Spiral2 control COMMAND: A STANDARDIZED INTERFACE between high level applications and EPICS IOCs

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The Spiral2 project

Tomorrow’s physics is under preparation at GANIL. The future SPIRAL2 linear accelerator will produce light and heavy exotic nuclei at extremely high intensities. These entirely new particle beams will make it possible to explore the boundaries of matter. SPIRAL2 (Second Generation System On-Line Production of Radioactive Ions) is a linear particle accelerator project for the study of fundamental nuclear physics and multidisciplinary research. This facility, which is as large as the current GANIL installation, will produce the only beams of their kind in the world, starting in 2012.

Accelerator construction

After the design period for the whole process, the building construction started by the beginning of this year to be achieved in 2012.

EPICS modules Specification template

1 Requirements & Constraints
- Definition of the general context of use
- Identification of HW constraints & SW dependencies
- Expression of performance requirements

2 Functions Specification
- Specification of the functionality needed by OPI

3 Architecture : Static Model
- Functional packages definition relying on stable data

4 Architecture : Dynamic Model
- Defines events triggering EPICS DB processing
- Defines the EPICS DB activities
- Defines the sequence of activities execution

Guide with functions calling sequences examples

Definition of specific treatment or algorithm

Package UML diagram defined for the profiler DB

Main Activity UML diagram of the profiler DB

Sequence UML diagram showing how to use of the profiler