

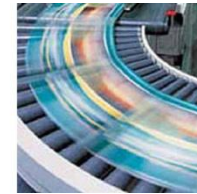
CoDeSys



CoDeSys



We software Automation.



CoDeSys

is a complete development environment for PLCs



We software Automation.

Introduction



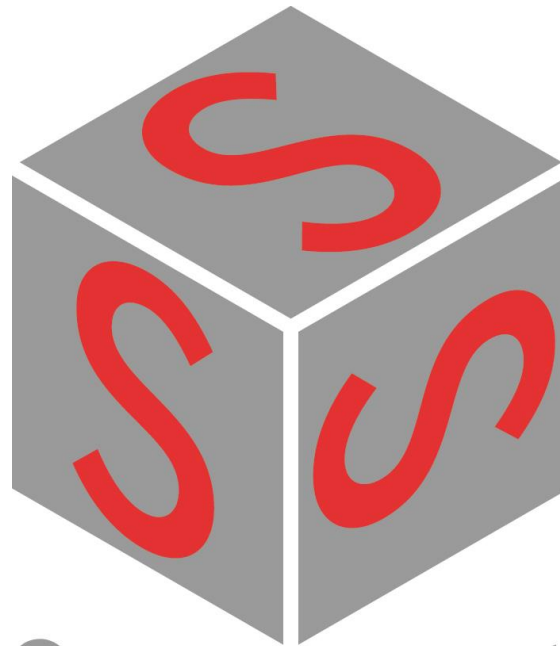
CoDeSys is a well known product.

But what exactly is CoDeSys?

This presentation will give you a general overview of the CoDeSys world.



Who is CoDeSys from?



S m a r t
Software
Solutions



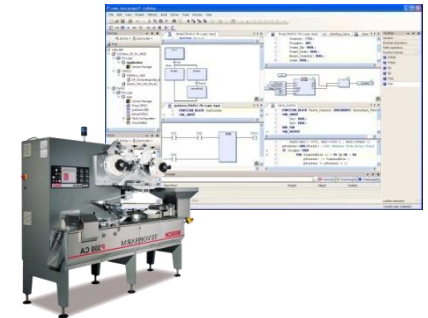
Members of staff



Date of Foundation
July 1994

Products and markets

CoDeSys: Software suite
for industrial automation



Smart
Software
Solutions

Headquarters in Kempten, Germany

CEOs / Owners

Dieter Hess
Manfred Werner

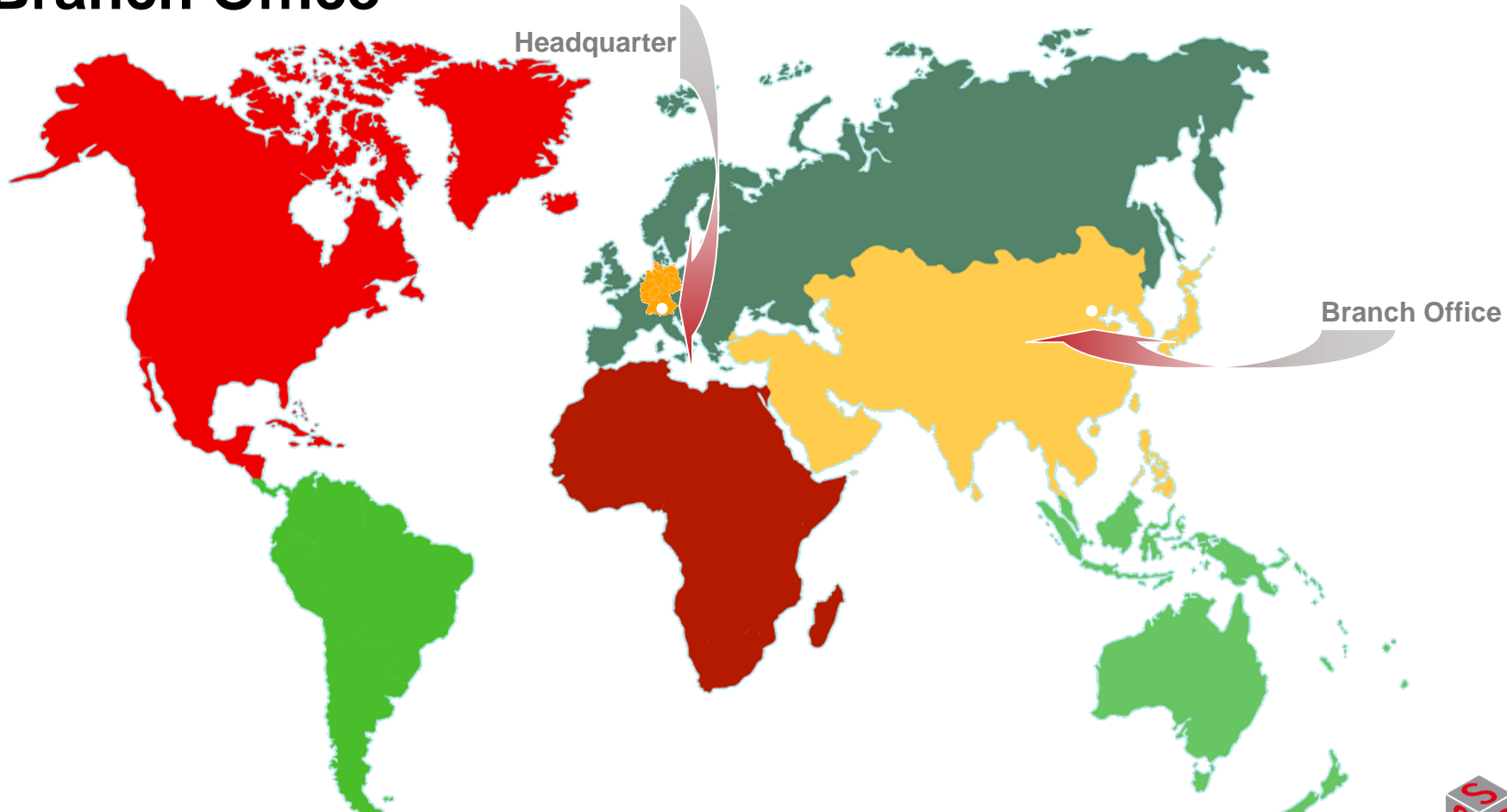
Turnover 2008

6.8 million €





Worldwide CoDeSys Network - Headquarter & Branch Office

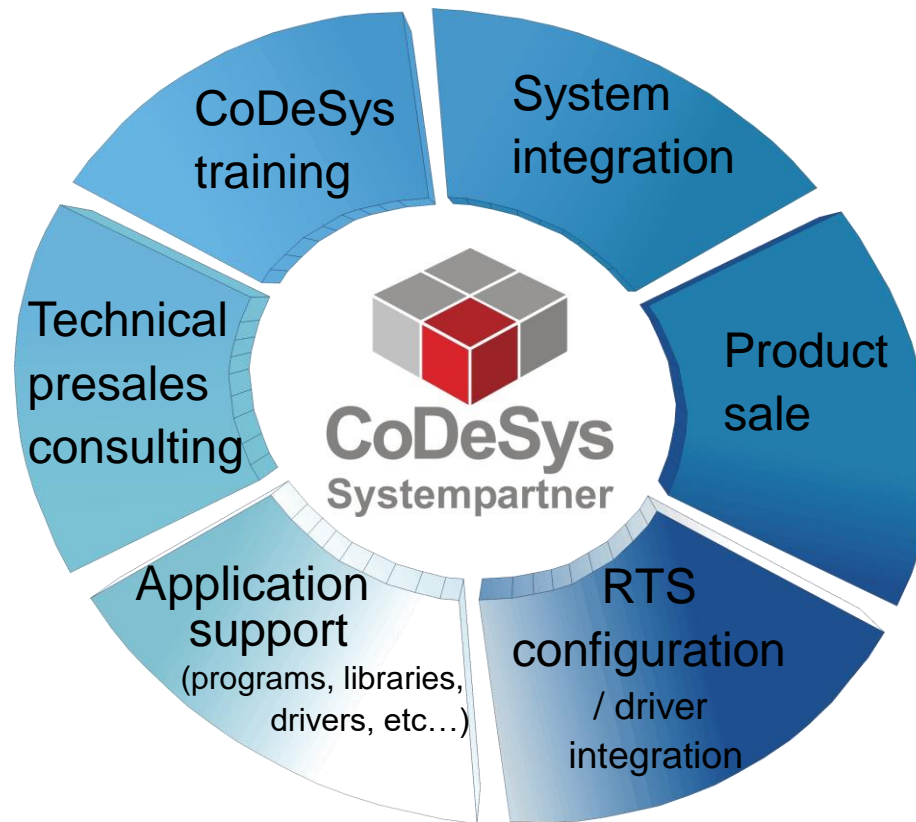


Product History & Milestones

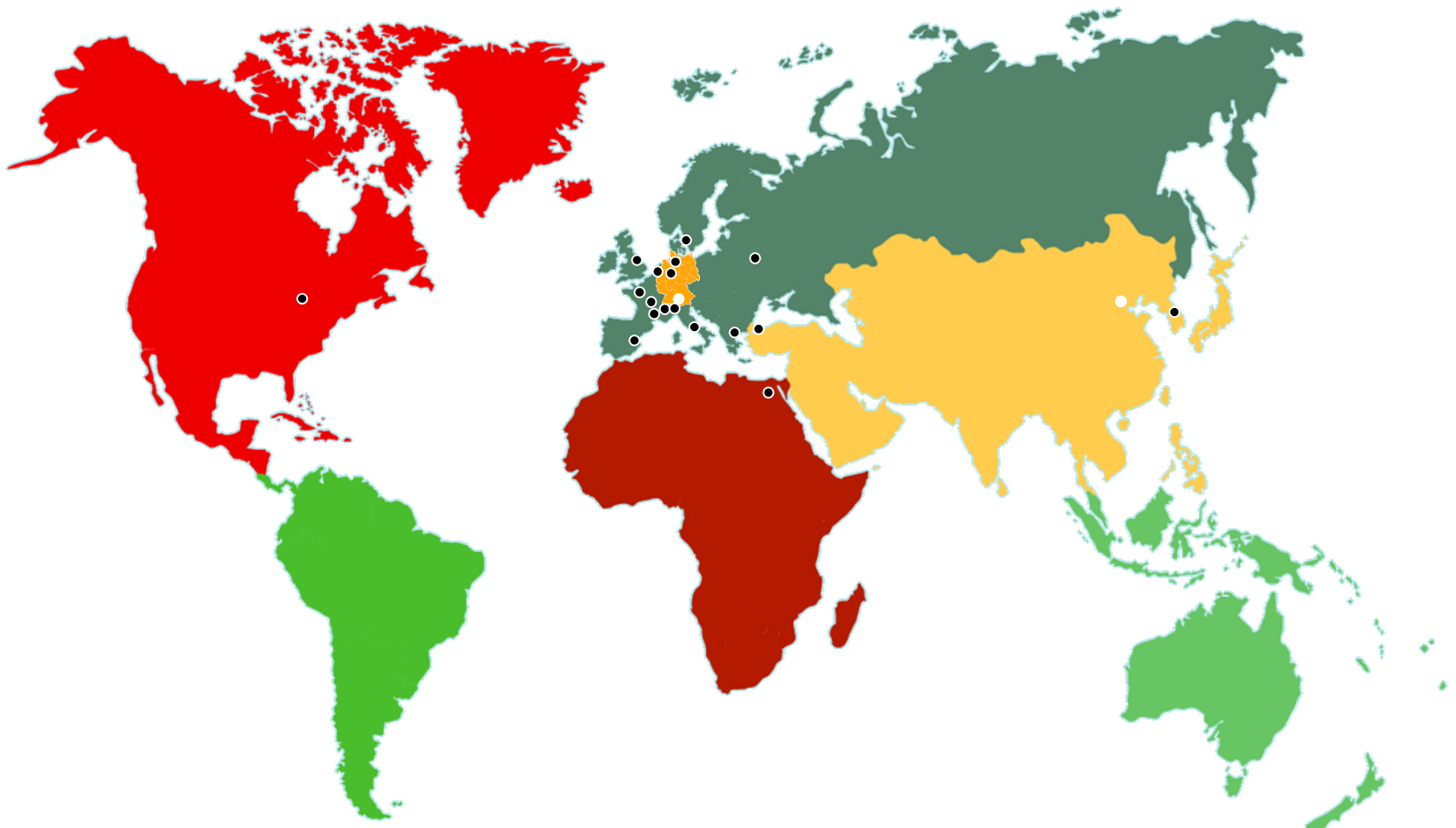
1994 / 1995	CoDeSys, the IEC 61131-3 programming system with C code generation / interpreter code, integrated visualization for demo purposes, runtime system available as backend
1996	development of integrated compilers for 8-bit, 16-bit and 32-bit CPUs
1998 / 1999	CoDeSys Gateway server / OPC server
1999	introduction of a SoftPLC on WinNT / WinCE First visualization customers
2001	CoDeSys HMI ready to use
2002	real time CoDeSys SP RTE ready to use
2003	CoDeSys ENI (version control)
2004	CoDeSys Target & CoDeSys Web Visualization ready to use
2005	CoDeSys SoftMotion ready to use
2006	CoDeSys V3 product launch (completely new technology)



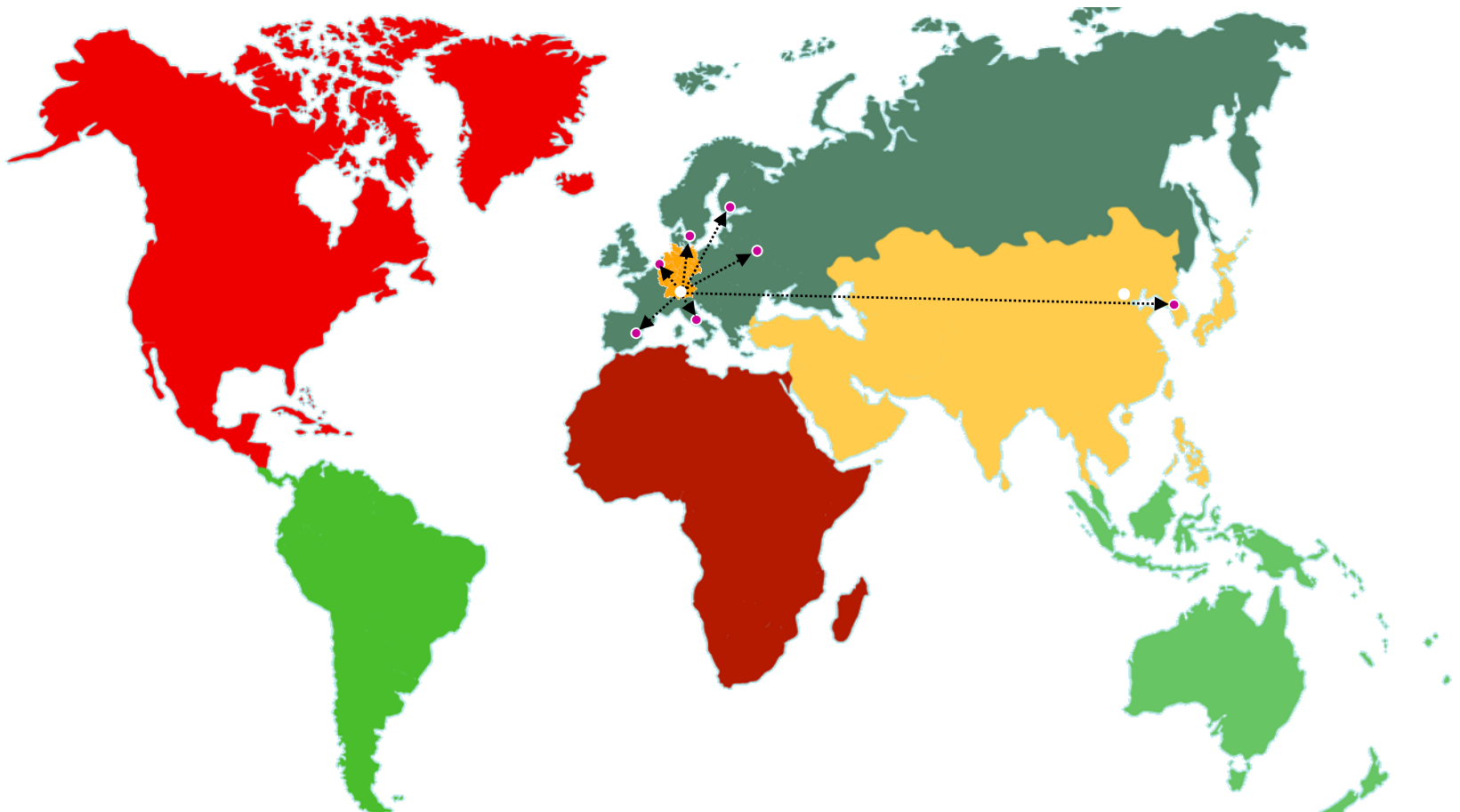
CoDeSys System Partner Network - Services



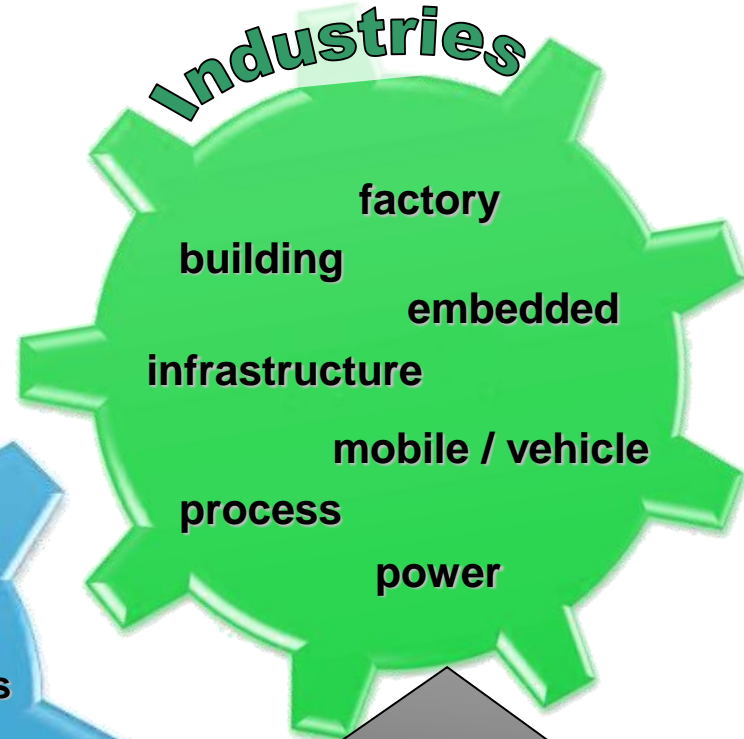
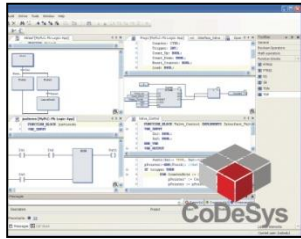
System Partners



Distributors



CoDeSys and integrated Products

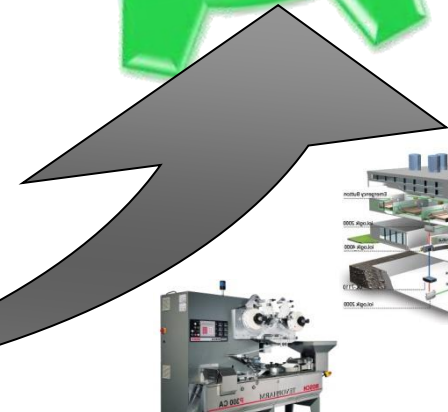


Products

DCSs PLCs
 motion controllers
 embedded controllers
 drives intelligent I/Os
 panel PLCs IPCs
 HMIs

Functionality
CoDeSys

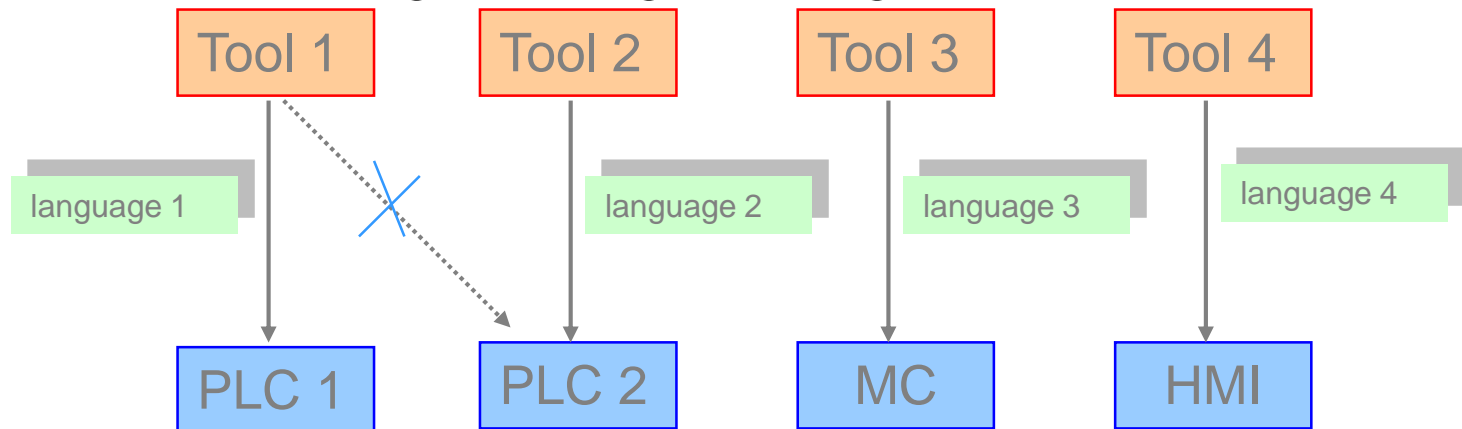
safety
 visualization
 motion control
 configuration
 logic control



CoDeSys and integrated Products

IEC 61131-3 in Automation

- a typical control engineer in the automation industry works with 4 different brands of controllers
- each controller uses a proprietary programming system with a specific language
- control engineers, programmers and maintenance engineers have different knowledge of programming these controllers



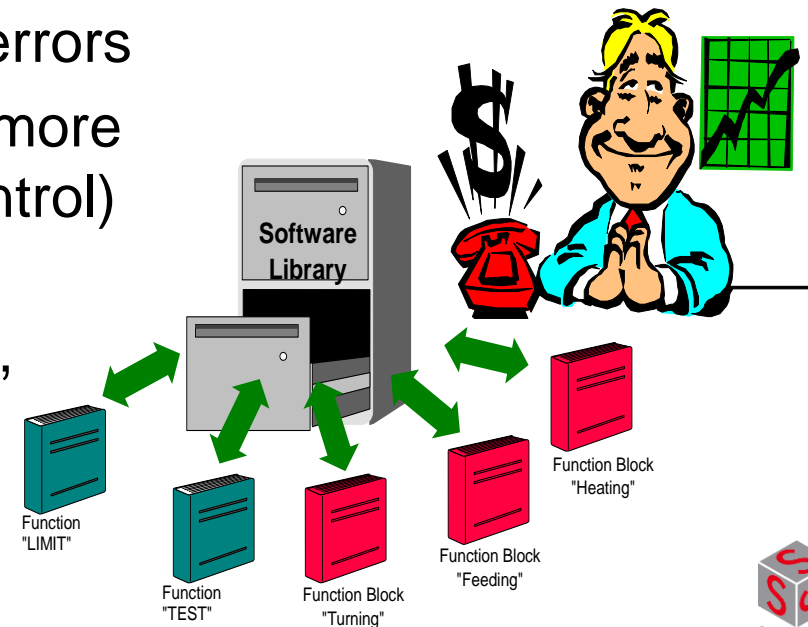
- a standard can solve this problem: **IEC 61131-3**



CoDeSys and integrated Products

Benefits of the IEC 61131-3

- Reduced need of human resources (for training, debugging, maintenance and consultancy)
- Reduced application investment and supplier dependency thanks to software re-usability
- Better general understanding, less errors
- Programming techniques usable in more environments (general industrial control)
- Seamless combination of different components from different locations, companies, countries or projects
- Increased connectivity (investment protection)



CoDeSys and integrated Products

CoDeSys supports the IEC 61131-3

- **CoDeSys** from the German software manufacturer 3S-Smart Software Solutions GmbH is the leading standard tool in the automation industry which supports all IEC 61131-3 specifications:
- CoDeSys offers:
 - I/O control with 6 programming languages
 - I/O and field bus configuration
 - integrated motion control
 - integrated HMI and visualization tool
 - integrated safety system
 - open communication interfaces to 3rd party tools



CoDeSys and integrated Products

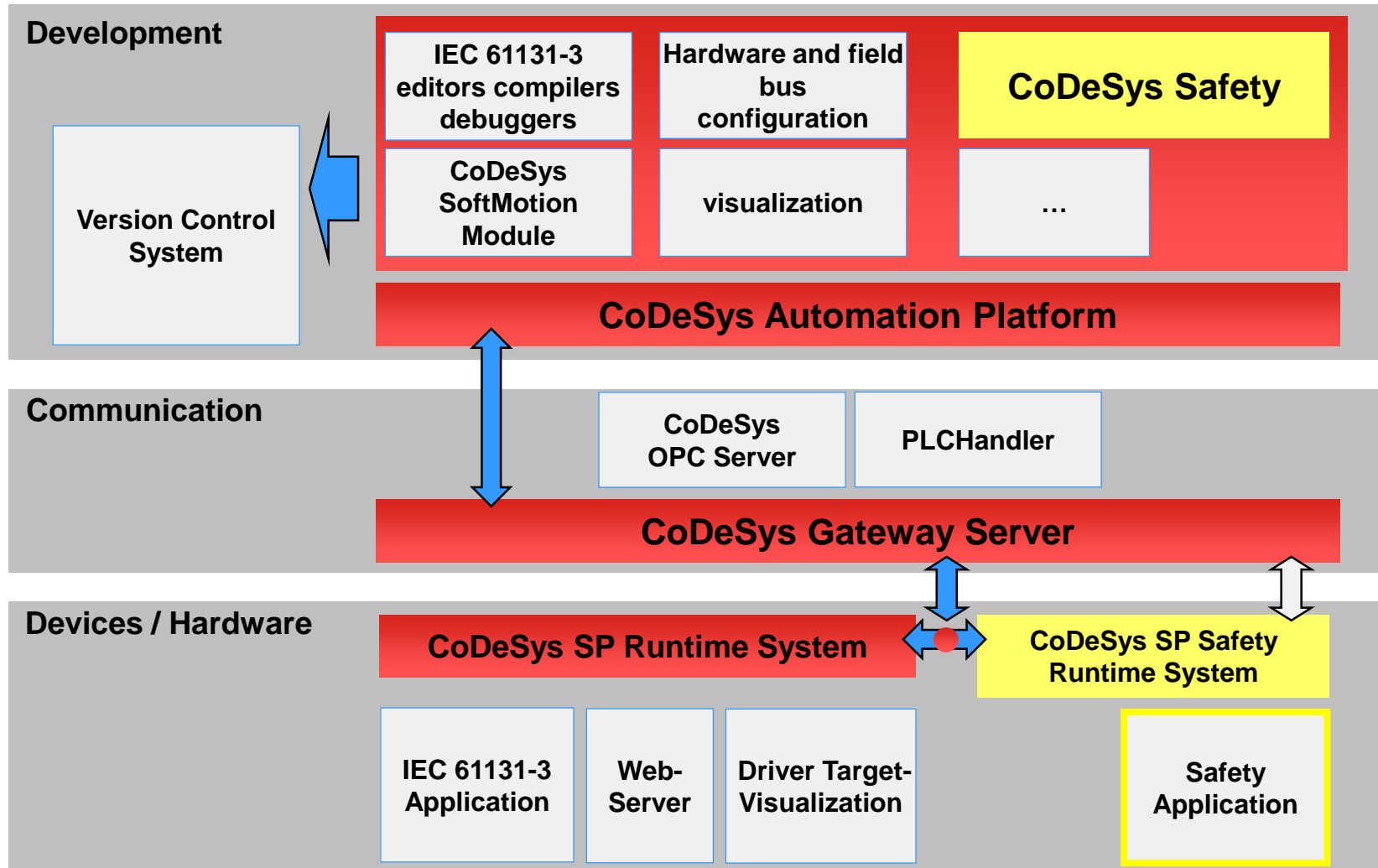
CoDeSys Product Range

- **CoDeSys V2 & V3**, the IEC 61131-3 programming tool
- **CoDeSys SP**, the runtime system for embedded platforms and PC based controllers
- **CoDeSys SP RTE**, the runtime system for Windows with hard realtime properties
- **CoDeSys Visualization** (HMI, target or web)
- **CoDeSys SoftMotion**, the integrated motion control solution
- **CoDeSys Safety**, the SIL2 and SIL3 safety solution
- **CoDeSys ENI Server**, the engineering interface
- **CoDeSys Automation Platform**, the .NET platform for customization
- **CoDeSys Communication** OPC, OPC UA, PLC Handler
- **CoDeSys add-ons**



CoDeSys and integrated Products

Product Overview



CoDeSys IEC 61131-3 Programming Tool

How can you use CoDeSys?

- use devices from our OEM customers on which one of the **CoDeSys** runtime systems has been implemented
- implement **CoDeSys** on your own hardware (with support from the 3S-Smart Software Solutions project department)
- use **CoDeSys SP RTE** and turn your standard Windows IPC into a powerful PLC with hard realtime properties



References and Applications

- We currently have more than 250 OEM customers worldwide, mainly automation component manufacturers.
- thousands of applications
- hardware-independent market leader
- some references:





Have a look at our Application Gallery



- We software Automation.

How to contact the Support Team?

- support@3s-software.com
- Telephone Hotline: +49-831 – 540 31 -66
Monday to Thursday, 9:00 – 12:00 / 14:00 – 17:00 (CET)
Friday, 9:00 – 12:00 / 14:00 – 16:00 (CET)
- More information on our website under
http://www.3s-software.com/index.shtml?support_en
- Those of our customers who offer OEM products which are sold to end users provide first level support for their customers.

