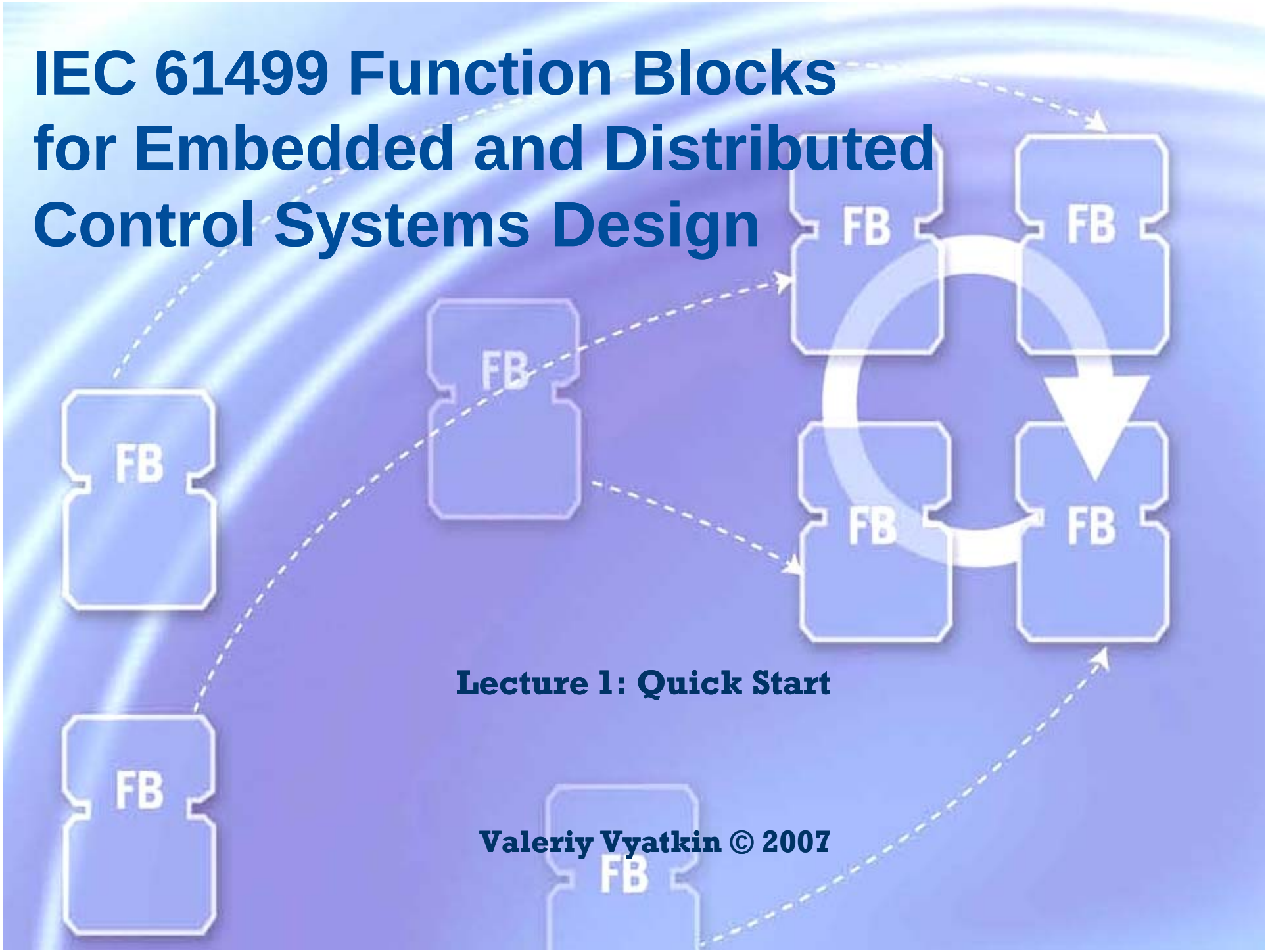
IEC 61499 Function Blocks for Embedded and Distributed Control Systems Design



Lecture 1: Quick Start

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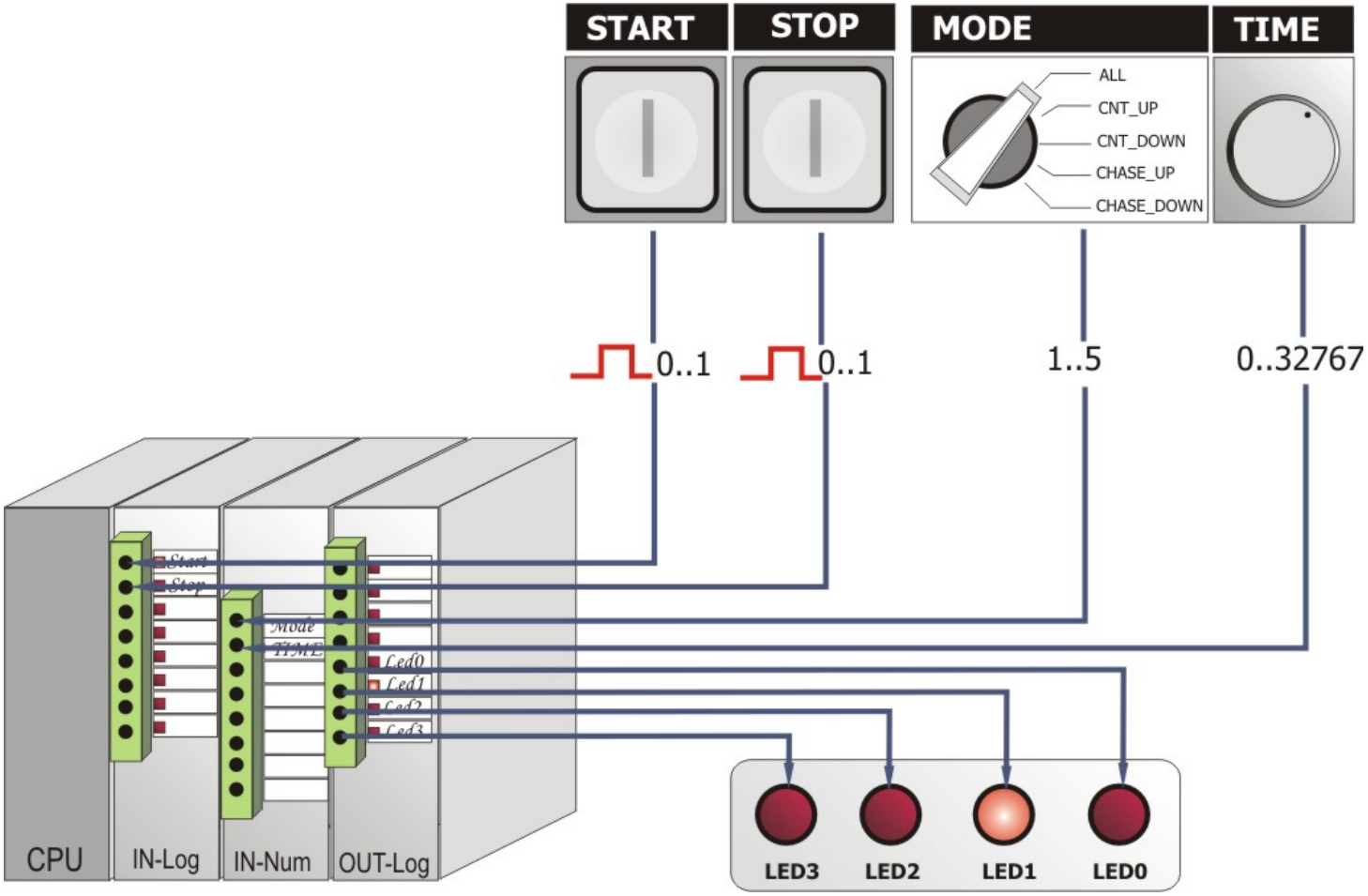
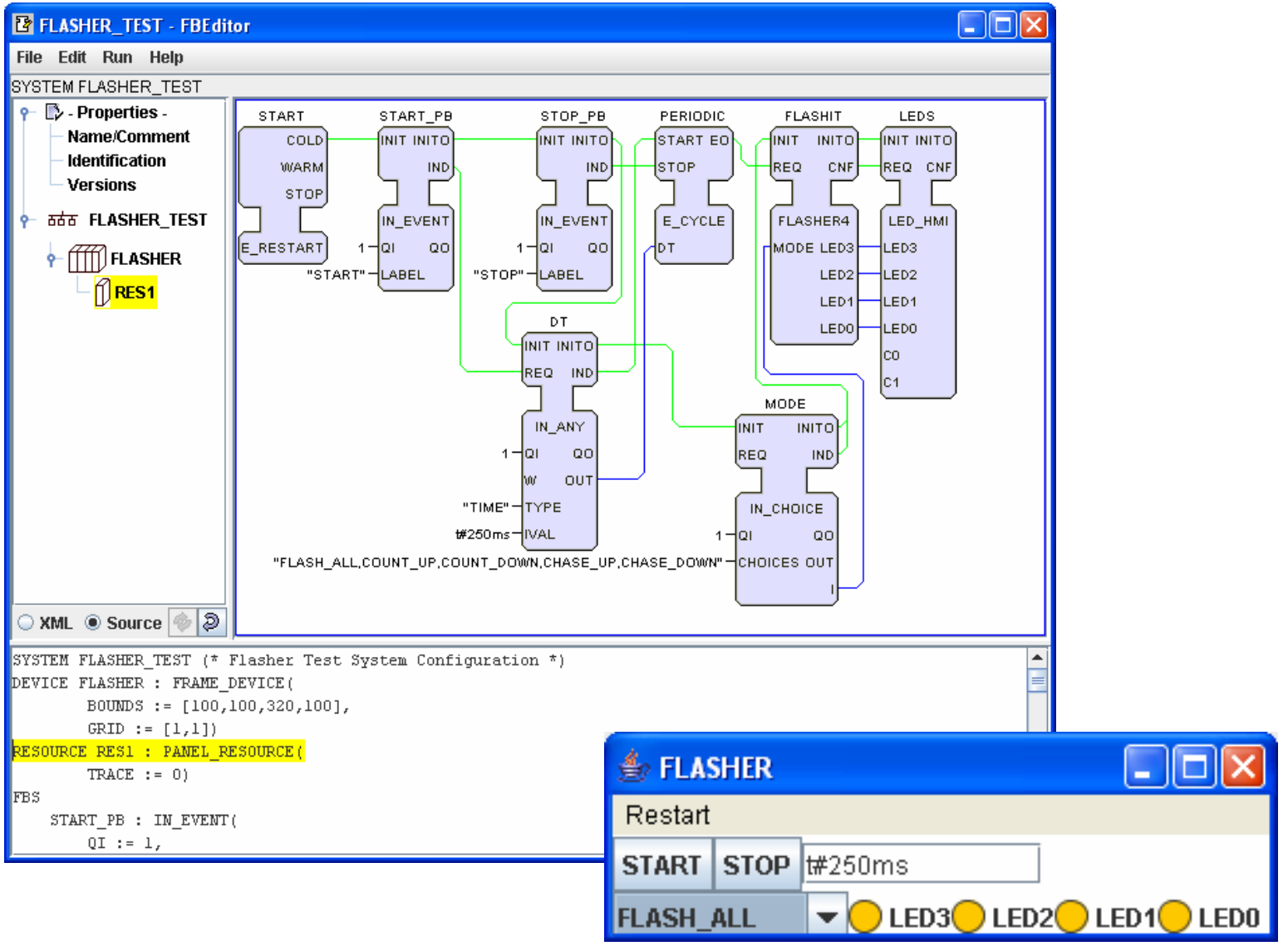
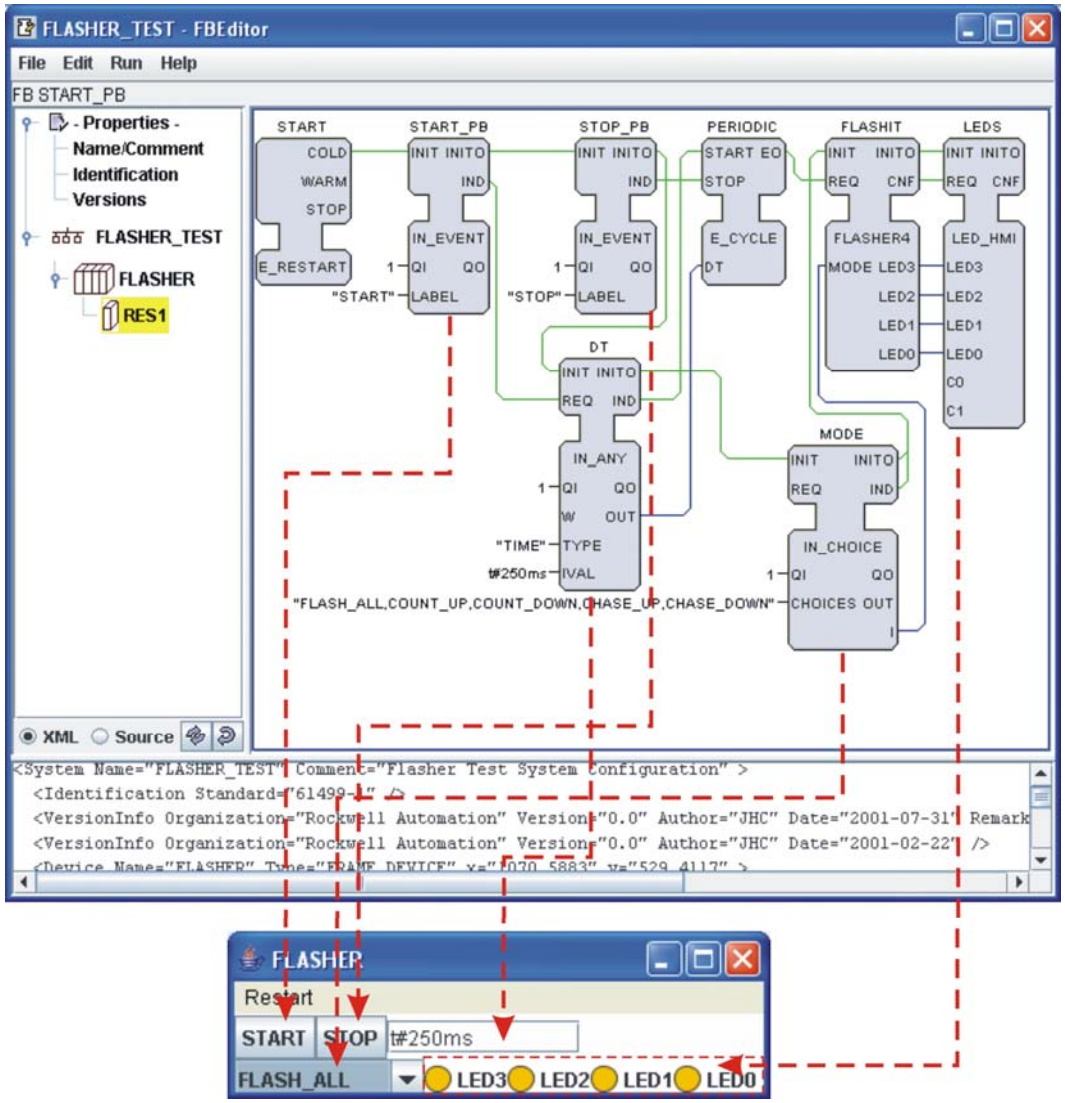
Flasher with parameters setting



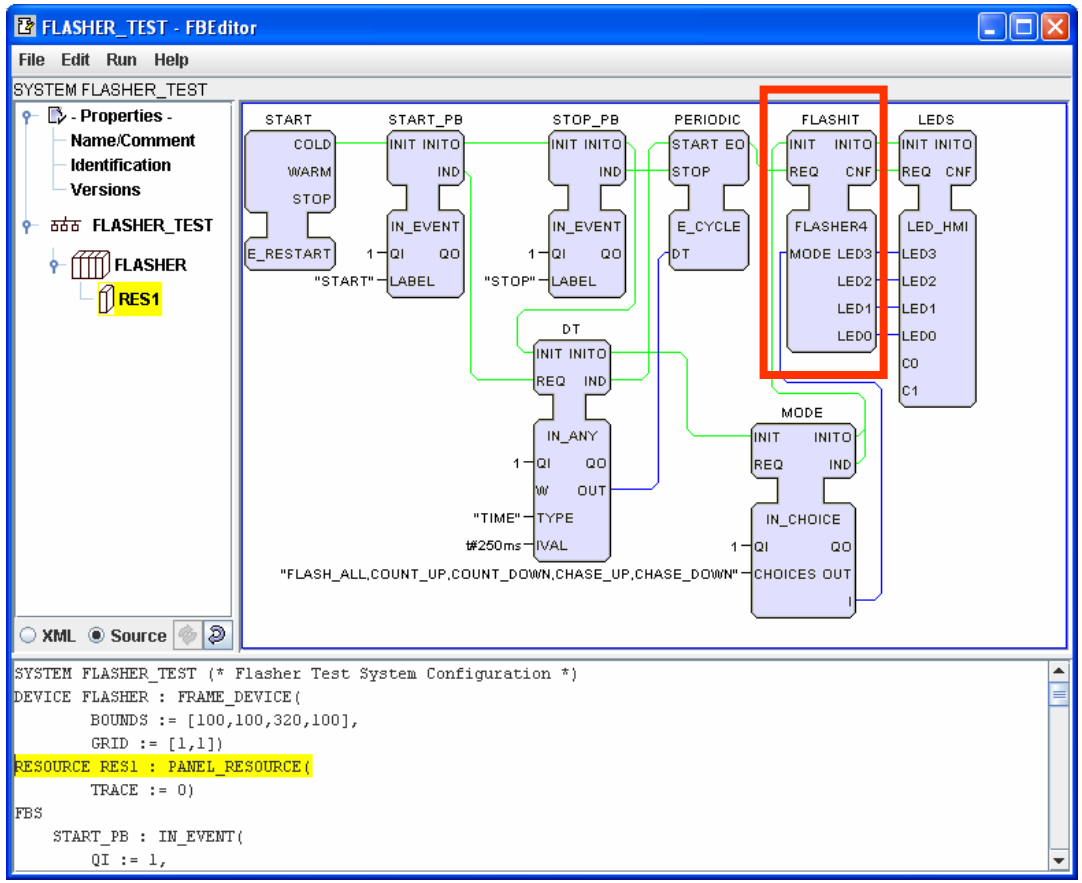
Function Block Model of the Flasher

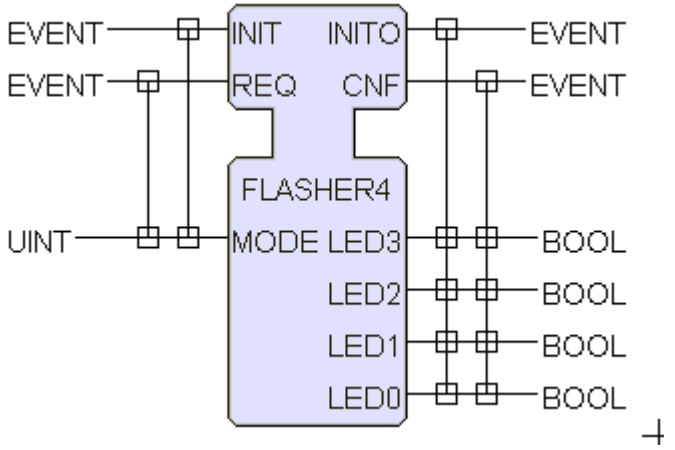


Function Block Responsibilities

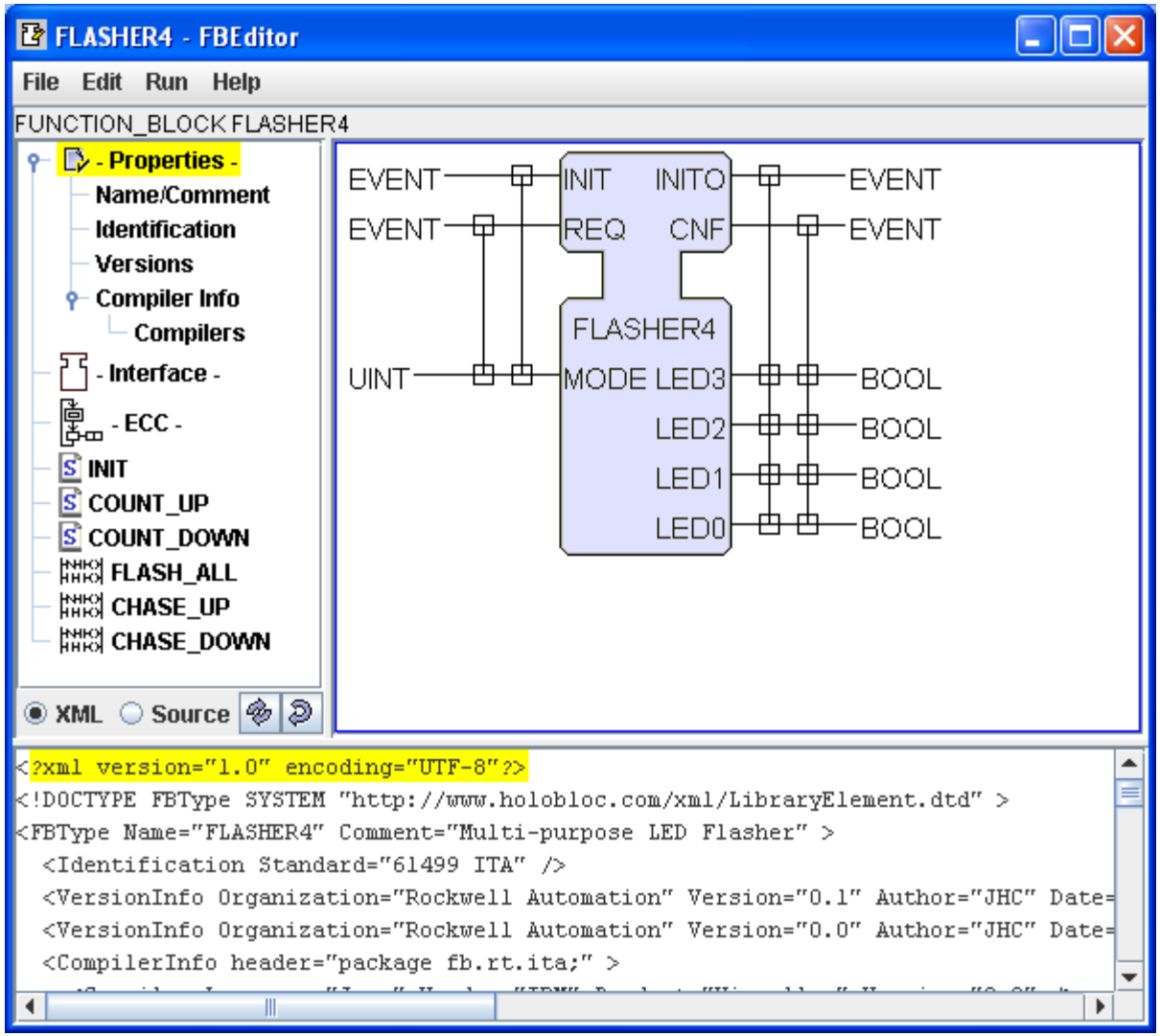


Function Block Model

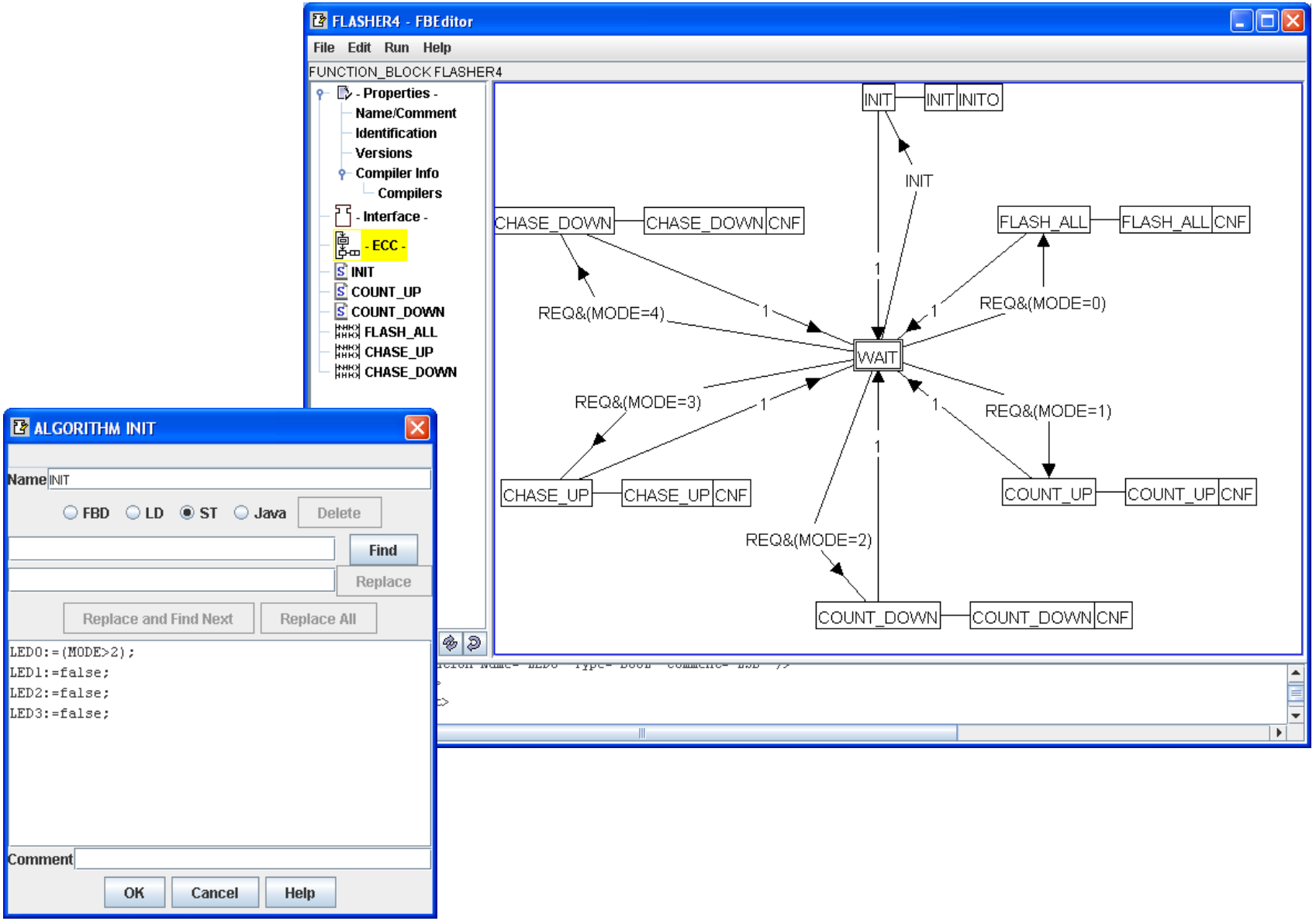




Basic Function Blocks: FLASHER4

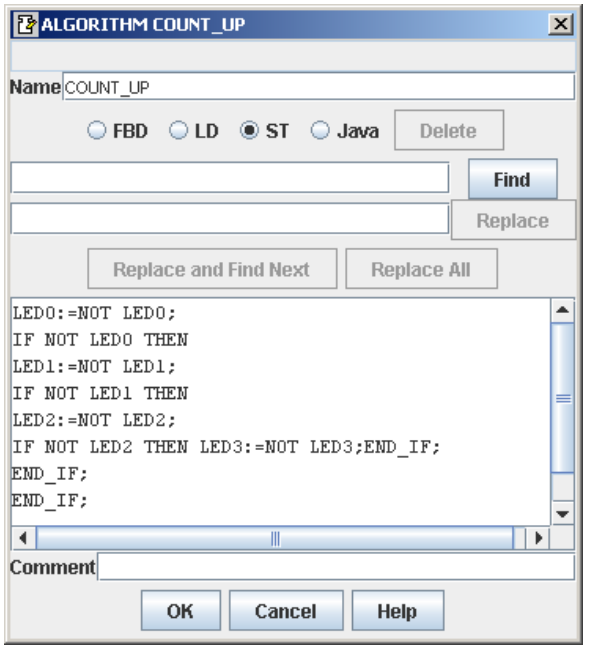


ECC and Algorithms

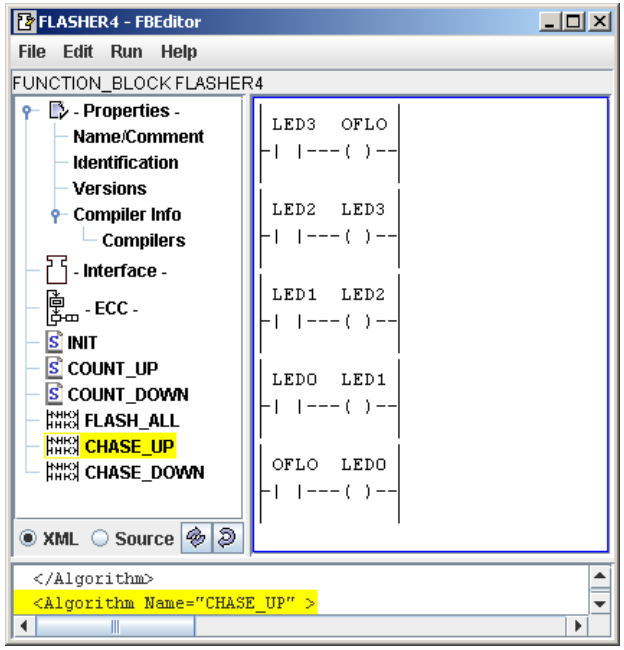


Algorithms

Algorithms in the same basic function block can be defined in different programming languages



Algorithm in structured text



Algorithm in ladder logic

Summary

- IEC 61499 is used to model and implement distributed automation systems
- The function block is an abstract model representing a function that can be implemented by software or even by hardware.
- Function blocks are activated only by external events
- Function block behaviour can be described in different programming languages
- Writing a program with function blocks involves drawing a network of function blocks and allocating them to a device for execution