Developers Workshop for IEC 61850 Client/Server and Publisher/Subscriber Applications Myong Ji University, Yongin/Korea, 11 March 2011

Lite Implementation using the SystemCorp software and the Beck Chip (API in the workshop on PCs using a DLL is same as on the Beck Chip)

Objective of the training:

Students will learn how to use an API for IEC 61850 (IEC 61400-25) for Client, Server (C/S), Publisher, and Subscriber (P/S) Applications. The API provides an IEC 61850 Stack (included in a Windows DLL) that is used by application software written in C, C++ and C#. Prior to the event, students will receive the DLL, that runs for 6 months, and sample executable and source code for the applications. Students that bring their own Notebooks will be trained to modify and extend the application examples. After the training sessions students can continue to write their own application software and run the DLL for up to 6 month.

During the course it will also be shown how the API (same as for Windows) is used on an embedded platform: Beck IEC61850@CHIP. The Beck Chip is running on the development kit (DK 61). Students may want to purchase a development kit after the event.

Who should attend:

Application and communication programmers that are looking for an easy and fast start integrating IEC 61850 in applications (on PCs and embedded platforms), Lab engineers, SAS project engineer, Smart Grid Engineer, master and PhD students.

Schedule

Instructor:

Karlheinz Schwarz (Chair, IEC 61400-25-6) Hyuk Soo Jang (Chair, IEC 61850-90-3)

- 0. Registration at 13:00.
- 1. Introduction into IEC 61850 [30 minutes]
- 2. Introduction of API [30 min]
- 3. Demonstration of API and programming applications [30 min]
- 4. Exercises for C/S and P/S present [30 min]

Break [20 min]

- Configuration of Exercise #1: C/S and P/S (modify SCL file [add data set, add GOOSE Control block, start server, interpret SCL file, modify values, see GOOSE messages, connect from client) [30 min]
- 6. Test at run time with IEDScout [30 min]
- 7. Program of Exercise #2: C/S (add 2nd Temperature value in application C-Program and in SCL) [30 min]
- 8. Test at run time with IEDScout [30 min]
- 9. Finish at 18:00

일시: 2011년 3월 11일 금요일 13:00 - 18:00

장소 : 명지대학교 자연캠퍼스 제5공학관 컴퓨터공학과 5701호

주제: IEC 61850 개발자 교육

주최: 명지대학교 컴퓨터공학과 ACCS Lab.

후원: 한전 전력연구원