

Johannes' IT-knowledge

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How it all started

- **1982:** (at 8 years of age) I started learning machine-code and assembler on the [Kosmos CP1](#) and Basic on the [Commodore VC-20](#). In conjunction with my electronics kits I developed microcontroller-driven nursery alarm plants a.s.o.
- **1984:** Advanced Basic on the [Commodore C128](#).
- **1985:** entering the world of Unix and DOS on my [Commodore Amiga 2000](#) and its intel 8088 expansion card. Programming languages modula, pascal, C, MC68K assembler.
- **1986:** entering the BBS community on the dataphone (300 baud) I had bought
- **1989-1999:** operating a small data centre (called "RLL Mailbox", see articles in [PC-Online 8/96 \[464 kB\]](#) , [8/95 \[555 kB\]](#) , [PC-Shopping 8/94 \[1.2 MB\]](#) and thousands of [Usenet postings](#)). Just like an Internet service provider, but complimentary.
- **1990:** first selling of selfmade DOS software
- **1991:** Developments also on OS/2 and Windows 3.x
- **1993:** Settling on the Internet, Linux, HPUX and AIX

and then fate chose its natural course...

Programming languages

I master the following programming languages (sorted alphabetically)

language	Reference
Assembler	<ul style="list-style-type: none"> ● intel 8049: private (see top) ● intel 8088, 80x86: Courses of informatics at high school (see testimonials) ● DEC VAX: Lecture of computer engineering at university (see uni certificates)
Basic (MS Visual, GW, GFA, AMIGA, C64, etc.)	<ul style="list-style-type: none"> ● private (see top)
C (ANSI-)	<ul style="list-style-type: none"> ● Development of a webserver for Deutsche Bank. (Details) ● Development of a software distribution client for Baader Securities.
COMAL	<ul style="list-style-type: none"> ● Development of a balances compilation software for Cooper&Rosenthal Corporation. (Details) ● Development of a merchandise management system for Eickmann Computer (Details) ● Development of a accounting software for ICI. (Details)
Delphi	<ul style="list-style-type: none"> ● Development of a software for high-precision environmental measurements. (Details) ● Development of a patient management system for the Alice Hospital. (Details)
Fortran 77	<ul style="list-style-type: none"> ● Maths lab at university (see uni certificates)
gnuplot	<ul style="list-style-type: none"> ● Development of some statistical tools for Deutsche Bank. (Details)
HTML/JavaScript/CSS	<ul style="list-style-type: none"> ● all Web-Frontends (see Perl, PHP und Rexx) and the webserver (see C) ● Creation of a 2nd-Level-Library for Deutsche Bank. (Details) ● The statistical tools for Deutsche Bank (see gnuplot).
LaTeX	<p>I wrote allmost any presentations and letters in LaTeX on a text editor (vim).</p> <p>Examples (LaTeX-Source):</p> <ul style="list-style-type: none"> ● Foils: Vortragsreihe TCP/IP [805 kB] ● Report: Personalauswahl [46 kB] ● Specification: Software-Entwicklung [70 kB] ● invoice for IT service, subject to german ISO regulations
LOGO	<ul style="list-style-type: none"> ● Courses of informatics at secondary school (see testimonials)
Modula-2	<ul style="list-style-type: none"> ● Lecture of computer engineering 1 at university (see uni certificates)
Pascal	<ul style="list-style-type: none"> ● Courses of informatics at high school (see testimonials)

Perl	<ul style="list-style-type: none"> ● Development of an onlinebanking monitor for Deutsche Bank 24. (Details) ● Development of a several administration tools (based on Perl/CGI/MySQL) for Baader Securities. For Example: <ul style="list-style-type: none"> ○ Exchange-rate management software ○ User manager for email, Internet, intranet and trading applications ○ Webmail environment ○ Calltracking system with integrated monitoring- and alerting- functionalities ○ Gathering and distribution of software ○ Email proxy wizard (vacation autoreply and forwarding) ○ Monitoring and processing of automated reports ○ Search engine for the corporate web site
PHP (LAMP)	<ul style="list-style-type: none"> ● Development of an merchandise planning and control system for some SME. ● Development of an OpenSource calltracking-system (see www.itcalls.org)
Prolog	<ul style="list-style-type: none"> ● Courses of informatics at high school (see testimonials)
Rexx	<ul style="list-style-type: none"> ● Development of 50 CGI scripts to diagnose software remotely for Deutsche Bank. (Details) ● Development of a network message server for Deutsche Bank 24. (Details)
Shellscript (bash, ksh, 4dos btm etc.)	<ul style="list-style-type: none"> ● Omnipresent...
Smalltalk V	<ul style="list-style-type: none"> ● Courses of informatics at high school (see testimonials)
SQL	<ul style="list-style-type: none"> ● Miscellaneous jobs (see databases)
XML, XHTML, WML	<p>(wml="Website Meta Language", not "Wireless Markup Language")</p> <ul style="list-style-type: none"> ● Creation of Homepages (Example)

Network-technology und security

- On behalf of Lufthansa Systems Group I prepared and performed some lectures on TCP/IP:
 - Protocol stacks, in particular TCP/IP
 - Network Hardware and Layer-2-protocols
 - Planning and implementing WANS
 - Analysis of application layer protocols (dns, smtp, http, ftp, telnet, pop3, imap, smb, nfs)
 - Strategies for Mail-, File- and Webservers
 - Konfiguring virtual webservers under Apache 1.3.9
 - Security concepts for the Internet

see the elaboration: Part [1](#), [2](#)

- At [Darmstadt University Linux user group](#) and [Unix Usergroup Rhine-Neckar](#) I held talks about OpenSSH. Topics were:
 - Introduction (protocols, configuration, encryption, login sessions, encryption, compression, public key authentication)
 - IP-tunnelling (X11-forwarding, pipes, local und remote port forwarding, telescoping tunnels, ppp over ssh)
 - Breaking Firewalls (Using open ports and existing proxy servers, recommendations)

see the elaboration: Part [1](#), [2](#), [3](#)






- For many customers I installed and administrated Novell Netware Servers. [\(to the references\)](#)
- I hold the

	Check Point Certified Security Principles Associate (CCPSA) Certificate [508 kB] by Check Point Test objectives [64 kB]
	i-Net+ Certificate [655 kB] by CompTIA Test objectives [271 kB]

Operating systems

Though I work most efficiently in unix environments (particularly Linux) I have good general knowledge of the other operating systems. I installed servers and developed software with the following operating systems:





- UNIX (Linux seit Version 0.99, Solaris seit Version 2.6, AIX, HP-UX, SCO etc.):
I hold the

	<ul style="list-style-type: none"> • Sun Certified System Administrator (SCSA)-certificate [213 kB] by Sun Microsystems for <i>Solaris 9</i> Test objectives [40 kB] The SCSA-logo is a registered trademark of Sun Microsystems, Inc.
	<ul style="list-style-type: none"> • LPIC-2 Certificate [518 kB] by the Linux Professional Institute Test objectives [440 kB]
	<ul style="list-style-type: none"> • Red Hat Certified Engineer (RHCE) Certificate [139 kB] by Red Hat for <i>Enterprise Linux 3</i>. Test objectives [65 kB]
	<ul style="list-style-type: none"> • Certified Linux Administrator for SUSE Linux Enterprise 11 (CLA-11) Certificate [27 kB] by Novell • Data Center Technical Specialist (DCTS) Certificate [46 kB] by Novell
	<ul style="list-style-type: none"> • Linux Certified Administrator (LCA)-certificate [665 kB] by SAIR Linux & GNU Test objectives [59 kB]

- Several DOS (MS DOS 2.11-6.22, IBM PC-DOS, Caldera OpenDos etc.)
- AmigaDOS 1.1+
- IBM OS/2 2.11+
- MS Windows versions 2.1, 3.0, 3.1, 95, 3.51, 4.0, 2000, XP
- Novell Netware 2.11, 3.1x, 4.1
- CP/M on Apple-[], Commodore C128

Databases

I got experienced with these database management systems:

DBMS	Reference
MySQL 	<ul style="list-style-type: none"> • I hold the  MySQL4 Professional Certificate [1.2 MB] by MySQL AB  Test objectives [72 kB] • Development of some CGI-scripts with access to MySQL for Deutsche Bank (see Rexx) • Development of a user management system for Baader Securities (see Perl) • Development of an merchandise planning and control system for some SME (see PHP) • Development of an OpenSource calltracking-system (see PHP)
IBM DB/2	<ul style="list-style-type: none"> • Systems administration on 3600 DB/2-servers (located all over the world) at Deutsche Bank AG's OPUS project.
Novell Btrieve	<ul style="list-style-type: none"> • Development of miscellaneous financial software (see COMAL)
Ashton Tate DBase 3 (xbase), 4 (SQL)	<ul style="list-style-type: none"> • Courses of informatics at high school (see  testimonials)
Borland Paradox	<ul style="list-style-type: none"> • Development of a patient management system for the Alice Hospital (see Delphi)
Oracle 7,8	
Microsoft Access	
M(ini)SQL	

Internet domains

- I am the author of the book *DNS & BIND GE-PACKT*, which was edited by [mitp publishing](#) (ISBN: 3-8266-1502-6, [Details](#)).
- I hold the



 [DNS Fundamentals & BIND Administration Certificate \[205 kB\]](#)
by [Men & Mice](#)

- As former hostmaster of a bank and coordinator of more than 30 Internet domains, I have experience with registration and modification (esp. changing providers) of Internet domains and running name-servers.