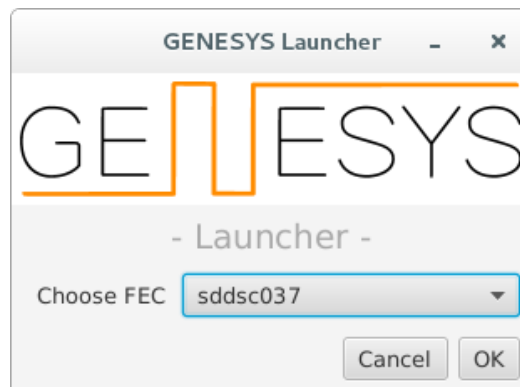


Introduction to Genesys Software for the control of exploder FTRN

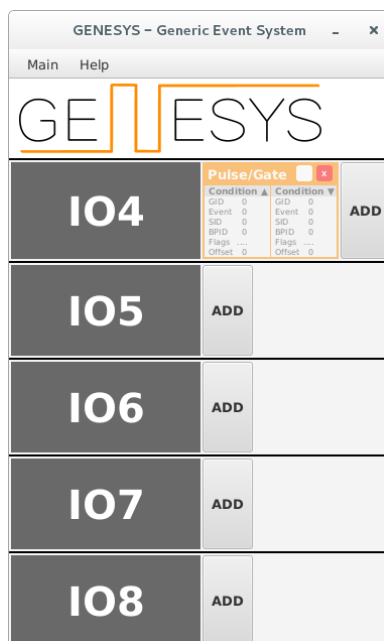
The Genesys programme has been written by T. Milosic (Beam Instrumentation Dept.) as a tool for commissioning and trouble shooting. With this SW a configurable number of exploder outputs can be freely programmed.

The software can be started from the ACO Launcher.

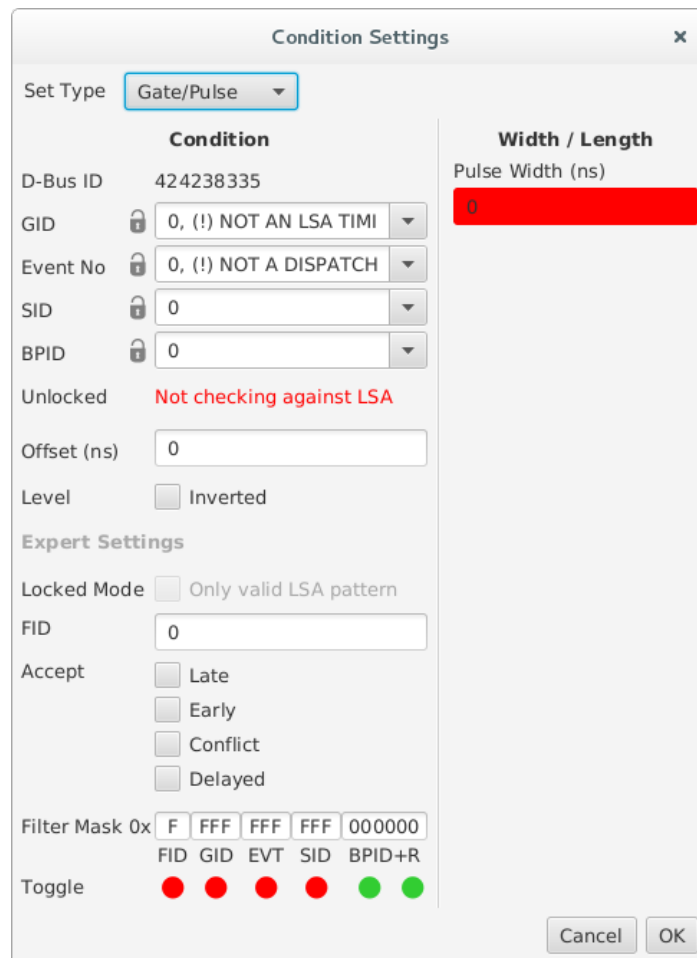
1. Start “genesys” application and select correct front-end controller (FEC): sddsc037



2. The SW starts (with last settings on exit)



3. Click “ADD” to create a setting icon (for example “Pulse/Gate”)



The image shows a 'Condition Settings' dialog box with the following fields and options:

- Set Type:** Gate/Pulse (selected)
- Condition:**
 - D-Bus ID: 424238335
 - GID: 0, (!) NOT AN LSA TIMI
 - Event No: 0, (!) NOT A DISPATCH
 - SID: 0
 - BPID: 0
 - Unlocked: Not checking against LSA
 - Offset (ns): 0
 - Level: ☐ Inverted
- Width / Length:** Pulse Width (ns): 0
- Expert Settings:**
 - Locked Mode: ☐ Only valid LSA pattern
 - FID: 0
 - Accept: ☐ Late, ☐ Early, ☐ Conflict, ☐ Delayed
 - Filter Mask 0x: F FFF FFF FFF 000000
 - Toggle: FID (red), GID (red), EVT (red), SID (red), BPID+R (green), BPID+R (green)

Buttons: Cancel, OK

4. For a single pulse one needs to define:
 - a. GID (Group ID), Event No, SID (Sequence ID), BPID (Beam Process ID)
 - b. Offset (ns)
 - c. Pulse Width (ns)
 - d. Activate filter on BPID at the bottom by clicking on green icon
 - a) The relevant numbers can be extracted with the help of the “snooptool”.
 - b) **IMPORTANT: The Filter Mask works from “left to right” and operates on those values that are marked with red button. To deactivate the filter for SID, click on the red icon.**
 - c) **Example: You cannot deactivate the EventNo filter without deactivating the SID filter at the same time.**
5. Set output active by ticking the box next to the icon description (see arrow!)

GENESYS – Generic Event System

Main Help

GEESYS

I04	<div><div>Pulse/Gate</div><div><div>Condition ▲</div><div>Condition ▼</div><div><div>GID 0</div><div>Event 0</div><div>SID 0</div><div>BPID 0</div><div>Flags ...</div><div>Offset 0</div></div><div><div>GID 0</div><div>Event 0</div><div>SID 0</div><div>BPID 0</div><div>Flags ...</div><div>Offset 0</div></div></div></div> <div>ADD</div>	
I05	ADD	
I06	ADD	
I07	ADD	
I08	ADD	