
Surname

Name

E

Date of Birth

Position

Senior storage and UNIX consultant

Profile

I am a **senior storage and UNIX consultant** with over 12 years datacenter experience in high-end storage sub-systems (EMC², HDS, IBM and NetApp) and enterprise class UNIX (SUN, IBM and HP).

As a senior storage and UNIX consultant, I have been responsible for assessments, designs, deployments, implementations, migrations, capacity planning, reporting, and auditing of the storage tiers and system landscapes, that fit the business and compliancy needs. This has included setting up a detailed Disaster Recovery Center (Active-Standby) and Twin-Datacenter (Active-Active) to ensure both Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO) could be met. In terms of sizing the ERP platforms were scaled to host 3000-4000 concurrent users based on 2/3-tier client-server architecture with a 15TB SAP-Oracle instance.

I am a results-driven, self-motivated, and highly adaptive IT professional who consistently delivers technical solutions based on customer requirements.

I am always ready to put analytical and interpersonal skills to resolve unanticipated complex problems.

I have proven leadership skills including people and project management. Next to this development I am available as Solutions Architect who want to be ahead of the 24x7 enterprise datacenter solutions.

From 2000 until 2009 I have worked on two full-time (80-100hrs/week) permanent assignments for two different customers.

Currently I am still with NUON Energy N.V. providing third level support on a 2PB storage landscape and 800+ systems landscape, after completing the 1PB storage migrations due to company spin-off. NUON Energy N.V. belongs nowadays to Vattenfall, a Swedish power company.

Last but not least, I am a team player with a no-cure / no-pay mentality who is also capable to work independently.

Company activities

sdmc IT Services is a service provider active in the Information Technology with main activities **S**torage support, software **d**evelopment and testing, **m**anagement of systems and infrastructures and **C**onsultancy.

Evaluation

On your request **sdmc IT Services** is proud to introduce ES to your organization. You can contact us by sending an e-mail to Piet Sanstra: psanstra@sdmc.nl or phone 0654 683 224.

ROLES, RESPONSIBILITIES AND ACHIEVEMENTS

The lessons I have learned so far after many storage consolidation and migration projects are:

- The more data you managed centrally, the more economical it becomes.
- The more data you managed centrally, the more leverageable it is.
- A data consolidation DRIVES other consolidation: servers, backup, facilities.
- A well prepared data migration methodology gets more than 50% of the migration work done: assessment -> design + deployments-> plan + migrate -> validate -> operations

1. Designs and Deployment

Lead in storage migrations/data carve outs due to outsourced datacenter services and/or company spin-off activities. Majority of storage migrations were done storage-based (block-based) and a minor part were host-based (file-based) and/or by storage Vmotions.

Created and presented a business case justification (based on pros/cons/costs scenario's), budgeted, procured and implemented multiple SAN's, Virtualization technologies as well as server, site and service consolidation. This produced energy savings, reduction of carbon footprint, reduced heating and maintenance costs, and so in turn led to a reduction of Total Cost of Ownership (TCO). Other business benefits realized include: improved fault tolerance, system availability, Disaster Recovery (DR) and a reduction in complexity thus greater ease of management.

2. Storage and Backup Management

Technical lead on a project to implement data lifecycle management, by utilizing tiered storage systems, exchanging cost for performance based on business needs. Implementation of an enterprise backup solution, offloading network traffic by storage consolidation and direct backup-streams offload from the SAN to the VTL's (Virtual Tape Library) and PTL's (Physical Tape Library). LUN snapshots, and offloading of backup overhead from the client to reduce impact on a 24/7 environment, as well as ensuring data consistency. Basically faster backup, faster restore times, reduced operations costs.

3. Audit and SOX-404 Compliance Program

Technical lead on the yearly audits done by internal and external auditors from PriceWaterhouseCoopers (PWC) and Deloitte & Touche (D&T) resulted in zero findings while business needs were still met e.g. to manage centrally all SAN changes, violations and vulnerabilities on the multi-vendor storage landscape SANscreen from NetApp was deployed to handle these demands. On the server landscape HP-SAS (Server Automation System) was implemented to manage the 800+ nodes landscape from a single entry-point/stepping stone.

4. Disaster Recovery Services

Designed and implemented several Disaster Recovery solutions by using storage-based data replication over dark-fibre and/or existing WAN connections and host-based replication across existing SANs in the WAN, basically FC/IP. This has included setting up a detailed Disaster Recovery Center to ensure both Recovery Point Objectives (RPO) and Recovery Time Objectives (RTO) could be met.

5. Technology Roadmap, Agility Alliance

Technical lead/role model for the global storage and UNIX teams regarding new directions and needs by consolidations, centralizations, and virtualization of storage and host services, based on Gartner Magic Quadrant for enterprise governance, risk and compliance (EGRC) platforms.

6. ERP Design and Capacity Planning

Created and presented a business case justification, budgeted, procured and implemented host and storage-solution for the new 2-tier ERP-architecture including a new Data warehouse.

Lead in server consolidation of multiple enterprise UNIX systems to single scalable frame with a higher granularity in terms of partitioning, and on-the-fly reshuffle of resources with kernel locked memory (non-disruptive and on-demand resource management).

7. Data Migration Services

2009-2010: Lead in 1000TB storage migrations from NUON Energy N.V.

2009-2010: Lead in 200TB storage migrations from Vodafone B.V.

2008-2009: Lead in 150TB storage migrations from ArvinMeritor Inc.

EDUCATION

Sept 1992 - Aug 1995 Catholic University Nijmegen
Informatics – Doctoral

Sept 1990 - Aug 1992 Catholic University Nijmegen
Informatics – Propedeuse

Oct 1984 - Aug 1989 VWO-B

Oct 1980 - Aug 1984 MULO-B

OPERATING SYSTEM AND STORAGE CERTIFICATES

SUN Solaris (8/9/10)

SUN Networking

SUN Field Engineer

IBM AIX (4/5/6)

HP HP-UX (v1/v2/v3)

NetApp Operations Manager, Protection Manager, and Provisioning Manager Administration

Hitachi Storage Command Suite (Foundation and Advanced)

IBM Storage Management Fundamentals

EMC² Proven Professional

WORK EXPERIENCE

Period March 2009 - ...
Organization NUON Energy, a Vattenfall Company (www.nuon.com)
Position Senior storage and UNIX consultant

Lead in all storage migrations from NUON Energy due to company spin-off. Approximately 1PB were migrated from the old Datacenter to the new NUON Twin-Datacenter on high-end EMC² storage platform. All SAN to SAN migrations were done using LSAI ISL to bridge the 4x Datacenters (2x old and 2x new) with each other.

Currently as a team of 3x storage consultants at NUON Energy we are managing 2PB and providing 3rd storage support on current storage landscape of: EMC² DMX4-24, DMX4-6, DMX3-24, DMX-3000, DMX-2000, CX3-80, CX4-240, Celerra NSX (NAS), Centera RAIN-nodes (CAS), Brocade 48000 Directors, NetApp FAS3170-Metrocluster, FAS3140-CIFS, FAS3140-nearstore, HP-EVA 4400, DELL EqualLogic-6000/6500.

Period January 2010 – October 2010
Organization Vodafone (www.vodafone.com)
Position Storage manager

As storage manager I was responsible for the data migration from an end-of-life Symmetrix-8730 and multiple EMC² CLARiiON CX500 to a new Hitachi UPS V. Completed successfully all the required data migrations from Vodafone old Datacenter (MER4) to the their new Datacenter (MTX1). This 9 months contract was done in parallel to my primary assignment at NUON Energy.

Period March 2009 – July 2009
Organization Vodafone (www.vodafone.com)
Position Solutions architect

As a Solutions architect I had the casus to perform an assessment based on EMC² storage landscape in their old datacenter and created a design based on Hitachi storage platform in their new Datacenter. Describe in-depth the data migration path to perform and how bridge non-disruptive the 250KM distance between the 2 locations using the TCP/IP-stack to shift the FC-traffic. This 3 months contract was done in parallel to my primary assignment at NUON Energy.

Period Jan 2008 – Feb 2009
Organization EDS, an HP Company (www.eds.com)
Position Solutions architect and Manager enterprise systems

Solutions architect and team lead of the UNIX and storage team (3x FTE) for the overall design, builds, and manage routed SANs and Systems.

Project management and administration of all Enterprise UNIX and storage systems within the European Data Centers located in Hoofddorp and Roermond as well the Disaster Recovery Center at IBM in Almere.

Period Jan 2000 – Jan 2008
Organization ArvinMeritor Inc. (www.arvinmeritor.com)
Position Solutions architect and Manager enterprise systems

Solutions architect and manager of the UNIX and storage teams (3x FTE) for the overall Datacenter back-end design, deployments, administration of routed SANs and Systems.

Project management from design, prototype to implementation of hardware and central enterprise backup infrastructure (SAN backups).

Designed and implemented storage-consolidation from multiple EMC² symmetrix (DAS) to single symmetrix (SAN). As well Tier-1/2/3/4 SAN storage for Non-UNIX platforms e.g. Windows and VMware.

Responsible for designing and building new ERP-environment for the consolidation-process on scalable enterprise systems with a high ROI.

Coaching of first and second level UNIX and storage system administrators and contractors. Project management and assignments of tasks and projects to all members of the team.
Day to day management of 35+ UNIX servers and 50+ TB storage.

Responsible for capacity planning, performance management, and contingency planning for disaster and recovery.

Period Oct 2000 – Jan 2009
Organization UPC Broadband Services BV (www.lgi.com)
Position Senior systems engineer

Senior System Engineer and responsible for design, baseline, deployment, and UNIX and storage support during extended business hours (4pm-12am Mon-Fri) of all 24x7 core ISP Services (DHCP, DNS/CNS, Mail, News, Web, and VOIP) in 5x different Data Centers of UPC.

Management and administration of systems and storage server farm with approx 250+ nodes and 50TB customers data running on SUN & HDS storage platforms. Basically this was my second full time job (40hrs) parallel to my primary 40hrs job at ArvinMeritor.

Period Jan 1996 – Jan 2000
Organization Rijkswaterstaat, Ministry of Transport (www.rijkswaterstaat.nl)
Position Senior UNIX and storage specialist

I was responsible for the overall administration of all enterprise UNIX and storage systems within the RWS Data Centers in Rotterdam and Heerlen. System and storage administration of 50x UNIX servers and 10TB storage. Responsible for capacity planning, performance management, and contingency planning for disaster and recovery.

Period Jan 1994 – Jan 1996
Organization Computer Sciences Corporation BV (www.csc.com)
Position UNIX specialist

UNIX System administrator for CSC-customers.

Major projects/achievements were:

- (1) Migration of applications from IBM Mainframe to UNIX-Oracle client-server architecture.
- (2) Rollout of CA UniCenter for end-to-end management software on 50+ UNIX-nodes.
- (3) Deployment of MTM

Period Jan 1992 – Jan 1994
Organization Philips Semiconductors BV (www.philips.com)
Position UNIX system administrator

UNIX system administrator/operator for a variety of UNIX systems, supporting several applications. Automated application load-build via job scheduling with shell scripts. Day to day system administration of 20+ UNIX servers. Tape-handling routines for offsite storage and disaster recovery purposes.

TECHNICAL SKILL SET

Operating Systems

1. SOLARIS

In-depth knowledge and experience of SOLARIS version 2.6 up to version 10. Base-lined, security hardening, and administration of Solaris servers for RDBMS and Internet Services (MAIL, NEWS, WEB, DNS, DHCP, and VOIP) purposes. Both SUN features, Domaining and Zoning, were used on different platforms for consolidation and virtualization purposes.

2. FUJITSU SOLARIS

In-depth knowledge and experience of FUJITSU SOLARIS version 2.4 up to version 10 including the Fujitsu RC2000 firmware. Base-lined, security hardening, and administration of Solaris servers for ERP – and Data warehouse purposes. Both Fujitsu XPAR (Zoning) and PPAR (Domaining) features were used for Dynamic Reconfiguration on-the-fly of resources (building blocks).

3. AIX

In-depth knowledge and experience of AIX version 4.5 up to version 6.1. Base-lined, security hardening, and administration of AIX servers for EDI-purposes.

4. HPUX

In-depth knowledge and experience of HPUX versions 11.23 & 11.31. Base-lined, security hardening, and administration of HP/UX servers for RDBMS and paycheck purposes.

5. LINUX

In-depth knowledge and experience of Debian, Redhat, and Slackware distribution. Base-lined, security hardening, and administration of Linux servers for EDI purposes and Internet services.

6. OS/400

Operator knowledge and experience of OS/400 version 5 for daily system administration purposes, subsystems/services handling, and backup and tape-management.

System Hardware

In-depth knowledge and experience from Entry-level up to Enterprise-level:

- SUN (SOLARIS)
Entry-level servers V210 up to Enterprise-level server SF25000
- FUJITSU (SOLARIS)
Enterprise-level servers PW900 & PW1500
- IBM (AIX)
Entry-level servers up to Midrange-level servers (p5 560Q)
- HP (HP/UX)
Entry-level HP9000 servers up to Midrange-level servers (BL860, RX8640)

Storage Management Software

In-depth knowledge and experience of Enterprise Storage Management Suite

- EMC²
PowerPath, TimeFinder/Mirror/Clone/Snap, ESN Manager, ECC Ionix, Connectrix Manager, SRDF/A, SRDF/AR, Storage Scope, SAN Manager Workload Analyzer, SNAP, OpenReplicator, NaviSphere
- NetApp
OnTapp and SANscreen
- IBM
SAN Volume Controller (SVC)
- HDS
Hitachi Device Manager, Hitachi Tuning Manager, Hitachi Storage Command, Hitachi Dynamic Provisioning
- SUN
SDS and SUN-VERITAS Foundation Suite VxVM, VxFS, ZFS

Storage Area Network

In-depth knowledge and experience of below SAN software and hardware

- EMC² ControlCenter SAN Manager
- Brocade Data Center Fabric Manager
- Brocade 48000 Director
- Cisco MDS9000 Family SAN-OS
- McData Routers

Storage Hardware

In-depth knowledge and experience of Enterprise Storage Solutions:

- EMC² Symmetrix Family (DMX1000/2000/3000, DMX4, V-MAX)
- EMC² Celerra (NAS: NSX)
- EMC² Centera (CAS: RAIN-nodes)
- EMC² CLARiiON Family (CX3/CX4 family)
- HDS V9980, V9985, V9990
- IBM DS5000 and DS8000
- SUN A1000, D1000, A5200, STK6130, STK6140, STK6780

Backup Software

In-depth knowledge and experience of Enterprise Backup Solutions:

- VERITAS Netbackup (NBU)
- Legato Networker (NSR)
- Tivoli Storage Manager (TSM)
- EMC² Data Manager (EDM)

Backup Hardware

In-depth knowledge and experience of Enterprise Backup HW Solutions:

- EMC² Data Library (EDL)
- StorageTek L700e Tape Library
- IBM TS3500 Tape Library
- Quantum ATL 7100 Tape Library

Cluster Software

In-depth knowledge and experience of Enterprise High-Availability Solutions:

- VERITAS Cluster (VCS)
- SUN Cluster (HA)
- HP Service-guard Cluster (MCSG)

RDBMS

Technical knowledge and experience of RDBMS-implementations:

- Oracle
- Progress
- Ingress

ISP Core Services

In-depth knowledge and experience of Internet Service Provider Services:

- DNS/CNS
- DHCP
- MAIL
- NEWS
- WEB

Monitoring Tools

Technical knowledge and experience of Monitoring Tools:

- Nagios
- MRTG
- NetCool
- NetHealth
- HP-Openview (OV NNM)

Programming

Knowledge and experience of 3GL/4GL programming languages:

- SHELL scripting (in-depth knowledge and experience of UNIX scripting)
- Perl
- C/C++
- CLEAN
- Modula
- ELAN

Security

Knowledge and experience of Enterprise Security Solutions:

- Checkpoint Firewall-1 & NG
- Operating Systems Security Hardening based on CERT-practices
- UNIX Security Tools

FORMAL TECHNICAL TRAINING (BESIDES AN ACADEMIC BACKGROUND)

- NetApp Operations Manager (DFM)
- EMC² V-Max Fast-track training / Thin provisioning
- ESI Project Management Training
- Solaris 10 for Experienced Administrators (fast track v10)
- LearnIT Project Management Training
- Multiprotocol Routing for SANs
- Fujitsu Prime Power Training PW900+PW1500
- ITIL Essentials
- Remedy Helpdesk-tool training (ARS)
- HP Service Manager Helpdesk-tool training (HPSM)
- SUN Solaris Performance Tuning
- Cisco DNS and DHCP Training
- VERITAS NetBackup Training
- VERITAS Cluster v3.5
- Oracle Internals for UNIX-administrators
- OpenWave InterMail Training
- IBM AIX System Administration for Experienced Administrators
- IBM OS/400 System Administration
- Solaris System Administration II (v2.8)
- Solaris System Administration I (v2.8)
- Hitachi Storage Command Suite Software
- SUN System Performance Training
- HPUX System Administration for Experienced Administrators
- SUN Storage Management Training
- VERITAS Foundation Suite Training – VxVM and VxFS –
- EMC² 8x weeks Passport Training – EMC² High-End Storage Management –
- EMC² Data Manager Training (EDM)
- SUN Field-Engineer Training
- SUN Solstice DiskSuite
- SUN HA Cluster
- Solaris System Administration II (v2.6)
- Solaris System Administration I (v2.6)
- SUN E10K Advanced Administration
- SUN E10K Administration
- Solaris Network Administration II
- Solaris Network Administration I
- Checkpoint Firewall-1/NG Management I
- TCP/IP Fundamentals
- ATM Implementation
- Windows NT Installation and Administration
- Windows NT Advanced Installation and Administration
- HP-UX OpenView (NNM)
- HP-UX Operations Center
- CA-Unicenter for UNIX Implementation
- CA-Unicenter/TNG: Enterprise management
- Introduction to Oracle
- Introduction to Ingress
- Oracle SQL+ Training
- Solaris System Administration II (v2.5.1)
- Solaris System Administration I (v2.5.1)
- UNIX Fundamentals (Solaris, HP/UX, OSF)
- AT computing UNIX fundamentals