLARiiON arrays.
* Migration expert with hands on experience of storage migration between 3PAR to VMAX, 3PAR to NetApp, NetApp to NetApp and VMAX 20K to 40K.
* Good Knowledge of virtualization (**VMWare**), Install, maintains, and supports VMware (**ESX Servers**).
* Good Knowledge on **VI client** and **VMware converter**.
* Knowledge in ESX Architecture, guest OS installation, setting up of VM priorities, Cloning, Snapshots, Creating Teams, NIC teaming, VM resource allocation.
* Good knowledge of **VPLEX** implementation.
* Experience in generating host remediation reports using EMC Host Environment Analysis Tool (**HEAT**), E-lab navigator and grab analysis reports.
* Installed and configured **PowerPath** for AIX, Solaris, HP-UX, Linux and Windows Operating Systems to support the load balancing and failover features among the HBA’s on the system.
* Experience in implementing array based migrations using **Open Migrator, PowerPath Migration Enabler** (PPME) and host based **Logical Volume Manager**, EMC Symmetrix **Open Replicator**, **SRDF/S/A/AR**, CLARiiON **SanCopy**.
* Experience in creating CPG, virtual volumes, hosts, exporting **virtual volumes** to host using **InForm Management console 4.2.1** and CLI 3.1.1.
* **NAS** storage using Celerra Manager and **Celerra CLI** and also with VNX 5500/5700.
* Responsible for managing different kinds of **FAS series** 960, 6030, 6240, 6280 in SAN/NAS environment 3050 **Vfilers** in SAN environment. Worked on both SAN and NAS environments.
* Implementing, Managing and administration **Netapp 8.1 C-mode** storage arrays.
* Using on command system manager and cluster shell on command tolls to create new **vservers**, aggregates, volumes and provisioning new storage.
* Decommissioned NetApp filers by destroying all volumes, aggregates. Added the disk sanitize license to the filer for sanitizing the disks and power off the filer head and shelf as a part of decommission process.
* Possesses hands on expertise in troubleshooting day to day SAN/Storage and host related issues quickly.
* Capable of handling multiple projects simultaneously with good Communication and mentoring skills.

**TECHNICAL SKILLS:**

**Storage Platforms:**

SYMMETRIX VMAX-10/20/40K, VNX 5500/5700, DMX 2/3/4, Clariion CX4-120/240/480, CX3-20/40/80, CX 500, CX 700, Xtrem-IO, PURE FlashArray M70, NetApp FAS 6240/6280/3070/3040/3250/3170, HP 3PAR F200/400, T-800, S-400, V-400/800

**SAN Switches:**

Cisco MDS 9513/9509/9506 directors and 9124, 9140, 9148K switches

Brocade 48K, DCX directors 4100/4900/5100 and 5300 switches

McData

**Applications and Management Tools:**

SYMCLI 6.x/7.x, SMC 6.X/7.x, Unisphere Manager for VMAX/VNX, Navisphere Manager, Navi CLI, Brocade CLI, Brocade Web Tools, DCFM, Cisco Fabric Manager, Cisco CLI, Cisco Device Manager, ECC, Celerra Manager/CLI, Time Finder-Mirror/ Clone/ Snap, SRDF/S, SRDF/A, Mirror View/A/S, Snap View Clone/Snapshot, Power Path Migration Enabler, Open Migrator, San Copy, HP 3PAR Peer Motion, 3PAR CLI, Data ONTAP 7 Mode, Data ONTAP 8 Cluster mode, On command system manager, Snap Mirror, Operations Manager, Netapp System Manager, Netapp Performance adviser, Filer view, Inform CLI 2.2.6 and NetApp DTA Tool, DPA 6.2.3, EMC NetWorker 8.2

**Storage Operations:**

* Technical Support
* SAN & Storage Administration
* Lun Management, Monitoring and Replications.
* Storage Provisioning
* Storage Reclamation
* Local Replication using TimeFinder
* Remote Replication using SRDF
* Administration & Implementation
* Troubleshooting
* Switch Level Operations
* Configuration & Implementation
* Incident Resolutions
* Root cause analysis
* Problem & Capacity Management

**Migration Tools:**

rSync, Robocopy, OR(Open Replicator), OM(Open Migrator), DTA, VMotion and SanCopy.

**Operating Systems:**

Windows 2003/2008/2012

Red Hat Linux 5.x, 6.x

Sun Solaris 9 and 10

VMware VSphere 4.0/5.0/5.5/6.0

**Education and Certifications:**

Bachelors in Computer Sciences and Engineering

EMC proven Professional

Microsoft Certified System Administrator (2000/2003)

Microsoft certified Professional

Completed Accelerated NCDA Boot Camp Data ONTAP 8.0 7-Mode

**Corporate Training:**

EMC SAN Clariion Navisphere

EMC SAN Symmetrix ECC Control Center training

EMC SAN Design Foundations

EMC SRDF (S and A)

Five days training in EMC SAN Zoning

Completed Accelerated NCDA Boot Camp Data ONTAP 8.0 7-Mode (ANCDABC87)

Completed VMware VSphere on NetApp (VVNA) training from Fastlane

Data Ontap Cluster-Mode Fundamentals web course from NetApp

PURE Flasharray Basic Administration Course (Pure Academy)

DPA 6.2 new features and enhancements training (Penn Plaza)

**WORK EXPERIENCE:**

**1199 SEIU (National Benefit Funds) NYC, NY. August 2015 – Current**

**Designation: Storage Engineer ||**

**Responsibilities:**

* Planning, implementation and administration of EMC VMAXe, VNX 5600, Xtrem-IO and PURE FlashArray m70.
* Involved in Commissioning, Configuring and Zoning newly acquired PURE FlashArray M70.
* Commissioned EMC Xtrem-IO POC and was involved in performance testing.
* Provisioned storage from SAN platforms to Multi-Vendor Host Environment, which included Windows and linux
* Day to day jobs included troubleshooting any single path failures, acknowledging alerts, performance issues and Capacity monitoring.
* Rack installed and configured new MDS 9148 Switch. Also, Implemented ISL between 9148 and 9506(Director Core switch)
* Worked with UCS-Fiber Interconnects
* Implemented FAST VP and created storage tiers for efficient utilization of resources and to achieve optimized performance.
* Involved in the upgrade of EMC DPA(Data protection Advisor) from 6.0 to 6.2 and NetWorker from 8.1 to 8.2
* Creation of customized reports using DPA
* Scheduling backups from DataDomain and Avamar devices using EMC NetWorker.
* Planning and Implementing Migrations to move data from VMAXe to PURE FlashArray

**Environment:**PURE FlashArray m70, Xtrem-IO POC, EMC-VMAXe, VNX 5600, Migration, Windows 2003/2008/2012, Red Hat Linux, VMware VSphere 6.0, Cisco MDS 9506/9148 CLI/ Fabric

Manager, DataDomain, Avamar, DPA 6.2, NetWorker 8.2, Dell UCS.

**AT&T Hosting and Application Services – Dallas, TX July 2012 –July 2015**

**Designation: Data Migration Engineer**

**Responsibilities:**

* Responsible for end to end migration work for moving data from Legacy 3par to EMC and NetApp.
* Participate in the client calls to explain them about the plan and get approval for migration.
* Work with Capacity teams, Data center tech’s, DBA’s, System Administrators and EMC Resources simultaneously for the successful migrations.
* Switch migration from brocade to Cisco.
* Pre-Migration work includes getting approval from the clients and running Grabs and nSANity on the target hosts.
* Allocated switch ports and verification after the cables have been swapped.
* Zoning between the hosts and the target Storage Array.
* Installation of various Migration tools for Host based Migrations.
* Post-Migration work includes Cut-Over, Swapping Cables, Deleting Zones and Storage reclamation.
* Performed NAS-NAS Migrations from old NetApp to New.
* Decommissioned Four HP-3PAR arrays, Six EMC 20k’s and two DMX arrays around various Data centers.
* Writing Technical MOP.
* Played a key role in installing brand new EMC VMAX 40K.
* Production support activities on VMAX, NETAPP, and 3PAR.
* Successfully Migrated 1800+ Hosts belonging to various clients across different data centers around the world in the span of three years.
* Allocated storage from EMC VMax and NetApp.
* Responsible for creating Tickets with Data center for cabling and making sure it is completed before migrations are started.
* Worked on VMware VSphere 4.x/5.x installation and virtual machines setup using Virtual Infrastructure client.
* Participated in multiple Farm Migrations (VM migration using VMotion).
* Allocated storage using Auto-provisioning of VMAX-10K/20K/40k, by creating storage groups, port groups, initiator groups and masking views using Symcli 7.X and SMC 7.X.
* Also worked with disaster recovery operations team to perform the DR exercise to check the data consistency at the remote site using failover, update and failback operations.
* Setup alerts for monitoring of thin pools usage on both CLARiiON and VMAX and expanded the pools accordingly.
* Created CIFS servers, CIFS shares, managed CIFS Files permissions and Share permissions.
* Responsible for performing day to day operational tasks like storage provisioning and maintaining high availability as per EMC best practices.
* Administration of ECC, monitoring alerts, set data collection policies and alert thresholds, responsible for testing and verifying device configuration recommendation to enhance EMC array performance.
* Involved in the installation and configuration of ECC 6.1 and took care of installing the agents for the hosts in the production.
* Installed PowerPath on different servers for load balancing and failover.
* Performed Zone administration on the fabric to do migration according to requirements.
* Involved in migrating the SAN environment from old switches to the latest Director Class switches.
* Configured Cisco switches by creating VSAN’s, Port Channel, TE ports and zoning.

**Environment:** HP 3PAR, EMC-VMAX 20/40k, VNX, NetApp, Migration, Windows 2003/2008, Red Hat Linux 5.x, 6.x, VMware VSphere 4.0/5.0, Sun Solaris 9 and 10, Cisco MDS 9513/9509 CLI/ Fabric Manager, Brocade 48k, DCX Directors, CLI 2.3.1/3.1.1 SRDF A, TimeFinder Mirror/Clone/Snap, EMC PowerPath, MirrorView EMC Grabs, HEAT, OM, OR, SanCopy, VSphere 4.x/5.x, CIFS, ECC 6.1

**Client: N P C, Louisville, KY. Mar 2010 – Jun 2012**

**Designation: Storage Engineer**

**Responsibilities:**

* Explored SAN and NAS vendors NetApp, EMC during the evaluation phase.
* Managed existing EMC CX700 and NetApp FAS3000/3100/3200 Filers and involved with purchase of newer EMC CX4-480C Array with EMC Recover Point for Disaster recovery for migrating existing SQL and Oracle server onto Fiber channel Storage Area Network (SAN).In addition implemented VMware Site Recovery manager with SNAPMIRROR for ESX servers existing on new NetApp FAS3140 Filers using iSCSI.
* Installed and Uninstalled NetApp Data Fabric Manager on different systems.
* Refreshed data using Snap Mirror and Snap Shot whenever needed.
* Installed iSCSI software and Snap Drive 3.0 software
* Configured Network Appliance Snap Vault software for regular backup data stored on NetApp or any other storage platform to Network Appliance enterprise storage and Near Store systems, providing a centralized disk-based backup solution for heterogeneous storage environments.
* Created LUNs and Volumes across a large pool of disks and one or more RAID groups using FlexVol.
* Performed automatic, incremental data replication between systems: synchronous or asynchronous using Snap Mirror.
* Deployed Time Finder Business Continuity Solutions by allocating BCV devices, Clones and Snapshots as per the business needs on DMX and Clariion.
* Created Aggregates, Volumes (Traditional, FlexVol and Flex Clone), Qtrees and Quotas in NetApp FAS 3040 and FAS 3020 using Filerview.
* Troubleshoot NFS, SAN and CIFS issues on NetApp filers and fine tune the filers for optimal performance.
* Monitor, replace, and reconfigure disk drives, FC HBAs (Host Bus Adapters), Compact Flash Card, tape drive/libraries.
* Experience in implementing NetApp NAS technology, including configuring shares, CIFS and NFS Administration.
* Created Aggregates, volumes (FlexVol), qtrees and Quotas on NetApp Filers. Involved in creating CIFS shares, NFS exports.
* Configuring data storage in NetApp FAS 3170 series filers that run Data ONTAP 7G using CLI and Filer View.
* Provisioned storage to customers using both ISCSI and Fiberchannel provisioning.
* Experience with Cisco fabric manager and CLI to do Zoning for Cisco MDS 9513 switches and Brocade zoning for M4400 Fabric switches.
* Created and Configured Virtual servers. Migrated servers using Platespin power convert and VMware converter.

**Environment:**EMC CX700/CX-4/DMX, NetApp FAS3000/3100/3200, EMC RP, VMWare Site Recovery manager, iSCSI, Snap drive 3.0, Snap Vault, FlexVol, TimeFinder, Brocade, Cisco MDS 9513, ONTAP 7G, NFS, NAS, CIFS, RedHat Linux 4.x, Windows 2003, SYMCLI 7.x/6.x, SMC 7.1, ECC 6.1, Unisphere, Navisphere Manager 6.x.

**Client: Demand Media, Bellevue, WA Dec2008 – Feb2010**

**Designation: NetApp Administrator**

**Responsibilities:**

* Housekeeping of snapshots, reviewing volume snapshot counts and ages and investigate the removal of excessive or old snapshots.
* Aged out or unused snap vault relationships, Investigating and cleanup on the Vfiler 6000 series.
* Configuring data storage in NetApp FAS 3000 series filers that run Data ONTAP 7 series using CLI and Filer View. Configurations including Vfiler, Flex Volumes, qtrees, aggregates and snapshots.
* Responsible for replication related issues of NetApp based storage using Snap mirror.
* Backed up data for Disaster Recovery purposes using Snap vault Qtree replication.
* Created Flex clone Volumes and Flex clone LUNS and splitted them from Original volumes and LUNS in an aggregate to have their own space.
* Involved in configuration of NetApp FAS systems including Qtree, volume, aggregates and Snapshots.
* Perform daily storage administration activities such as storage provisioning, capacity planning, coordinate plan and break/fix maintenance, perform code upgrades, and adhere to documented storage best practices.
* Handling Configuration and Administration of Volumes, User Quotas, Qtrees, Snapshots, Snap mirrors.
* Installation, Configuration and integration of NetApp filers with the Windows and UNIX environment, experience with CIFS, NFS, LUN management, Managing Quotas and permissions, managing disks.
* Used Data fabric manager (DFM), Filer view and ONTAP command line, Snap drive in monitoring, managing, reporting and provisioning storage to the users.
* Performed Data ONTAP 7.0 Data protection online backup and recovery using Snap mirror, Snap Vault and disaster recovery using Snap Restore.
* Worked on Snap Manager of SQL server for backup and instant restore.
* Experience with V filer configuration and Managed 150 V filer units using MultiStore to the research cluster, assisted in migration using Snap mover software.
* Upgraded the filers from ONTAP 7.0 to ONTAP 7.2 as a process of flex vols migration.
* Worked with the system administrators and network administrators to troubleshoot NAS related issues
* Migrated NAS file systems from standalone NAS server to NetApp filers.
* Configured snapshots schedule on the NetApp volumes in the environment.
* Created hourly, nightly, weekly and monthly snapshots to maintain online backup to recover from accidental deletions, corruptions or modifications of the data.
* Used RAID-DP protection to prevent data loss in the event of second drive failure without excessive redundancy costs.
* Data growth analysis and storage resource forecasting also comes under my responsibilities.

**Environment:**FAS 3000 Series, DATA ONTAP 7 Filer View and CLI, VFiler 6000 Series, Data Fabric manager (DFM), NAS, RAID-DP, Linux, Windows 2003, Quotas, Qtrees, Snapshots, Snap mirrors. Flex Clone Volume/LUN.

**Client: Wesley Medical center, Wichita, KS Jul 2007– Nov2008**

**Designation: Storage/System Administrator**

**Responsibilities:**

* Experience on managing and allocating storage from NetApp FAS3020, FAS250, FAS270 and EMC Clariion CX3-20, CX700, CX600 and worked on different SAN tier levels.
* Allocated storage space in the process of migration for SYMMETRIX DMX 2000/3000.
* Configuring Snapview, Snapshots and Snapview Clones on CLARIION CX Series Sub-Systems.
* Configured MirrorView, SAN Copy for SQL and Exchange with CLARIION Storage systems.
* Configuration and Administration of ECC.
* Assigned storage from DMX/Symmetrix & CLARIION arrays to UNIX & Windows systems.
* Installed NaviSphere Agent and NaviCLI on all the hosts in CLARIION environment.
* Create RAID Groups, Bind LUNs; create Storage Groups, Register Hosts for assigning Host to Storage Group and Add LUNs.
* Experience on Assign storage from CX600/CX700 using Navisphere Manager.
* Experience using symconfigure command and LUN masking using symcli.
* Installed and managed problems on SnapView, MirrorView and SANCopy setups.
* Used SRDF and timefinders for DR purpose.
* Involved in troubleshooting CIFS and NFS performance issues.
* Worked with McData, Brocade and Cisco Fiber Channel switches to manage customer infrastructures.
* Managed hosts with Qlogic HBAs as well as Clariion and Symmetrix frames.
* Implemented dual-path and dual-fabric switches for highest availability solutions.
* Experience in installation and configuration of Veritas Volume Manager.
* Used Veritas NetBackup 6.0 for regular netbackup purposes.
* Responsible for daily maintenance of backup server and troubleshooting, building backup policies, backup schedule monitoring.

**Environment**:DMX-3/DMX-2, CLARiiON CX 700, CX 3-80, FAS3020/250/270, Brocade 48k/4900/4100, ECC, Symcli, SRDF/S, SRDF/A, TimeFinder BCV/Clone, SanCopy, Navisphere, Brocade CLI and Web tools, Veritas NetBackup 6.0, Veritas Volume Manager, AIX, Solaris, HP-UX, Linux and Windows.