### curriculum vitae

Name & Surname Sascha Milic Nationality German

Address Hauensteinstrasse 114

4059 Basel Switzerland

Phone +41-61-5216421 Mobile +49-151-55386121

Linkedin <u>Sascha Milic</u>

E-mail <u>sascha.milic@milic-it.ch</u> Education Certified Computer

> Scientist – Akademie für Datenverarbeitung –

Germany

Certifications VCP 2-7, VCP-Cloud &

Network & Desktop, VCI



### **Short trainer description**

With over 25 years of combined experience, Sascha is the man for the job. In delivering world class training sessions, Sascha puts an emphasis on participant involvement through practical examples derived from real life scenarios. Sascha is able to create an atmosphere of discussion and collaboration (with the occasional lighter moment) in the classroom to encourage a thought process and ensure a full understanding of the underlying technical concepts.

2014 Trainer Award:

**EMEA VCI of the Quarter Award** 



### **Trainer Experience**

### VMware Lead Technical Trainer & Course Content Contributor - Europe

03/2014-present

Responsibilities: Train the Trainer, mentoring for VMware trainers, VMware Course content contributor Courses delivered: cloud training, vRealize Automation, Orchestrator, vCloud Director, PowerShell

#### **VMware Technical Trainer - vSphere Orchestrator - Europe**

09/2013-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of VMware solutions. Courses Delivered: vCenter Orchestrator which later became vRealize Orchestrator.

### VMware Technical Trainer - vRealize Suite - Europe

08/2013-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of VMware solutions. Courses Delivered: vCloud Automation Center which later became vRealize Automation.

### Freelance Technical Trainer & Course Developer - Worldwide

08/2013-present

Responsibilities:

- Course Developer for VMware (vRealize Automation / Orchestrator & Extensibility)
- Course Developer and Technical Trainer for 2X Software (now known as Parallels)
- Custom Linux Suse server training
- Custom Windows training

Courses Delivered: Linux Suse Essentials, Windows 2008 Server Essentials, 2Xpert training and certification

### **VMware Technical Trainer - vCloud Suite - Europe**

04/2011-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of VMware solutions. Courses Delivered: vCloud Director, vCloud Network Security.

### **Technical Trainer - 2X Software - Worldwide**

01/2010-present

Responsibilities: Advanced course in design, troubleshooting, optimize and scale of 2X solutions. Courses Delivered: 2Xpert.

### **VMware Technical Trainer - vSphere Automation - Europe**

01/2010-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of VMware solutions. Courses Delivered: PowerCLI.

### **VMware Technical Trainer - Horizon View - Europe**

08/2008-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of VMware solutions. Courses Delivered: Horizon View and Mirage.

### **VMware Technical Trainer - vSphere - Europe**

07/2007-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of VMware solutions. Courses Delivered: vSphere.

### Microsoft Certified System Engineer (MCSE) certification program Microsoft Certified Trainer

04/2006-06/2007

MOC 2145D, MOC 2163D, MOC 2224D, MOC 2178D, MOC 2183D, MOC 2238D, MOC 2190D, MOC 2195D, MOC 2112D

Certification program for potential Microsoft Certified System Engineers consisting of the seven modules: Exam 70-290: Managing and Maintaining a Microsoft Windows Server 2003 Environment Exam 70-291: Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure Exam 70-293: Planning and Maintaining a Microsoft Windows Server 2003 Network Infrastructure Exam 70-294: Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure The client component consisted of Windows XP Professional (70-270). The Design component consisted of 1 exam with a choice

between 2 exams: Exam 70-297: Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure Exam 70-298: Designing Security for a Microsoft Windows Server 2003 Network Both of these exams can be taken and using 1 of them to satisfy your elective requirement.

**Skills: Microsoft MCSE** 

### Microsoft Trainer - Infrastructure Services and Security - Europe Microsoft Certified Trainer

11/2001-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of Microsoft Network Services. Courses Delivered: Active Directory, Windows File Server, Exchange Server.

Skills: Microsoft Exchange Server, Microsoft Active Directory Design, Microsoft Infrastructure Server

### **Skills Redevelopment Programme**

01/1995-07/2001

This programme spread over 1 year was funded by the German Government at the time with the aim of developing new IT skillsets for unemployed people. Training topics included COBOL programming, emerging Internet technologies, PC hardware assembly, PC technician, basic Linux, Microsoft and Novell use. Each topic was thought through a minimum of 80 hours of classroom training and was assessed by a written exam.

### **Novell Networks - Europe**

11/1990-present

Responsibilities: Basic & advanced courses in design, troubleshooting, optimize and scale of Novell Netware solutions. Courses Delivered: Installation, configuration and administration of Novell Netware.



### IT Experience

### vRA Automated testing helper modules (development) Software Developer, Cloud Consultant

09/2019-04/2020

Software Developer, Cloud Consultant

Supporting the Testing & Operation Team with Automated Blueprint / Deployment testing.
Usually the vRA requests are done via the portal / UI in this case it was done via a REST call through the vRO

Usually the vRA requests are done via the portal / UI in this case it was done via a REST call through the vRO REST API calling the REST vRA API.

With config files stored in git reflecting the different use cases and different blueprint releases the testing team could improve the efficiency tremendously.

The Defects Management Team is able to find and dispatch issues much faster and prepare the results optimized for the responsible support/development team.

Skills: vRO 7.x, vRA 7.x

could be gathered.

### vRA Troubleshooting helper modules (development) Software Developer, Cloud Consultant

02/2019-07/2019

Supporting the Testing & Operation Team with Automated Error Analysis and Deployment Trace Log. vRA Portal, laaS and vRealize Orchestrator are formerly independent systems coupled by VMware. Following the provisioning while it's going forth and back between the different systems is very challenging. With config files reflecting the involved workflows for different releases important runtime states/information

The Defects Management Team is able to dispatch the responsible support/development team much faster. **Skills: vRO 7.x, vRA 7.x** 

### vRA laaS alternative solution with native vRO

08/2017-02/2019

Worldwide Server Deployment in different locations/countries and different network zones for a Private Bank. VMware native laaS module couldn't be used due to various limitations.

All needed features were developed with vRealize Orchestrator and JavaScript. Most backend integration systems were integrated with REST and SOAP API calls.

The deployment process duration could be shortened from many weeks to 2 hours. Furthermore the company provisioning compliance could be enforced in much more accurate way.

# VDC for VMware Training delivery - Reorganisation Cloud Consultant, Project Leader

10/2014-01/2015

Identification and resolution of performance issues in VCloud Director which was used for the automation of

training course deployment. Additionally training of new personnel in maintaining the solution.

The existing solution suffered performance issues at a networking and storage level.

Apart from training the new personnel in VCloud Director, a by-product of the training was a new scenario for classroom training. This was subsequently integrated in VMware training for troubleshooting scenarios. The new personnel started to perform effectively, even contributing to the new training scenario while troubleshooting the original issue. The project was effective in mentoring the personnel to provide superior level of Support for customers.

Skills: vCD 5.5, Automation

# Faulty Deployment of vSphere and Active Directory Active Directory Consultant, vSphere Consultant

08/2013-01/2014

The customer was not satisfied with the performance of vSphere used in a hosted desktops project at their organisation. Also the connection between Active Directory Domains on different sites was not functioning as expected.

The vSphere Deployment was not completed according to best practices. Various issues like hardware errors, misconfiguration, undersized hardware and poor choice of software solutions. The design of the Active Directory domain was inconsistent. The domains functioned indipendently however they formed part of the same Active Directory Forest. This limited the functionality of the Active Directory in functions such as the exchange of user and user group information within different domains.

Many of the issues with vSphere were due to performance tuning and misconfiguration by the hardware vendors of the equipment in the customer's data center. Sascha identified the issues through benchmarking, analysis and monitoring tools. As for the Active Directory issues, Sascha tackled the problem by breaking it down into smaller problems. In specialised areas, Microsoft Support for Active Directory was consulted.

Confidence was restored in the hosted desktops project. The users could visibly see the benefit from improved desktop performance after the project was completed. The defective hardware in the data center was not only replaced but upgraded to higher specifications at an attractive price. This is a text book example of how a crisis was turned into an opportunity.

Skills: vSphere vCenter 5.x, VMware Virtualization

# Virtualisation of Novell Netware 3.12 using VMware vSphere vSphere Consultant

07/2013-02/2015

To create a redundant Novell virtual server hosting an accounting application by creating a brand new Novell server in the virtual environment.

To recreate the complete physical environment in a virtual environment and verifying that all DOS-based software is running efficiently on a modern virtual environment.

Skills: Novell NetWare 1.x-5.x, VMware Virtualization

### VMware vCloud Director & vRealize Automation - Design & Implementation Cloud Consultant

03/2013-04/2015

Customer wanted to quickly deploy Windows and Linux servers for Staging application tests from a service catalog.

The applications that needed to be tested involved several components which required customization at setup phase resulting in a lengthy test process. Several teams with a mix of skills were involved in the project including teams of Database administrators and certificate administrators. Cross-team communication had to be carefully coordinated to ensure that product development stages could proceed smoothly especially when dependencies were required.

The customer requested a Proof-of-Concept using vCloud Director since at the time, the customer believed this was the best approach. However Sascha demonstrated through detailed testing, that this was not the ideal solution in the long term. The customer accepted the advice and requested an alternative approach using vRealise Automation. vRealise Automation and vRealise Orchestration formed the ideal solution in this scenario. The solution involved the deployment of several Virtual Machines, customization including certificates and database tuning. The new test environment consisted of Virtual Machines which were customized and baselined with vRealise for quick deployment. The Cataloged items offered instant setup of a fully working test environment for use by the Quality Assurance team.

The customer saved up to 95% of preparation time for the testing environment. The Testing team became more through improved control on the lifecycle of the testing environment resulting in further savings in server hardware, storage and networking equipment.

Skills: vRO 6.x, vCAC/vRA 6.x

### VMware Horizon View Training Environment Design & Implementation Active Directory Consultant, vSphere Consultant, Desktop Consultant, Project Leader

07/2012-06/2013

Training organisation requested the implementation of a Physical to Virtual Migration for delivery of automated course content

Remote control software for teachers was not intended to work in virtual environments Internal IT staff lacked the inhouse expertise to build a solution for virtual environments

The client wanted to remove the physical desktops in the classrooms and to automate course lab environment. The solution was developed over two iterations. Apart from migrating physical servers to virtual servers, the first iteration also involved a migration of VMware vSphere 5.0 to 5.1. The preparations were complete and hence we could proceed with VMware View 5.0 Design & Implementation. PCoIP based Client Integration was achieved and the desktops could then be removed from the classrooms. Second iteration involved a migration from Microsoft Active Directory 2008 to 2012 with a re-Design of Microsoft AD & VMware View Pools. VMware View 5.0 was updated to Horizon View 5.2. Customisation of different baselines for course labs was achieved through the implementation of Liquidware Labs Profile Management.

The client immediately saved costs in deploying and maintaining over 120 physical machines in the classrooms. The organisation was more agile through the ability in rapdily creating and deploying automated course content. The changes in the Active Directory environment resulted in reduced administration costs, optimisation of resources and improved security.

Skills: Horizon View 5.x, Automation

# Automation of deployment for VMware classroom training environment Software Developer

03/2010-09/2010

Customer requested a solution to automate the deployment of VMware classroom training environment Manual preparation of the classroom training environment was a time consuming process which needed to be done every Friday evening. At any point, tens of training programs were scheduled for the following week where each training program required the necessary preparation so it is ready to be used by the students. Training programs varied in content and each training program required a customized setup involving as many as a hundred Virtual Machine instances.

The customer was presented with a library of VMware PowerCLI functions that are assembled in a task list to create a separate workflow for each course deployment. Sascha designed a flexible workflow engine that accepted a text file as input and in turn the engine produced a new course deployment using automated delivery. The solution also enabled quick deployment of new courses involving minor modifications to the input text file, rather than creating a separate workflow engine for each course.

The workflow engine made possible the automation of a manual task which traditionally is prone to human error, time consuming, resource intensive and inefficient. The customer estimated time savings of up to 70% in deploying classroom training environments.

**Skills: Automation, VMware Virtualization** 

### Design and delivery of 2Xpert training program 2X Certified Trainer

01/2010-01/2014

2X Software, a vendor of remote desktop delivery software based on Windows Terminal Services, required a training programme to certify global distributors in deploying the 2X solution.

The training had to be created from scratch The 2X products worked with various Microsoft components which required fine tuning before the actual 2X solution was installed. Training sessions were organised worldwide and not every training center had the hardware and software resources to deliver the training content. Bandwidth in some training centers was not adequate to demonstrate the 2X solution. Hence an on-premise solution was preferred.

Initially a training lab document was planned which detailed step-by-step instructions to deploy the 2X solution. However it was deemed too close to a user manual, which delivered no benefit. It was decided to create a lab environment which is portable and could be run on laptops with medium-to-high specifications. The lab document contained detailed instructions to deploy the solution and side notes to explain why each process was needed. Finally the candidate had to sit a certification exam. The lab environment was first built on Microsoft Active Directory 2008 but was later upgraded to Microsoft Active Directory 2012. The 2X Software also functioned as a connection broker so the lab also included virtualised instances of VSphere 5.0 and Hyper-V 2008. Updates included installing updated versions of VSphere, Hyper-V and the content in the training lab document to reflect the new features of the 2X product. The whole lab environment was highly automated and rapidly deployed.

Sascha trained over 150 candidates in Central Europe with this program. However the training was delivered by a network of global trainers over all continents bringing the total number of certified 2Xperts to over 600 by late 2014

Skills: Server Based Computing, Desktop Virtualization

### **VMware vDCOS Project**

03/2009-present

# Active Directory Consultant, vSphere Consultant, Desktop Consultant, Cloud Consultant, Project Leader

Design, Implementation and Maintenance of a Private Cloud Environment servicing own company requirements and requirements of selected customers.

In 2009 the technology to define Data Centers via software was still evolving. The requirement was to host colocated server infrastructure in the data center which hosted a production environment hosting Active Directory, DHCP, DNS, Firewalls, Spam filters, Mail servers and Web servers. The threat management, web and mail services had to service a select group of customers in a redundant data center setup. An additional requirement was to create an environment that could be used for Proof-of-Concept and demonstration of a live working environment during training courses.

The programme spanned a number of years. Through its evolution, several hardware upgrades were carried out to ensure scalability and to support the use of the whole VMware stack. This included products like vSphere, Horizon View, vRealise Suite and vCloud Suite. A Proof-of-Concept was created to demonstrate practical scenarios using vCenter Orchestrator which doubles up as a Staging environment for customer projects. Milicit.ch domain is fully hosted in this environment including Active Directory domain, Virtual Desktops, Mail Server, Web Server and Threat Management Software. Acronis and Veeam are the backup products used while for replication vSphere complement the Disaster Recovery solution.

The environment has been optimized and is a compelling platform that is used to demonstrate a fully working solution using the whole VMware stack of products. Sascha can access the private cloud infrastructure from any remote location to demonstrate concepts while delivering technical training. A select group of satisfied customers have been using the mail and web servers for a number of years. In addition to the benefits of using a private cloud, customers can also avail themselves to technical expertise. This adds value to the hosting service rendered on top of the comparable offerings from public cloud providers.

Skills: vSphere vCenter 6.x, Horizon View 6.x, Microsoft Active Directory Design, Horizon View 5.x, Microsoft Infrastructure Server, vSphere vCenter 5.x, vCO 5.x, vCAC/vRA 6.x

# Design and Implementation of VMware VI3 for P2V migration Virtualization Consultant

06/2007-09/2007

Implementation of VI3 to initiate physical to virtual migration of all server infrastructure.

Skills: VI3

### Microsoft Active Directory Migration & Consolidation Active Directory Consultant, Project Leader, Microsoft Certified Trainer

03/2005-10/2007

To consolidate 6 different Active Directory sites into 1 Active Directory forest.

The organisation consisted of 6 sites in different countries. Each site was managed by the local Systems Administrator. The Distributed architecture meant it was difficult to maintain users and permissions, lacked a centralized audit trail and hardware resources could not be shared. Applications could not be deployed on a company wide basis hindering knowledge sharing. Users resorted to optical media and traditional post methods to share sensitive data. Some of the Systems Administrators were resisting this project due to fear of losing control of the allocated site. Company politics also meant the project suffered more setbacks until a favorable solution for all stakeholders could be worked out.

Initially a Proof-of-Concept was created to demonstrate the design. The data containing original users was taken from the production environment and the migration was then simulated. The Administrators based in the European offices were brought into the Head Office and were given training to perform their assigned task during the migration. Sascha was the designated Project Leader who coordinated and executed the migration in a sequential manner. At all stages of the migration, from Proof-of-Concept to final iteration, the technical documentation for each site was also updated. Even after the migration was completed successfully, the administrators continued to receive mentoring sessions by Sascha in order to maintain the integrity of the newly formed Microsoft Active Directory site.

The Head Office of the organisation gained immediate control of all sites since administration was now centralized. Newly created monitoring checks were effective in maintaining the integrity of the new Active Directory Forest and for auditing user permissions. The organisation was now more agile in deploying

applications to all sites thus fostering better user collaboration and information sharing. The mentoring sessions triggered new standard procedures in maintaining user accounts and permissions using one common standard for all the sites in the organisation.

Skills: Microsoft Active Directory Migration, Microsoft Exchange Server, Microsoft Active Directory Design

## Microsoft Active Directory Reorganisation & Exchange Design and Implementation

03/2005-06/2005

### **Active Directory Consultant, Project Leader**

To reorganize an existing Microsoft Active Directory 2003 Domain structure including permissions and profiling for 100 users of a government organisation. The project also involved the design and implementation of Microsoft Exchange 2003.

The IT staff lacked the skills to administer an Active Directory and Exchange setup.

The re-organisation process involved implementing Microsoft Best Practices. During the implementation, the IT staff were mentored and equipped to administer the new setup.

Skills: Microsoft Exchange Server, Microsoft Active Directory Design

#### **LeanSolutions - Senior Architect and Trainer**

01/2003-12/2004

Design, Implementation and Administration of:

- 1. Security Solutions including Anti-Spam, Content filtering, Stateful firewalls and Intrusion Detection
- 2. IPSEC-based VPN's
- 3. Server Support for customers
- 4. Linux Training for internal IT Department and customers
- 1. Several Virtualization projects internally and for customers
- 2. Achieved VCP 2 certification
- 3. Built several lightweight installations of Linux servers using various distributions including RedHat, SUSE and Debian.

#### **STEP Computer - Senior Architect and Trainer**

04/2002-12/2002

Design, Implementation and Administration of:

- 1. Technical training platform for Windows Infrastructure Services based on VMware workstation
- 2. Server Support for customers
- 3. Technical training on Microsoft Windows Server technologies for internal IT Department
- 1. The training platform was fully automated and drastically reduced deployment time
- 2. Increased customer based through Service Level Agreements
- 3. The internal IT Department gathered new IT skills that improved the level of service rendered to the organisation's users and also customers.

Infrastructure Services - Chief Technology Officer Virtualization Consultant, Security Consultant, Active Directory Consultant, Desktop Consultant, Project Leader 01/1990-present

- 1. Strategic technology direction for Small-Medium Business sector
- 2. Evaluation of emerging technologies in Server Based Computing and Security
- 3. Productisation of bespoke technologies
- 1. Numerous deployments of Novell Server
- 2. Several customers with ongoing Server Support using Microsoft technologies such as Active Directory, Exchange, DNS and Fileserver
- 3. Built custom firewalls, VPN solutions, proxy servers, content filters based on Linux and OpenBSD.
- 4. Spearheaded the first implementations and migrations to Virtualised server environments
- 5. As technology evolved, customers using the custom security solutions were eventually migrated to Astaro products.

### Co-founded CSL Computer Service Leonberg Software Developer

03/1984-09/1988

Developed custom software for customers such as Booking Systems for Sports facilities. In 1986, the company expanded its operations and CSL Computer Service GmbH was formed.

Skills: Basic, C & Assembler, Clipper

### **Business Software Developer**

09/1982-12/1994

Patient Management System for General Practitioners. The solution was built in BASIC and assembly language. It centralized patient records on a file server running on Novell servers allowing multi user access. In a subsequent version of the System, the integration of hospital systems made it possible for doctors to manage patient test results. The solution allowed an innovative method, at the time, for direct transfer of patient test results from testing machines used in laboratories and clinics. Billing, statistical analysis and reporting facilities were also add to the system. Warehouse Management System. The solution was built in clipper and designed to be flexible to cater for different business types such as mechanical engineering and pharmacies. Apart from stock control, the solution incorporated supplier management, invoicing, ordering and reporting modules.



#### **Education**

**VMware Certified Professional 6 - Network Virtualization** 

**VMware Certified Professional 6 - Data Center Virtualization** 

VMware Certified Professional 5.5 - Data Center Virtualization

**VMware Certified Professional 5 - Desktop** 

**VMware Certified Professional - Cloud** 

**VMware Certified Professional 5 - Data Center Virtualization** 

VMware Certified Advanced Professional 4 - Data Center Administration VCP, Advanced, Cloud and Desktop.

**VMware Certified Professional 4 - Data Center Virtualization** 

**VMware Certified Professional 3** 

#### **VMware Certified Professional 2**

### **Microsoft Certified System Engineer and Trainer**

#### Microsoft Certified Professional - TCP/IP

### **Computer Scientist Graduate**

In 1987, Sascha enrolled in the Computer Science course at the Akademie für Datenverarbeitung to further develop his Software Programming skills. COBOL was thought on IBM mainframe systems. In later years, Sascha thought COBOL to other students. In November 1988, Sascha co-founded InfoLink GmbH, a Software Development company. The main product was a SAP offering.

### Internship

Sascha's first experience with computer programming was in September 1981 while attending high school. Using an IBM/34 machine, the precursor to the Personal Computer, Sascha spent much time learning Assembly, BASIC and RPG II programming languages, even after school hours. Recognizing the potential of Sascha and fellow students, the class teacher helped set up the first company with summer worker placements in the business community.

