

Curriculum vitae
and
employment history

of

Enno Richter

Enno Richter
Software - Entwicklung

Schwarzwaldstraße 8
71083 Herrenberg

Germany

Tel. +49 7032/786260
Mobil +49 172/7303136

e-mail: migration@richter-software.de

<http://www.richter-software.de>

Curriculum Vitae

Employment history

IT - skill

(practical experience since 1966)

Hardware

- IBM 1401
- IBM/370
- IBM /3 /36
- IBM AS/400
- IBM RS/6000
- PC's

Operating Systems

- MVS OS/390 (TSO)
- VSE/ESA
- OS/400
- UNIX/ / AIX
- LINUX
- Windows

Program-languages

- /370 - Assembler
- C , C++
- COBOL
- Golang
- JAVA
- PL/1
- Python
- RPGII
- RPG/400

DataBases/TP

- DB/2
- CICS
- MySQL
- IMS - DB/DC
- UTM
- SQL

Ide / Source revision control system

- Eclipse
- git

Special Skill

Migration-Experience in more then 100 Projects.

- RPG ----> COBOL Migrations.
- CPG ----> COBOL Migrations.
- Transact ----> COBOL Migrations.
- VPLUS ----> COBOL-Windows Migrations.
- FMS ----> Java-COBOL Migrations.
- /370-Assembler ----> COBOL Migrations

Own Products

RTC RPG to Cobol

The complete RPG to COBOL conversion procedure (RTC) is performed according to a tried-and-trusted method. The method is described here step by step.

The RTC-Service is performed in the most efficient way for the customer. RTC-Service elaborates the technical realization.

The conversion of RPG to COBOL (RTC) is independent of the platform, i. e. possible for all platforms with a COBOL-Compiler. Here is a view of two typical RTC-Projects:

RTC-Project for Mainframes and RTC-Project for IBM /36.

Arguments for the Migration from RPG

- New generation of programmers have no knowledge of RPG.
- no interface to DB2
- no up-to-date tools (e.g. debugger) available for RPG

to COBOL

- definition as X-Open language (portability)
- easy maintenance
- independent from "RPG -know how"
- the following options can be chosen later:
 - File I/O - methods
 - presentation variants
 - Client/Server - concepts
 - OLTP - architecture

Curriculum Vitae

Employment history

CPG CPG to Cobol

CPG is similar to RPG a dialog oriented programming language.
The source will be translated into COBOL - the character oriented masks in COBOL-Windows-mode.
The application runs on all Linux, Unix, Windows-systems.

T2C Transact to Cobol

Transact is a interpreter, stack orientated programming language which runs exclusively on HPe3000-Systems.
Source code will be translated into COBOL and run in combination with a "c"-runtime system on any Linux, Unix, Windows-systems.

VtG VPLUS to GUI

The VtG method translates VPLUS-sources (HPe3000 only) into GUI-sources (COBOL or Java).
Your legacy mask layouts will be available in any platform of your choice - now available in GUI-technology.
Advantage: No training required for your users.

Curriculum Vitae

Employment history

April 2019 - April 2021

The in-house development of the migration software is extended to the programming language C# (C-Sharp, MS-Net).

October 2017 - March 2019

In-house development of a migration software that migrate COBOL sources in Golang sources.

The flexible concept also allows the adaptation/extension from other Programming languages. (e.g. CPG, QPG --> Golang)

Plattform: Kundenabhängig (Linux, Windows, z/Linux, z/OS...)
Sprachen: as starting point.: COBOL,CPG,QPG, u.a....
as target: Golang.
Tools: The in-house development works under Linux in the Eclipse environment.
Python and Golang are the active programming languages of this project. This means it can run on every current System - if a license is required.
Funktion: The migration is offered as a service.

April 2017 - September 2017

Use of the RTC process for a customer in Spain.

372 RPG sources are converted fully automatically into COBOL sources.

The RTC software was previously supplemented by the country-specific character code.

In addition, the VSAM key lengths and positions for each RPG program are determined using the 'JCL' and 'LISTCAT' information and integrated into the RPG source.

Plattform: The RTC service runs on Linux on your own Linux server.
Sprachen: The RTC software is implemented in COBOL and Python.
Tools: The RTC software is a complete in-house development.
Funktion: The migration is offered as a service.

January 2014 - April 2017

In-house development of a migration software that converts COBOL sources into C++ sources.

The flexible concept also allows the adaptation/extension to other Programming languages. (e.g. CPG, QPG --> C++,C# or Golang)

Plattform : Customer-dependent
(Linux, Windows, z/VM, z/VSE,z/OS.
Program_language: as a starting point COBOL,CPG,QPG, u.a....
as target.: COBOL , C++, Golang u.a.
Tools: The in-house development works under Linux in the Eclipse environment.
Python and C++ are the active programming languages of this project. This means it can run on every current System - if a license is required.
Function: The migration is offered as a service.

Curriculum Vitae

Employment history

2012 November - 2013 August

By order of Hanse-Merkur, Krankenversicherung, Hamburg, 150 BS2000-COBOL-Sources are converted to MicroFocus – Suse-Linux – Cobol.

Platform: old: BS2000/OSD new: Suse-Linux
Program_language old: COBOL new: COBOL
Tools: div. self-developed software-tools.
Function: Software-Developer

2010 - 2012

In rthe language "Python" some migration-programs are developed and offered as service. (Like the RTC-Service)

Platform: old: z/VSE,z/OSnew: z/VSE,z/OS,Unix/Linux/Windows
Program_language old: CPG,QPG,HL1 new: COBOL , "c"
Tools: self developed
Function: The sources will be migrate to COBOL or „c“.

2010 February - March

By order of Volvo, Sweden, 20 RPG-Programme are converted from (IBM VSE/ESA) to COBOL (IBM VSE/ESA).

Platform: old: VSE/ESA new: VSE/ESA
Program_language old: RPGII new: COBOL
Tools: The RTC-Service (RTC-Software)
Function: Automated source-migration and in-company training.

2009 Juni - December

Frelance in Frankfurt am Main at Commerzbank AG

Integration of the Dresdner Bank AG software in the IT-Structures of ther Commerzbank AG.

Platform: IBM z/OS
Program_language /370 COBOL
Tools: TSO , Xpediter etc.
Function: Softwaredeveloper

2009 Januar – Mai

Beginnning of software-development CPG-to-COBOL – migrationssoftware.

Platform: Suse-Linux
Program_Language: Python
Tools: gVim
Function: Softwaredeveloper / Softwarearchitekt

Curriculum Vitae

Employment history

2007 - 2008

Development of a **COBOL-JSON-Interface** to connect COBOL-Programs and GUI-Software via 'sockets'.

JSON (Java Script Object Notation) is an international, independ standard. JSON used as a replacement for XML in areas in which the resources (volume, speed rating) are limited. This is important in GUI-Web-scenarios.

2008 August - October

Freelance in Stuttgart at der W&W Informatik GmbH.
(Wüstenrot-Bausparkasse und Württembergische Bank.)

Enhancements / adjustments in IBM /370-COBOL-Programs.
The data management is IMS-Database.

Platform:	IBM z/OS
Program-Languages	COBOL
Tools:	TSO , Xpediter etc.
Function:	Software-developer

2008 – February - May

Freelance in Schwäbisch-Hall at Kreditwerk GmbH (a subsidiary company of Bausparkasse Schwäbisch-Hall). Pervasive changes in /370-assemblerprograms. Specialised register-statements are altered in /370-macro-routines. This required an accurate analysis and carefull changes of the assembler-sources.

Platform:	IBM z/OS
Program-Languages:	/370 Assembler
Tools:	TSO , Xpediter etc.
Function:	Software-developer.

2006 - 2007

Development and deployment of the migrationsoftware „VPLUS-to-COBOL“ for a customer in germany. VPLUS is the „GUI“-language of the HP3000-systems which are converted in AcuCOBOL-(Windows)-sources. These COBOL-moduls are activated via CALL-Statements from the COBOL-application-program. The benefit is the minimum effort to alter the application programs.

The account ocured on a „fix price base“.

Platform:	old: HPe3000	new: Windows XP
Program-Languages:	old: VPLUS	new: COBOL unter Windows
Tools:	the own develop VPLUS-to-COBOL Migrationssoftware	
Function:	Software-development and delivery of the sources.	

Development and deployment of the migrationsoftware „**FMS-to-COBOL**“. FMS is the „GUI“-language of the open-VMS-system. These sources are migrated to Java-swing-sources and via a java-server connected with the minimum altered COBOL-programs.
This concept has been presented in April 2007 at the DECUS-usermeeting in Nürnberg.

Curriculum Vitae

Employment history

2004 – 2005

Development and deployment of the proprietary development „Transact-to-COBOL“ for a customer in the US. Transact is a HPe3000-specific interpreter-programming-language. The account occurred on a “fix price base“.

Platform: old: HPe3000 new: IBM AIX
Program-Languages: old: Transact new: COBOL and 'c'-runtime-system
Tools: the own develop T2C-Software (T2C=Transact-to-COBOL)
Function: Development the “t2C” - migration-software.

2001 - 2003

Freelance at a health insurance in Stuttgart. In the IBM-mainframe area computer applications are planned and realized.

By order of an Italy softwarehouse IBM/VSE-RPG-source are migrated to HP-UX-COBOL with the RPG-to-COBOL-Software (RTC).

Platform: old: IBM VSE/ESA new: HP-UX
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

2000

By order of MERANT (MicroFocus), Spain, ca. 260 RPG-programs (BS2000/OSD) are converted to MicroFocus-COBOL.

Platform: old: BS2000 new: BS2000/OSD
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

Freelance in Nürnberg at a insurance company. There programming in COBOL and DB2 on a z/OS IBM-mainframe.

Curriculum Vitae

Employment history

1998 - 1999

As freelancer by an order of a Stuttgarter softwarehaus. COBOL-programming in the banking-area under TSO/MVS. In this context development and deployment of the migration-software ASSEMBLER-to-COBOL (ASCOMI)

Platform: old: IBM MVS new: IBM MVS
Program-Languages: old: Assembler new: COBOL
Tools: the own develop Software „ASCOMI“
Function: Leading the projekt and realization with customer-employees.

In order by SBS GmbH, (Siemens Business Services GmbH) ca. 30 RPG-programs are converted to COBOL. The customer is KSB, Frankenthal.

Platform: old: BS2000 new: BS2000/OSD
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

In order by WERU AG, Rudersberg, ca. 100 RPG-programs are converted to COBOL. The reason: the customer wanted to work with DB2-databases. This is not possible wit the RPG-language.

Platform: old: IBM VSE/ESA new: IBM VSE/ESA
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

The newly developed **CTC-system (CTC = CPG-to-COBOL)** will be deployed for the Südwest Union, Offenburg. Ca. 300 CPG-online-programs are converted in COBOL/CICS with DB2 connection.

Furthermore ca. 400 RPG-batch-programs are converted to COBOL, also with connection to DB2.

The before dialogoriented CPG-programs runs under CICS really transactional !

Platform: old: Siemens-Nixdorf VSE new: IBM AIX
Program-Languages: old: RPGII new: COBOL
old: CPG new: COBOL-CICS
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
the own develop CTC-Software (CTC=CPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

1997

In order by HAMA, Monheim, ca. 50 BS2000-RPG-programs are converted to SINIX-COBOL.

Platform: old: BS2000 new: SINIX
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

Curriculum Vitae

Employment history

1996

The RTC-Service (RTC=RPG-to-COBOL) is used for the Hessische Landesbank, Offenbach. Ca. 70 RPG-programs are converted to MVS-COBOL.

Platform: old: IBM MVS new: IBM MVS
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

1995

For a customer the RTC-Software will be enhanced for the WINDOWS-modul (MicroFocus-Dialogsystem) and installed.

1994

For the Fa. Raab Karcher Energierservice GmbH, Münster, ca. 200 batch/dialogprograms of the IBM - /36-system are converted to COBOL/CICS running on a IBM VSE/ESA-mainframe. The dialogprograms are running under CICS in a real transactional-mode !

Platform: old: IBM/36 new: IBM MVS
Program-Languages: old: RPGII new: COBOL-CICS
Tools: the own developed RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

1993

in order of a customer programs for the IBM AS/400-system are developed and programmer who don't know anything about the AS/400-systems are trained.

1992

In order of DKV, Köln ca 150 RPG-Programs (batch/dialog) are converted to COBOL. The dialogprograms are running under CICS in a real transactional-mode !

Platform: old: IBM/36 new: IBM MVS
Program-Languages: old: RPGII new: COBOL
Tools: the own develop RTC-Software (RTC=RPG-to-COBOL)
Function: Leading the projekt and realization with customer-employees.

1991

The RTC-Software will be enhanced for several computersystems. The "WIR" EDV-Beratung GmbH will be liquidate.

Instruction material for AS/400 teaching are developed. Furthermore AS/400-COBOL-programs are developed.

Curriculum Vitae

Employment history

1976 until 1990

Foundation of the „WIR“ EDV-Beratung GmbH in Sindelfingen.
Start of the RTC-Software development.

RTC = RPG-to-COBOL

More than 100 customers uses the RTC-Service to migrate their RPG-sources to COBOL-sources.

In order of IBM, Germany the RTC-Software will be adapted to the AIX-operating system and demonstrated on the „automechanika“ in Frankfurt.

In the years 1981/1982 the RTC-Software will be enhanced to convert dialog-programs to transactional programs. The ordering customer ist the lab of IBM, Germany.
The enhanced RTC-software is used for some customers.

In fullservice some RPGII-softwarepackages are converted to COBOL/CICS on the MVS-operating system.

1973 until 1975

Freelancer at IBM Deutschland GmbH in PL/1 and /370-ASSEMBLER projects.
Database and Monitorsystem is IMS-DB/DC.

1972

Employed at a softwarehouse. In order of this softwarehouse working as a freelancer at IBM, Stuttgart on PL/1 and /370-assembler projects.

1966 until 1971

Employed at IBM, Germany.
Education as system-engineer (SE).
Theoretical and practical knowledge of the programming-languages /370-Assembler, PL/1, COBOL and RPG.
As hierarchical databasesystem DL/1 is used.

Curriculum Vitae Employment history

CURRICULUM VITAE

Biography

Date of birth	Jan. 13th 1945
Completion of secondary education	1962
Apprenticeship (bank clerk)	1963 - 1965
Bank employee	1965 - 1966
Employee at IBM Germany GmbH	1966 - 1971
Employee at a Software-House	1971 - 1972
self-employed	1973 - 1976
IT consultant, Director of "WIR EDV-Beratung GmbH" self-employed	1976 - 1991
self-employed	1992 - today