

# Florian Heigl

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**Year of birth:** 1978    **Computer experience since:** 1996    **Citizenship:** Deutsch

## Position:

- Consulting
- Coaching / Training
- Administration / Support

*Contract positions only.*

## Professional main focus:

- Troubleshooting and Maintenance of critical Unix/Linux system
- Monitoring (Check\_MK)
- Consulting
- Documentation
- Training

Permanent position is currently not considered. Only contracting.

## Education:

### 2012-2010:

- Python programming for Check\_MK 2011
- Linux from Scratch 2010
- Legato / EMC NetWorker Admin III (BR110) 2010
- Legato / EMC NetWorker Admin II (BR105) 2010
- HP-UX - Managing Software with Ignite-UX (H1978S) 2010
- Oracle VM Implementation Specialist 2010
- Veritas Cluster Server 2010

### 2009-2002:

- HP Datacenter Orchestration (Opsware) (OO120, OO350) 2009
- Veritas Volume Manager 2008
- Systems Engineer IBM BladeCenter 2008
- RHCE Fasttrack RedHat Enterprise Linux 4 (RH301) 2006
- HP SuperDome 2005
- HP-UX 11i Delta 2005
- Solaris 9 Administration for experienced Unix-Administrators 2003
- AIX LVM & Troubleshooting II (AT11, AT121) 2003

- Orsyp Dollar Universe Advanced Administration 2002
- Orsyp Dollar Universe Administration 2002

### 1999-2001

- Apprenticeship "Fachinformatiker / Systems Integration"
- Unix Basics 1999
- Novell NetWare 5 Advanced Administration 1999

**Languages:** English, German

### **Hardware:**

- Alpha AlphaServer
- Ascii/X - Terminals Wyse, Digital
- Digital AlphaServer, PC Servers
- Emulators Citrix XenServer, KVM, Oracle VM,
- Virtualbox, VMWare ESX, Xen
- HP PA-RISC, IA64, SuperDome
- IBM RS6000 Power2 - Power5
- Industrial Robot KUKA
- Silicon-Graphics MIPS-based (Octane, Origin) and Rackable
- PC cluster nodes
- SNI RM-Computer
- SUN UltraSparc

### **Operating systems:**

- HPUX 10.20 - 11.31
- IRIX 6.5.x
- SUN OS, Solaris 2.6 – 11
- Unix
- Windows 2000, 2003, 2008
- FreeBSD 3 – 9
- AIX 4.2 - 6.x
- Linux
- RHEL, SLES, Debian, Alpine, Carrier Grade Linux, Ubuntu, CentOS, Oracle, Enterprise Linux

### **Programming languages:**

- Python
- Shell

#### Database:

- MySQL
- Oracle
- Postgres

#### Data communication:

- Ethernet
- FDDI
- SNMP

#### Products/Standards/Experiences:

##### X86 hardware

- anything PC based, workstations & servers
- PC Storage: SAS, SCSI, Fibrechannel (FC), iSCSI, Raid, SSA
- Server: ALR, Compaq, FSC, HP, IBM, SuperMicro
- Blades: HP, IBM, Motorola Telco-grade systems

##### UNIX hardware

- Digital,HP,IBM,NetAPP,SGI,Sun (from small 'Octanes' to HP SuperDome, PA-RISC/IA64)

##### Embedded

- VME PPC systems (Linux and FreeBSD)
- CompactPCI i386/PPC/Sparc (FreeBSD)

##### SAN/Networking/Appliances:

- 3Com, Cisco, Extreme, Huawei/H3C, Nortel/HP Load Balancer
- Brocade Switches, Cisco SAN Router & MDS Switches, Crossroads/IBM FC-SCSI

##### Gateways

- Infiniband (Cisco, Mellanox)
- EMC^2 Clariion/CX
- HP EVA
- Firewalls: pf/ipf, iptables, PIX, Checkpoint NGX (auf Nokia IPSO)
- automated policy generation fwbuilder / Google Capirca
- NetApp Filers

##### Operating systems

- FreeBSD from 3.3
- IBM AIX version 4.x to 5.3
- HP-UX from 2001, from 10.20 to 11.23; parts of 11.31, i.e. multipathing
- Irix from 2000 to 2005

- Linux since 1996, usually RHEL (RHCE RHEL4).
- Tru64 5.1B 2004-2005
- Solaris 7/8/9/10/11 on x86/sparc/fujitsu (Primepower)
- Windows mostly W2K3/Active Directory, 2008 basics.

### Applications

- Monitoring Nagios & Check\_MK - expert as user, developer and consultant
- Backup / Restore (Legato NetWorker, Bacula, BackupExec)
- Confluence (Documentation, Basics for usage & administration)
- Cluster (MetroCluster/ServiceGuard, Veritas, Heartbeat, Pacemaker)
- Batch Scheduler (AutoSys, Dollar Universe)
- Ticketsysteme (als User) HP Service Manager, Remedy ARS
- Mail (MS Exchange 2000, Postfix)
- Monitoring (HP OpenView, Nagios, Check\_MK)
- Linux Storage Target iSCSI Org (LIO)
- Proxy (squid)
- Virtualization (Citrix XenServer Enterprise, VMWare, Solaris Zones, Xen, Oracle VM)
- Veritas Cluster Server (VCS) / Veritas Volume Manager (VxVM)
- Webserver (Apache)
- HP Server Automation (OpsWare)
- Installation - Ignite/UX, Cobbler, Kickstart
- Distributed Storage - Ceph, GlusterFS
- Cloud - OpenNebula
- Configmanagement - Basics Puppet, cfengine, isconf, ansible

### Standard services

- DNS(bind)
- NFS
- NTP
- SSH
- DHCP
- SNMP
- in-depth knowledge with NFS, NTP, SNMP

### Scripting

- ksh (88 & 93)
- Bash
- POSIX sh

- Python

### Branches

- Finance
- Industrial production
- Software development

### Projects:

Mathias Kettner GmbH • 01/2011 - 12/2012 • *Consultant Monitoring & systems integrator*

#### Systems integration:

- Customize and debug an existing CentOS based HA environment of > 60 servers and virtual machines.
- Automation, NTP, NFS and clustering modifications to reach long-term stability.
- Prototype a successor based on a newer RHEL release.
- In-depth log analysis of 50 interacting applications using Splunk

#### Check\_MK team member:

- Create monitoring support for various hardware and software systems ranging from RAID controllers to radar systems.
- Support customers with highly sophisticated Nagios setups, train operating teams.
- Setup and design of monitoring systems and optimization of existing systems.

#### Trainer:

- Nagios / Check\_MK - train monitoring concepts and skills to attendees with and without prior monitoring or systems administrations experience.
- Linux Storage - LVM, iSCSI, Raid - overview and real-world use of features and their limitations.
- Citrix XenServer 6 - Workshop on new features and administration.

TriaSoft GmbH • 11/2001 - 12/2010 • *Systems administrator/Consultant*

- Ops Team Unix/Backup/Storage for Munich based Global100 insurance company:
- 2nd/3rd Level support, operations and oncall for AIX, HP-UX, Linux, NetAPP
- Storage, Backup-/Restore, Job scheduling.
- 2010 Team Lead during Offshore & Linux migration.
- Experience in mediating cultural differences, offshore training and ensuring quality.
- Planning shifts (rota) & oncall for multiple teams
- Plan training, internal & external
- Plan UNIX tasks scheduled maintenance weekends with pre- and post-procedures
- Process optimization, create change requests, optimize DR test procedures

- create structure for knowledge base entries
- Improve monitoring, san troubleshooting, i.e. by automated identification of SAN arrays and matching up with DR policies, inventory of all processes including whitelisting.
- Report on incident statistics & identify quality measures
- Incident handling, handle escalations with multiple vendors
- OS part of large-scale Unix->Linux migration of over 200 Oracle and SAP servers.
- Plan & document secure wipe of ~20 servers & storage.
- Plan and coach for Linux skill increase in whole team.
- Design & implement Syslog server for Unix operations based on Syslog-NG, ipf firewalling NFS and SD UX
- Support / Troubleshoot during backup landscape migration
- Fully automate batch scheduler migration by creating an AUTOSYS to \$Universe converter.

#### TriaSoft IT:

- Design firewall cluster and rule structure (OpenBSD / CARP)
- Build and run monitoring system, based on Nagios since 2003, switch over to Nagios/Check\_MK in 2009
- Upgrade companies' mail server using MS Exchange Server 2000
- Design and build redundant SAN for virtualization environment (Citrix XenServer)
- Plan / troubleshooting / support during upgrades of Citrix XenServer

#### KUKA Roboter GmbH • 02/2001 - 10/2001

- Work in IT department as user support & tech
- Responsible for support external sales teams, created new backup & dial-in solutions to give them more autonomy
- Inventory software used in company and all international branches.
- Develop and introduce image-based client rollout
- Specify new, more stable client systems
- Administration of SGI CAD workstations

#### KUKA Roboter GmbH • 09/1998 - 02/2001 • *Apprenticeship: Fachinformatiker / Systems integrator*

- Full-time IT staff before official start (05/1998 - 09/1998)
- User support & rollout
- Planned and held workshops for other apprentices
- Created monitoring software in VB

#### Siemens AG:

- Two internships as network tech (08/1996) and in network sales (08/1997)
- Network wiring at Siemens and at customer sites
- Network documentation for current projects (i.e. Burj al arab)

OSS work:

- Community support for FreeBSD and HP-UX in IRC and on the HP ITRC
- Sole source of Bacula HP-UX binaries until ~ 2006
- Help port & QA for the HP-UX Port of NetBSD pkgsrc, until status "officially supported" was reached. This made thousands of OSS programs available for HP-UX including regular updates.
- XenDistro - released in 2005, first "embedded" OSS hypervisor
- GPLHost DTC, scripts for virtualization in successful OSS hosting panel.