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| --- | --- | --- | --- | --- | --- | --- |
|  | | | **Name:** | | | Manfred Schirmer |
|  | | | **Date of birth:** | | | September 15, 1955 |
|  | | | **Nationality:** | | | German |
|  | | | **Languages:** | | | German / native speaker  English / fluent |
|  | |  |  | | |  |
| **Contact** | |  |  | | | +49 151 58825850  E-mail: [manfred@it-schirmer.net](mailto:manfred@it-schirmer.net)  Web: [http://www.it-schirmer.net](http://www.it-schirmer.net/) |
|  | |  |  | | |  |
| **Conditions** | |  | **Disposability:** | | | Jan 2020 |
|  | |  | **Location:** | | | International |
|  | |  | **Hourly rate:** | | | 110,00 EUR |
|  | |  | **Daily rate:** | | | 880 EUR |
|  | |  |  | | |  |
| **Qualifications** | |  |  | | | Engineer / Electrical Engineering  HP-UX Performance und Tuning  Unix-Ware Master |
|  | |  | **IT-Experience since:** | | | 1980 |
|  | |  |  | | |  |
| **Information Technology Experience** | |  | **System Administration** | | | Red Hat Enterprise Linux 4.0 up to 7.1,  SuSE Linux Enterprise Server up to 11,  Debian, Ubuntu, CentOS, Scientific-Linux  AIX, HP-UX, VMWare ESX vSphere 4, 5, ESXi  Solaris 8 up to 11, SCO Unix,  NetBSD, FreeBSD, OpenBSD, NanoBSD  Novell Netware, OS/2, Citrix Server/Cluster,  Microsoft Windows Server 2003, 2008, ActiveDirectory, openLDAP, ZFS, VERITAS Netbackup  VERITAS Volume Manager, Cluster, File System |
|  | |  | **Programming Languages** | | | C/C++/C#, Java, Pascal, PHP  Perl, Python, Shell (sh, ksh, bash) |
|  | |  | **Tools** | | | Ansible, Puppet, Puppet Bolt, Chef,  HP OpenView, MC/ServiceGuard, McAfee ePolicy Orchestrator, OpenVZ, HP Quality Center, Puppet, Chef, RHN, RedHat Satellite, Kickstart, ADS, PXE-boot, ITIL process, Sendmail, Postfix, TrendMicro VirusWall |
|  | |  | **Databases** | | | MySQL up to 5.x, MariaDB, Oracle 9i up to 11g,  MS SQL Server 2005 |
|  | |  | **Network Administration** | | | LAN, WAN, TCP/IPv4, IPv6, NIS, NIS+, NFS, DNS, LDAP,  SNMP, DHCP, CARP, LoadBalancing, Sendmail, Postfix, IMAP, SSL, Kerberos |
|  | |  | **Hardware** | | | SUN SPARC Server, SUN Blade, SUN Fire, UltraSPARC-T2, T4  IBM RS6000, pSeries, iSeries  Brocade SAN Switch,  HP 9000 A-Series, N-Series,  HP SureStore Tape Library,  HP VA7410  19“ Server HP, Dell, Siemens, IBM  CISCO 650x, 5x00, 37xx, 35xx, 29xx, PIX520  Nokia 12xx, 22xx |
|  | |  | **Web Technology** | | | Apache httpd, Tomcat 5 up to 7, nginx,  JBoss 4 up to 7, Wildfly 8 up to 9,  IBM WebSpere, Apache Felix |
|  | |  | **Monitoring** | | | Nagios, Icinga, Icinga2, Splunk, Cacti, Jolokia, HP Openview, Tivoli, ELK |
|  | **Client** | | |  | **Schufa Holding AG,** Wiesbaden | |
|  |  | | |  | <https://www.schufa.de> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **Jan 2019 to Today** | | |  | ***System Engineer Middleware and Unix Systems*** | |
|  |  | | |  | Installation, automation and operating of Web- and Application Server | |
|  | **Software** | | |  | OpenShift, Docker, Ansible, RedHat Enterprise Linux 6 and 7, Solaris 10, Apache, Nginx, Tomcat, Wildfly | |
|  |  | | |  |  | |
|  | **Client** | | |  | **Consorsbank**, Nürnberg | |
|  |  | | |  | <https://de.wikipedia.org/wiki/Consorsbank> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **Oct 2017**  **To Oct 2018** | | |  | ***System Engineer Middleware, Monitoring*** | |
|  |  | | |  | Installation, automation and operating (Webstack, Application-Server)  Installation and customizing of monitoring-checks and DevOps pipelines | |
|  | **Software** | | |  | RedHat Enterprise Linux 6 and 7, JBoss Enterprise Application Platform, Tomcat, Apache Webserver, Ansible,  Icinga2, Subversion, Git | |
|  |  | | |  |  | |
|  | **Client** | | |  | **finanz informatik technologie service**, Stuttgart | |
|  |  | | |  | <https://www.f-i-ts.de/kunden/kunden-ueberblick/lbbw> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **March 2017**  **To Dec 2018** | | |  | ***System Engineer Applikationsbetrieb Unix Systeme*** | |
|  |  | | |  | Installation, automation and operating (Webstack, Application-Server)  Identity- and Access Management | |
|  | **Software** | | |  | RedHat Enterprise Linux 6 and 7, JBoss 6 up to Wildfly 9, Websphere WAS, Apache Webserver, Ansible, SAS, LDAP server and clients | |
|  |  | | |  |  | |
|  | **Client** | | |  | **Sparda Datenverarbeitung e.G.**, Nürnberg  <http://www.sdv-it.de/ueber-die-sdv> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **Feb 2016**  **To Feb 2017** | | |  | ***System Engineer Middleware, Linux, zOS***    Installation, automation and operating (Webstack, Application-Server) | |
|  | **Software and tools** | | |  | RedHat Enterprise Linux 6 and 7, Suse SLES11, SLES for System z, JBoss 6 up to Wildfly 9, Websphere WAS, Liberty, Portal, Apache Webserver, puppet, hiera, subversion, git | |
|  |  | | |  |  | |
|  | **Client** | | |  | **FILIADATA / dm-drogerie markt**, Karlsruhe  <https://www.dm.de/unternehmen/arbeiten-und-lernen/arbeiten-bei-uns/filiadata-c534052.html> | |
|  | **Industry sector** | | |  | Retail Industry IT | |
|  | **August 2015**  **To Jan 2016** | | |  | ***System Engineer Linux Production Systems***    Automatic installation and HA operating (Webstack, Application-Server) | |
|  | **Software and tools** | | |  | RedHat Enterprise Linux 6 and 7, JBoss 6 up to Wildfly 9, Tomcat 6 and 7, Apache webserver, nginx webserver, Varnish, Reverse-Proxies, puppet, ruby, Perl, foreman, keepalived, tanuki, Icinga2, jolokia, Jmx4Perl, percona, Galera-cluster | |
|  | Additional Information | | |  | <https://www.inovex.de/uploads/loesungsarchitektur.png> | |
|  |  | | |  | <https://www.inovex.de/uploads/deployment-und-lifecycle-management.png> | |
|  |  | | |  |  | |
|  | **Client** | | |  | **DZ Bank AG**, Frankfurt  <https://en.wikipedia.org/wiki/DZ_Bank> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **January 2015**  **To July 2015** | | |  | ***System Engineer***  ***As freelance in Application Support and System Engineer***  Installation and HA operating of Apache, JBoss, and Tomcat servers.  Last level support. | |
|  | **Software and tools** | | |  | RedHat Enterprise Linux 6 and 7, Solaris 10 and 11, ZFS, JBoss 4 up to 7, Tomcat 5 up to 7, Apache web server and reverse proxies, WatchIT, UC4, RedHat Satellite 5 and 6, Perl | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **IBM** Global Business Services <http://www.ibm.com/services/us/en/outsourcing/index.html> | |
|  | **Industry sector** | | |  | IT Services | |
|  | **April 2014**  **To December 2014** | | |  | ***System Engineer***  ***As freelance in Application Support and System Engineer***  Installation and HA operating of Apache, JBoss, and Websphere servers.  Last level support. | |
|  | **Software and tools** | | |  | RedHat Enterprise Linux 5 up to 6, Jboss 4 up to 7, Tomcat, Websphere, Apache, Kerberos, Configuration and deployment framework written in bash and Perl | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **Media-Saturn** IT-Services, Ingolstadt  <http://www.media-saturn.com/group/EN/Pages/Default.aspx> | |
|  | **Industry sector** | | |  | Retail Industry IT | |
|  | **September 2012**  **To March 2014** | | |  | ***Systems Design Engineer***  ***As freelance in System Design and System Engineer***  Installation and HA operating of Apache, JBoss, Tomcat and Coldfusion servers.  Oracle clusters on virtual and physical servers.  Data center transition and operating, design and implementation Nagios monitoring | |
|  | **Software and tools** | | |  | SuSE Linux Enterprise Server 10 up to 11, VMWare, Jboss, Tomcat, Websphere 8.5, Apache, Kerberos, AppDynamics, ColdFusion9, Nagios, Munin, Cacti, F5 Loadbalancer | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **Sybase 365**, Raunheim (now subsidiary of SAP)  <http://en.wikipedia.org/wiki/Sybase> | |
|  | **Industry sector** | | |  | IT, Telecommunications | |
|  | **June 2012**  **To September 2012** | | |  | ***Systems Design Engineer***  ***As freelance in System Design and System Engineer***  Installation and HA operating of Apache, JBoss, Tomcat, Oracle clusters, troubleshooting and debugging web applications | |
|  | **Software and tools** | | |  | Red Hat Enterprise Linux, VMWare, Kickstart, Jboss6 up to 7, Tomcat, Apache, Apache mod\_jk loadbalancer, bash, Oracle 10g up to 11g, Perl, Python, Kerberos | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **ORGA GmbH**, Karlsruhe (now subsidiary of FIDUCIA)  [http://www.orga.de](http://www.orga.de/) | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **September 2011**  **To June 2012** | | |  | ***Linux System Administration and operating Tomcat, JBoss***  ***As freelance in System Design and System Engineer***  Installation and HA operating of Apache, JBoss, Tomcat, Oracle clusters, troubleshooting and debugging web applications | |
|  | **Software and tools** | | |  | Red Hat Enterprise Linux, PXE-boot, VMWare, Jboss4 and 5, Tomcat, Apache, bash, Oracle | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **IT.NRW**, Düsseldorf <http://www.it.nrw.de/UeberUns/ITNRW_Ueberblick/Flyer_UeberUns_english.pdf> | |
|  | **Industry sector** | | |  | Government Service (IT) | |
|  | **July 2011**  **To February 2012** | | |  | ***Linux Systemadministration JBoss***  ***As freelance in System Design and System Engineer***  Installation and HA operating of Apache, JBoss, Tomcat, Oracle clusters, troubleshooting and debugging web applications | |
|  | **Software and tools** | | |  | Red Hat Enterprise Linux, AppDynamics, OpenLDAP, Puppet, Chef, Perl, PHP, Kerberos, VMWare, Jboss5, JBoss7, Tomcat, Apache, Bash, Python, Fabric | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **Deutsche Post AG**, Bonn <http://www.epost.de/geschaeftskunden.html> | |
|  | **Industry sector** | | |  | Communications | |
|  | **January 2011**  **To June 2011** | | |  | ***Linux Systemadministration***  ***As freelance in System Design and System Engineer***  Installation and operating of Linux servers. Design and implementation of load balancing and firewalls. Automatic configuration with Puppet. | |
|  | **Hardware** | | |  | HP, Cisco, NetApp | |
|  | **Software and tools** | | |  | Red Hat Enterprise Linux, Ubuntu Linux, OpenLDAP, Puppet, Perl, PHP, VMWare, OpenVZ, Jboss, Tomcat, Postfix, Bash  Windows Server, Exchange, Lotus Domino | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **ITSG** Informationstechnische Servicestelle der gesetzlichen Krankenversicherung, Heusenstamm [http://www.itsg.de](http://www.itsg.de/) | |
|  | **Industry sector** | | |  | Health Services (IT) | |
|  | **September 2010**  **To December 2010** | | |  | ***Linux Systemadministration***  ***As freelance in System Design and System Engineer***  Installation and HA operating of Apache, JBoss on Linux and Windows servers.  Deployment JAVA-Software and tools | |
|  | **Hardware** | | |  | HP, Fujitsu, NetApp | |
|  | **Software and tools** | | |  | Suse Linux, Ubuntu Linux, OpenLDAP, Perl, VMWare, Jboss, Tomcat  Windows Server 2003 and 2008, MS SQL Server 2005(9.0) and 2008(10.0) | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **HZD** Hessische Zentrale für Datenverarbeitung, Wiesbaden [http://www.hzd.de](http://www.hzd.de/) | |
|  | **Industry sector** | | |  | Government Service (IT) | |
|  | **May 2010**  **To August 2010** | | |  | ***Linux Systemadministration***  ***As freelance in System Design and System Engineer***  Installation and operating of Linux servers. Design and implementation of load balancing and firewalls. Operating Oracle Application servers,  Design and implementation Nagios monitoring. | |
|  | **Hardware** | | |  | Fujitsu | |
|  | **Software and tools** | | |  | Suse SLES9–11, OpenLDAP, Perl, Shell-Scripts, Oracle10, Nagios, Icinga, VMWare, JBoss, Tomcat, Windows Server 2003 und 2008 | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **Vodafone**, Eschborn <http://en.wikipedia.org/wiki/Arcor_(telecommunications)> | |
|  | **Industry sector** | | |  | Telecommunication | |
|  | **January 2010**  **To April 2010** | | |  | ***Unix Systemadministration***  ***As freelance in System Engineer***  Installation and HA operating of Unix clusters, ITIL, connection to SAN-Storage and Oracle Databases. | |
|  | **Hardware** | | |  | HP, IBM, EMC Clariion, Symmetrix | |
|  | **Software and tools** | | |  | HPUX 11, ServiceGuard, AIX, HACMP, Linux (RHEL 3 und 5), OpenLDAP, Perl, Oracle  Nagios | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **UBS AG**, Frankfurt <http://www.ubs.com/de/en.html> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **February 2008**  **To December 2009** | | |  | ***Unix System Administration***  ***As freelance in System Engineer***  Installation and operating of Linux and Unix servers in international team. Backup/Restore services. Data center transition to co-location, Change Management and Incident-Management according to ITIL. Rotating team responsibility in Follow-the-Sun-Schedule. | |
|  | **Hardware** | | |  | SUN, StorageWorks, Quantum, HP, Fujitsu Siemens, IBM, NetApp, Hitachi, EMC,  Brocade, Cisco | |
|  | **Software and tools** | | |  | Solaris 10, HPUX 11, AIX, Linux (RHEL 3 und 5), MAC OSX Server, NetCool System Monitoring, Veritas Storage Foundation, Veritas NetBackup, ARS Remedy,  HP Open View  Oracle 10, MC/ServiceGuard, NIS, Kerberos, LDAP, DNS | |
|  |  | | |  |  | |
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|  | **Client** | | |  | **Dresdner Bank**, Frankfurt <http://en.wikipedia.org/wiki/Dresdner_Bank> | |
|  | **Industry sector** | | |  | Banking IT | |
|  | **08/2007 – 12/2007** | | |  | ***AIX-System Engineer***  ***As freelance in System Engineer***  for IBM p-Series servers. | |
|  | **Hardware** | | |  | IBM p-Series SAN Storage | |
|  | **Software and tools** | | |  | AIX 4.3 und 5.3, Development Tools  BFF Packaging Tools | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **MAN Turbo AG**, Oberhausen <http://turbomachinery.man.eu/> | |
|  | **Industry sector** | | |  | Mechanical Engineering (IT) | |
|  | **04/2007 - 08/2007** | | |  | ***Unix-Systemadministration***  ***As freelance in System Engineer***  HP Cluster for CAD-Construction, IBM p-Series server running SAP, Linux High-Performance Cluster for Scientific Calculations | |
|  | **Hardware** | | |  | IBM p-Series, HP-Server: RISC and Intel Itanium (Failover-Cluster) SAN Storage | |
|  | **Software and tools** | | |  | AIX 4.3 und 5.3, SAP Basis Administration, RHEL 3 und 4 HPUX 11, MC/ServiceGuard, I-Deas CAD-Software, ARS Remedy, Nagios monitoring | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **Client** | | |  | **AWEK Mikrodata**, Bielefeld [http://www.awek.de](http://www.awek.de/) | |
|  | **Industry sector** | | |  | Retail Industry IT | |
|  | **08/2006 - 03/2007** | | |  | ***Netzwork Administration and System Software Development***  ***As freelance in System Engineer and Software Development***  Network Infrastructure Design, System Software Development for Retail | |
|  | **Hardware** | | |  | Intel Server,  Cisco Router, HP ProCurve Switches | |
|  | **Software and tools** | | |  | Windows Server 2003, Linux Server (Debian 3, SLES 10), VPN, Firewall (IP-Tables)  SAMBA, Apache, JBoss, Tomcat  Postfix, SNMP  Linux Kernel Development, System Installer | |
|  |  | | |  |  | |
|  | **until July 2006** | | |  | The following projects ran under employment of **CSE** GmbH, Gefrees (now subsidiary of AWINTA)  <http://www.awinta.de/> | |
|  | **July 2006** | | |  | ***Installation WLAN*** Access-Point Infrastructure | |
|  | **Hardware** | | |  | Cisco Linksys WRT 54G | |
|  | **Software and tools** | | |  | WEP / WPA | |
|  |  | | |  |  | |
|  | **June 2006** | | |  | ***Installation VoIP-Router***  Internet Access for network and phones. | |
|  | **Hardware** | | |  | FritzBox Fon 5050 | |
|  | **Software and tools** | | |  | Firewall | |
|  |  | | |  |  | |
|  | **May 2006** | | |  | ***Tuning für T1 multithreading Systeme von Sun***  Tunig Software for CoolThreads technology of Sun SPARC T1 server | |
|  | **Hardware** | | |  | Sun UltraSPARC T1 (T1000 und T2000) | |
|  | **Software and tools** | | |  | Solaris, Apache, Sendmail, MySQL, Oracle, JBoss, Tomcat | |
|  |  | | |  |  | |
|  | **April 2006** | | |  | ***Installation und Administration OpenSolaris auf Intel-Hardware*** | |
|  | **Hardware** | | |  | Intel Server | |
|  | **Software and tools** | | |  | Open Solaris 11, Sendmail, Postfix, Apache ... | |
|  |  | | |  |  | |
|  | **Client** | | |  | **VSA** ApothekenSysteme GmbH, Gefrees | |
|  | **Industry sector** | | |  | Retail Industry (IT) | |
|  | **January 2005**  **To November 2005** | | |  | ***Administration Mail System***  Microsoft Exchange, HA Mail Proxies | |
|  | **Hardware** | | |  | Intel Server Cluster, SAN Storage  f5 BIG/ip Loadbalancer  Cisco Switches Catalyst 2960, PIX 520 Firewall  multi vendor internet connection | |
|  | **Software and tools** | | |  | Exchange 2003, Postfix, Apache, Trend Micro Virus Wall  grey listing spam filter | |
|  |  | | |  |  | |
|  | **Client** | | |  | **VSA** GmbH, München | |
|  | **Industry sector** | | |  | Data center for drugstores | |
|  | **January 2002**  **To November 2005** | | |  | ***Administration HP Cluster / Oracle Database Systems***  Administration and operating | |
|  | **Hardware** | | |  | HP 9000 N Cluster, HP 9000 A  HP VA7410  Cisco Switches Catalyst 6509, 3750G  Brocade SAN Switch  HP SureStore Tape Library | |
|  | **Software and tools** | | |  | HP UX 11i, MC/ServiceGuard  HP Open View, Oracle  SuSE Linux Enterprise Server 9  JBoss, Tomcat, Java | |
|  |  | | |  |  | |
|  | **Client** | | |  | **VSA** GmbH, München | |
|  | **Industry sector** | | |  | Data center | |
|  | **July 2005**  **To November 2005** | | |  | ***Administration HP OpenView Data Protector on HPUX-Cluster***  Online Backup Oracle  Backup automation | |
|  | **Hardware** | | |  | HP 9000 N Cluster, HP 9000 A, HP VA7410  Cisco Switches Catalyst 3750G  Brocade SAN Switch  HP SureStore Tape Library | |
|  | **Software and tools** | | |  | HP UX 11i  HP Open View  HP Data Protector  Oracle RMAN | |
|  |  | | |  |  | |
|  | **July 2005** | | |  | ***Installation HP OpenView Data Protector on HPUX-Cluster***  Software migration to HP-Data-Protector  Implementation HP tape libraries. | |
|  | **Hardware** | | |  | HP9000 N Cluster, HP 9000 A, HP VA7410  Cisco Switches 3750G, 3560, 2960  Brocade SAN Switch  HP SureStore Tape Library | |
|  | **Software and tools** | | |  | HP-UX 11i  HP Open View  HP Data Protector  Oracle RMAN | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **June 2005** | | |  | ***Installation Oracle 9 for Software Development*** | |
|  | **Hardware** | | |  | Intel Server (FSC) | |
|  | **Software and tools** | | |  | Oracle 9, JBoss, Tomcat, Java | |
|  |  | | |  |  | |
|  | **June 2005** | | |  | ***Software development Online Data Services*** | |
|  | **Software and tools** | | |  | Perl, Java, WebDAV, XML  Apache, Tomcat | |
|  |  | | |  |  | |
|  | **May 2005** | | |  | ***Installation Server***  Test and Implementation of Scientific Linux as low cost RHEL clone  https://www.scientificlinux.org | |
|  | **Hardware** | | |  | Intel Server | |
|  | **Software and tools** | | |  | Scientific Linux 4.1  DNS, DHCP, Firewall, Apache, MySql, Squid, Samba, Postfix | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **April 2005** | | |  | ***Replacement Nokia Firewall Hardware*** | |
|  | **Hardware** | | |  | Nokia 500s  Nokia Firewall  Cisco PIX 520 | |
|  | **Software and tools** | | |  | FreeBSD, CheckPoint FireWall1 | |
|  |  | | |  |  | |
|  | **April 2005** | | |  | ***Administration NFS***  Automount via NFS | |
|  | **Hardware** | | |  | HP9000, Intel-Server | |
|  | **Software and tools** | | |  | HP-UX, Linux, NFS, automount | |
|  |  | | |  |  | |
|  |  | | |  |  | |
|  | **March 2005** | | |  | ***SUSE-Cluster***  Design and implementation HA server, Softwaretests, Nightly Builds,  Server Backup | |
|  | **Hardware** | | |  | Server FSC Primergy RX300  FSC FibreCAT S80  Cisco Switches Catalyst 3560 | |
|  | **Software and tools** | | |  | SUSE SLES9, Heartbeat, Perl, Java SDK, PaperCut, Phorum, Apache, Bugzilla, Webmin, HP Data Protector, Oracle | |
|  |  | | |  |  | |
|  | **March 2005** | | |  | ***Rollout Citrix Client***  Version 8 | |
|  | **Hardware** | | |  | Intel Server-Farm (for 1200 users)  Cisco Switches Catalyst 3750G | |
|  | **Software and tools** | | |  | Citrix, Windows 2003 Server | |
|  |  | | |  |  | |
|  | **February 2005** | | |  | ***Software Development***  Recurrent data transfer from/to wholesale.  Firewall updates | |
|  | **Hardware** | | |  | Server | |
|  | **Software and tools** | | |  | HP-UX, Linux, nfs, ftp, iptables, wget, Shell-Scripts, Perl | |
|  |  | | |  |  | |
|  | **February 2005** | | |  | ***Firmware-Update HP VA7400***  New Firmware release for disc controller and hard disks | |
|  | **Hardware** | | |  | HP9000 N Cluster, HP9000 A, HP VA7410  Brocade SAN Switch | |
|  | **Software and tools** | | |  | HP-UX 11i, HP Service Guard  HP Open View, HP Data Protector  Oracle RMAN | |
|  |  | | |  |  | |
|  | **February 2005** | | |  | ***Big-Brother Monitoring*** | |
|  | **Hardware** | | |  | Intel-Server, SUN-Sparc Server, HP9000 RISC Server  Diesel generator, Surveillance cameras | |
|  | **Software and tools** | | |  | BigBrother, Apache, PHP, Java, Java Script, MRTG, Postfix, Perl | |
|  |  | | |  |  | |
|  | **January 2005** | | |  | ***Software Development Java***  Software components for Point of Sales Systems.  Connection of receipt printers and card reader. | |
|  | **Software and tools** | | |  | Eclipse 3, Tomcat, JBoss | |
|  |  | | |  |  | |
|  | **January 2005** | | |  | ***Exchange Mail Cluster***  Design and implementation Exchange 2003, Mailbox transition | |
|  | **Hardware** | | |  | Server FSC Primergy RX300  FSC FibreCAT S80  Cisco Switches Catalyst 2960 | |
|  | **Software and tools** | | |  | Windows 2003 Cluster Server, Exchange 2003 | |
|  |  | | |  |  | |
|  | **May 2002**  **To September 2005** | | |  | ***Administration Solaris-Server***  Operating web portal [http://www.apothekenportal.de](http://www.apothekenportal.de/)  Software development PKI | |
|  | **Hardware** | | |  | SPARC-Server | |
|  | **Software and tools** | | |  | Solaris | |