



Industrial Control Design celebrates Open Source Software

Industrial Control Design AS, the industrial automation middleware provider, is celebrating Open Source Software, the role it has played in the company success and the place it has in the company heart.

"Open Source software helps us cut costs and deliver faster", says CEO Bjørnar Huse. But OSS is about collaboration and community, and in that spirit, ICD has begun releasing parts of the CDP framework as Open Source Software.

First up is the CDP Dissector, a plug-in for the Wireshark network analysis tool previously known as Ethereal. "Wireshark is an invaluable tool for anyone working with network traffic and especially for us, with CDP designed around Ethernet and UDP." says CTO Svein Erling Linge. The plug-in has been released on SourceForge.

Another Open Source tool that ICD relies on is the GNU compiler suite, known for its portability and cross-platform usefulness. By creating a Canadian Cross-Compiler based on it, developers can compile CDP add-ons and applications for Linux from Windows and vice versa. This CDPToolchain is also used in the Windows-based build system to create Linux releases quickly and effortlessly.

Testing on all levels is of the utmost importance in industrial automation. From low-level component testing using CppUnit, the standard Open Source C++ unit testing framework, through to higher level testing in WATIR and ACTIR. For ensuring web browser compatibility, the WATIR (Web Application Testing in Ruby) framework allows automating control of a web browser, making automating a lot of manual testing easier.

Building on this was the internal testing framework ACTIR (Automated Component Testing in Ruby) which both makes WATIR easier to use with CDP but also can be used alone for deeper component testing. An alpha release of ACTIR is available on Rubyforge.

"We could not have created CDP2SQL on time and within budget without using ACTIR for active automated regression testing", says Project Manager Nils Petter Eftedal. CDP2SQL is a commercial CDP component which makes use of the SQLite3 database for logging purposes. SQLite3 is one of many available Open Source database solutions and is a good fit for embedded solutions with disk space constraints.

Another Open Source technology with increasing foothold in the embedded hardware market is Linux. The CDP platform was ported to Linux (a few) years ago and ICD has had a close eye on the growing real-time capabilities of Linux ever since. More and more controllers based on or supporting Linux are showing up, making for an exciting future in automation.

For further information, please contact:

Bjørnar Huse, General Manager, Industrial Control Design AS
www.icd.no e-mail: [icd \(at\) icd.no](mailto:icd@icd.no)

Industrial Control Design in Brief

Industrial Control Design AS is a software company based in Aalesund, Norway. The main product, the Control Design Platform (CDP), is a complete C++ framework for development of advanced control systems and control applications. Training and project specific consultancy services are also provided on demand. For more information about Industrial Control Design, please visit www.icd.no.

Relevant links:

ICD and CDP: <http://www.icd.no/>

Wireshark: <http://www.wireshark.org/>

CDPDissector: <http://cdpdissector.sourceforge.net/>

CppUnit: <http://cppunit.sourceforge.net/>

WATIR: <http://wtr.rubyforge.org/>

ACTIR: <http://rubyforge.org/projects/actir4cdp/>

SQLite3: <http://www.sqlite.org/>

Linux: <http://www.kernel.org/>