

Thomas C. Nieman

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IT Solution Architect

Domain Expertise includes:

- Data Center & Cloud (SaaS, PaaS, IaaS) - Automation
- Data Center Virtualization, Consolidation and extensive Migration experience
- Project, Program & Portfolio Management
 - Functional, Technical, Management & Industry group experience.
 - Communicate, Influence, Lead, Motivate, Negotiate, Manage & Solve
- SAN/Storage, Enterprise, Mid-Range plus Back-up & Recovery Solutions
 - Cisco, Brocade, McData, HP, IBM, HDS, EMC +
- Vendor management (Third party performing organizations)
 - Assessment, planning, design, recruitment and management of contract resources.
 - Customer needs assessments, Strategy & Architecture Assessments, etc.
- AIX, HP-UX, Linux (RedHat, Suse +), Solaris, VMware, Windows OS Support
- Perl, Python, Bash, C, C++, Visual Basic
 - Software tools and database development.
 - Project scoping, RFP, procurement, staffing.
- Web scraping and interactive website development (eg. day trading systems)
- ETL (Extract, Transform & Load) ingestion expertise.
- Business Continuity & Disaster Recovery Solutions
- Virtualization and Unified Computing Solutions
- Cloud Management and Systems Management Solutions
- Governance modeling, ITIL, ITSM, ITAM, LEAN & Service Management
- Strategy & Architecture workshop
- Network & Security (Infrastructure & End-point) Solutions
 - CCTV, access control, security, networking, storage, AV and Media
- Security & Compliance (SOX, HIPAA, DISA, DIACAP)
- Content & Knowledge Management Solutions
- Big Data Analytics, Database Design & Artificial Intelligence
- Infrastructure Assessments & Remediation

PROFESSIONAL EXPERIENCE

IBM Global : (2015-2017) Cloud Managed Services - Solutions Architect, DevOps & Project Management This engagement spanned 1 1/2 years in support of IBM's global CMS data centers in 14 countries.

- Transforming organization to a DevOps culture.
- Implemented 2 factor authentication solution and rollout to 14 data centers worldwide.
- As subject matter expert I trained additional support staff on ITSM, ITIL, LEAN, IP and FC networks, storage and SAN technologies.

Security Electronics, Milwaukee, WI : (2014-2015) Project Manager / Solution Architect,

Supporting pre-sales, sales and Implementation projects for customers primarily in Oklahoma and Wisconsin. The business is involved in CCTV, access control, security, networking, storage and Media centers for a wide range of government and public entities. Developed and managed “quote to cash” online systems for all Security Electronics products.

- Awarded contract to upgrade all Oak Creek WI public schools for access control and networking (including classroom renovation).
- Contracts for Milwaukee based auto dealer with multiple locations to provide CCTV, access control, Media and AV solutions for customer demo centers.

Hitachi Data Systems (HDS), North America : (2014-2015) SAN & Storage SME. In support of a server, network and storage Data Migration for Xerox and their customer (State of Texas). Data migration from IBM SVC/DS8300 and EMC VNX to HDS VSP. Also implementation of new HDS technology (VSP G1000 and GAD). Created advanced expert systems (graphviz, perl and excel) to dramatically reduce the prep time for hundreds of servers in migration. Automated existing program lifecycle systems to report usage, capacity and performance metrics.

Johnson Controls Inc., Milwaukee, WI : (2014) Fortune 100 company (68th) with 160,000 employees worldwide, engaged as Project Manager, Technical Consultant and Solution Architect in support of the recent merger/acquisition of a “SMART Grid” company known as “Energy Connect” or “Integrated Demand Response” (iDR) for the Johnson Controls business unit “Building Efficiencies” (BE).

- Project scope was to integrate the acquisition of Energy Connect into the JCI portfolio for the Building Automation Systems (BAS) division known as “Building Efficiencies” (BE).
- Corporate Global Infrastructure (GIS) demanded a secure integration into their SaaS IaaS platform which in many ways defeated the ability to collect data from Energy Connect customer’s remote sensors and deployed servers.
- Gained a great deal of new experience on Software Defined Data Center (SDDC), Azure, VBlock, Cisco, EMC and many other technologies for integration and support. Ingestion mechanisms from remote sensors, into BIG Data SaaS backend. MS Service Center.
- Developed custom tools for baselining, dashboarding, performance & capacity planning and reporting. Perl, Python, PowerShell, Excel, et al. Converged networks, Supervisory Control A Data Acquisition (SCADA) systems, VCops, Service Center Operations Manager, customer implementations.
- Leveraged my considerable project, program and portfolio background as a Governance and Architectural expert to conduct several governance and IT Strategy & Architecture (ITSA) workshops to help the business develop a strategy and begin defining IT governance models for this and other acquisitions.

MillerCoors, Milwaukee, WI : (2012-2013) Engaged for 18 months as a Storage & SAN Architect and Solution Architect in support of a project known as the "SAN refresh program", which upgraded, migrated and standardized the Servers, Switches and Storage infrastructure (virtualization) for eight breweries and a single corporate location across North America. Responsible for three of the five process groups (planning, execution and monitoring & controlling).

- Much of the planning consisted of workload baselining and performance testing which were key elements to the success criteria of this engagement. Updated existing hardware to Brocade switches, HP P6350 storage and VMware 5.5 for its improved virtualization, Fault tolerance (FT) and High Availability (HA).
- Also responsible for Performance and Capacity Management (PCM), Networks (IP & FC), Security, and the supporting software and script development (C, Perl & Excel VB), as it all relates to virtualization and Cloud infrastructure.
- Received additional training and became very proficient in the transition and transformation (TT) of services to operations for Cloud Computing and Automating the Virtualized Data Center.
- Expertise in the three main cloud service models: Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS).
- Additional critical success factors and skills required for this engagement were: Information Technology Infrastructure Library (ITIL), Information Technology Service Management (ITSM), Information Technology Strategy & Architecture (ITSA, LEAN Methodologies) expertise.

Hitachi Data Systems (HDS), North America : (2011-2012) Sr. Consultant, Principle Technical Consultant (PTC). This engagement lasted 13 months and was providing expert program support for HDS customer projects implementing their new product (VSP enterprise storage array) and providing architecture and migration services from any other storage vendor to the HDS arrays.

- One project was for Mapfree (2nd largest public company in Spain) and Telefonica (Phone company of Mexico and central and south america) in a joint venture to consolidate, migrate all services (many hundreds of TB's) from seven countries in the americas to the Miami based Cloud (IaaS) and then replicate that data on to Brazil for business continuity and backup. As part of the project I configured an HDS VSP storage platform in each location to migrate via FCIP over Cisco Nexus and MDS infrastructure, using Universal Replicator, Shadow Image and HDS TSM to perform on the infrastructure side. I also created custom tools to pull data on demand and verify (web portal, perl & mySQL), and report (Excel VB), ending up automagically in MS PowerPoint dashboard slides.
- Another customer success story I was responsible for was GMO a hedge-fund in Boston with High Performance Computing (HPC) requirements that pushed the existing infrastructure way beyond its best Storage Performance Council (SPC-2) ranking. I was the primary consultant performing the root cause analysis (RCA) and PCM study. It is from several deep-dives on the storage requirements and VMware infrastructure I discovered a bug in the Hitachi configuration tool RAIDCOM. The virtual switches (VSD) on the backplane were way over-subscribed and the VSD's were improperly configured with RAIDCOM in a fashion that caused the over-subscription. Also after diving on the VMware side, I was able to conclude that different configuration inputs (CI) are required for VMware whether Virtual Desktop Interface (VDI) is on the same cluster as other VM's or not.
- Additional critical success factors and skills required for this position were: Extensive IP and FC networking background, Security background, Programming, scripting and Agile development background, advanced communication skills, advanced customer relationship skills.

IBM, North America : (2008-2011) Storage and SAN SME / Solutions Architect. This engagement was for 2 1/2 years in support of a large IBM customer in the HealthCare industry who was required to have regular DOD audits.

- My extensive background with DISA, DIACAP and other DOD security audit disciplines and methodologies allowed me to easily create tools to seamlessly translate infrastructure reports into custom automated spreadsheets to help satisfy the audit process.
- I became the U.S. Subject Matter Expert (SME) for IBM SVC. I had become a regular escalation resource across all industry groups.
- As subject matter expert I trained additional support staff on ITSM, ITIL, LEAN, IP and FC networks, storage and SAN technologies.

U.S. Bank, Milwaukee, WI : (2008) Server Architect and Performance and Capacity Management (PCM) role. This engagement lasted 3 months Creating "platform schematics" for new infrastructure projects.

- Worked with G-10 (group of 10) on configuration items (CI) for various infrastructure solutions.
- Performance and Capacity Management resource for all product lines in catalog.

Hewlett Packard, North America : (1999-2008) Project Manager, Solution Architect, Sr. Consultant and Account Support Engineer. Eight + years of progressive experience. Consulting with customers to provide expertise in the areas of assessment, strategic planning, design, implementation, performance and steady state operations of IT software and infrastructure projects. If the term DevOps engineer existed at the time, I would have been designated as one.

HP Major Accomplishments:

- PM & SA responsible for a \$181M cell tower battery monitoring system. Project included the development of components, software and coordinating various field performing organizations. Project resulted in component patents for which I received name recognition.
- Delivered repeatable Strategy & Architecture workshops for numerous customers throughout North America. Services primary deliverables are to provide basic consulting focusing on the development of IT principles, Models and standards.
- Developed the program and delivered many Rapid On-site Assessment Delivery (ROAD) strategic engagements to fault isolate or develop best practice recommendations for various customers throughout North America.
- Both a business and IT delivery agent responsible for development and delivery of a wide range of professional services from IT server and storage (including desktop and helpdesk), to executive and business services.
- PM & SA for a \$10M server upgrade program including Break/Fix support for legacy IT equipment. A major component of the Ford Motor Companies "The Way Forward" initiative, I delivered strategy and architecture visioning workshops to all participating stakeholder business units and Sr. management.
- PM & SA for a \$52M annual support contract for SBC that included proprietary HP equipment and third party support.
- Created the concepts that became "SAN environmental Support", "G-Team" and "Heterogeneous Data Migration" services.

- Senior delivery manager representing HP North America for delivery initiatives including “Growth”, “Delivery Excellence” and “Total Customer Experience”.
- Environment: SAN, NAS, VMware, HP-UX, Solaris, Linux, W2K, AIX, Veritas NetBackup, BackupExec, HP Data Protector, HP Data Protector Integrations, HP Openview Storage Area Manager, HP Openview Performance Advisor, HP Openview Storage Mirroring, HP Openview Command View, Hitachi, ESL Library, STK Library.

HP Professional Achievements:

- One of first 10 engineers in the world to achieve McData "Master" status. Among HP's over 2000 resources who held SAN certifications, only 2 from HP held the "Master" status, myself and an engineer in Germany.
- Became the first engineer at HP certified on CISCO FC/SAN. As the only "field" resource within HP to serve as a member on the North American Storage Planning Council I was extremely influential and responsible for Growth, Training, and Delivery excellence.
- Created, modeled and managed the HP SAN "RAMP/SWAT" team built around my firm belief that small 4 to 5 person cross-trained teams function more efficiently than larger groups. As part of this model, I created or expanded functionality in the Field Integration Test (FIT) labs in Bridgewater NJ and Carrollton TX. These labs became an integral part of testing and qualifying customer configurations and migration strategies.
- Created the concept of "SAN Environmental Support" and many of the related services to support the development of that larger umbrella of multi-vendor SAN support. In conjunction with the FIT labs the field was then able to have a method to certify, qualify or "field test" customer configurations.
- While at HP I became the first Solution Architect in the newly created "Corporate Account" space, which consisted of the top 52 HP customers by spend in the world. Reaching beyond just storage and SAN, this position supported customers with services needs and contracts across the portfolio. Helpdesk, Desktops, IMAC, Multi-vendor break/fix, IP Telephony, Asset management and other ITSM components. I was "wide and deep" in all commercial off-the shelf (COTS) offerings, but especially skilled at custom solutions not in the portfolio, for example: Battery monitoring of 46,000 cell towers in NA for AT&T.

EDUCATION

University of Wisconsin - Milwaukee

Milwaukee Area Technical College - Milwaukee

Infrastructure Technology Certifications:

- Cisco Partner
- Brocade Certified Fabric Professional
- Brocade Certified System Designer
- McData Certified Master Designer
- McData Certified Storage Network Designer
- McData Certified Network Implementer

- McData Certified Professional
- HP Certified HP-UX System Administrator.
- HP Strategy & Architecture (Business & IT)
- Foundation Certification IT Infrastructure Library (ITIL)
- Foundation Certification IT Service Management (ITSM)

Infrastructure Technology Sample:

Level 3 – Hitachi (HDS) – VSP, G1000, GAD, AMS, USPV, Tuning Manager & all associated software. Replication, GAD, HUR, True-Copy. IBM - SVC, XIV, V7000, DS8x00, TSM & Replication Software. HP - XP24000, P9500, P6350, Performance Advisor, Storage Essentials, HP Service Manager, etc. Brocade, McData & Cisco IP & Fiber Channel Switches, Converged networks, Web Scraping, Hacking, Cracking.

Level 2 – IP Networks, HP Data Protector, TSM, HP Data Protector Integrations, HP OmniBack, Legatto. HP Openview Storage Mirroring, NAS, ESL Library, STK Library, ATI, ADIC Library, LTO, SDLT, Ultrium, Netapps, etc.