

Don't hesitate. Share your thoughts and experiences.

Open source software and IEC 61850 I have been thinking recently about the problems associated with the availability of decent tools for IEC 61850 users, system integrators and on-site maintenance engineers and technicians. And if there is to be longer term seamless interaction between IEC 61850 substations and the back-office ESBs with CIM and whatever, control centers, the whole "smart grid" thing, then easy to use tools that allow users to work at a higher level, dissociated from the nuts and bolts of the communications protocols etc, are vital.

At the IEEE PES General Meeting in Calgary this year there is to be a panel session on the use of open source software (OSS) in the area of power system analysis. But why not also open source software in IEC 61850 systems integration? I can't be at Calgary (it's a long way from Sydney!) so I thought I would share with you some thoughts I sent to the session chairman.

It would be interesting to know if anyone has done any work to kick off something like this.

Several points occurred to me, none of them perhaps particularly earth-shattering of themselves, but when you put them all together it leads me to conclude that use of the OSS could be a fairly useful idea to

develop user-oriented IEC 61850 tools. My reasoning was (*and some of the observations state the obvious*):

- Software is expensive to develop, and good software applications are very expensive.

- The price of software is dictated by the cost to develop it, spread over how many licenses can be sold

- The market for IEC 61850 system integration and related tools is limited to a few "seats" at a small number of sites (compared with sales numbers for "office" type applications).

- The number of developers of integration tools capable of working across systems with IEDs from different vendors is increasing (UTInnovation / Helinks, Kalkitech, ASE Systems, Triangle Microworks, Sisco... and no doubt others)

- Realistically they are not all going to make money out of the sale of the tools - the money is in the sale of the expertise in using them.

- The only real reason for doing it would be because they need it themselves, and selling it as a product is a plus.

- This amounts to a large total pool of money going into the independent development of a number of products, each of those products doing similar things.

SO

Why not put that same (or similar) total money from a pool of subscribers (maybe through the UCA Users Group, or a consortium of utilities, or manufacturers or whoever) to initiate an "open source" project to develop a suite of software based on the open source principles?

This would mean the same dollars overall (possibly even more) but a much better product at the end, because the dollars per product can be higher.

Even better, it will better align with the inter-operability dreams of all the users out there as whatever is done is open and freely modifiable. And it relieves each system integrator of the total responsibility for the code he would have had to develop in-house, while still allowing control over the particular parts of the code that matter to him, while also giving access to overall industry best practice. Of course, there are a myriad issues to resolve, but I think it might have potential.

Rob Corke, Australia

PAC World: Dear Mr. Corke, thank you very much for starting a very important discussion. We agree that one of the keys for the success of IEC 61850 is the tools and hope that others will express their opinion as well.

pac world

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