The
TrackFinder GUI

Lindsey Gray / Holger Stöck
University of Florida
Crate/Slot Level

Crate

Slots

Crate Tree Area

Window Area
SP02 Board Level

Boards

Higher level SP02 command panel windows
SP02 Chip Level

SP02 FPGA Chips

FPGA Muon Registers

FPGA/Muon Registers for parallel addressing
SP02 Register Level

SP02 Registers

Read/write hex values into individual registers
NEW: Sector Processor Registers

Sector Processor FPGA

New XML setup routine probes for available registers in all FPGAs
CCB Board Level

Boards

Higher level CCB command panel windows
CCB Registers

Read/write hex values into individual registers
NEW: TTCvi Window

Allows for quick configuration of the TTCvi
Backend currently makes calls to console programs of the TrigDAQ package

Controlled through one class for easy maintenance and possible extensions

Class can easily be modified to use SOAP messaging for XDAQ
The TFGUI parses XDAQ address tables to generate available registers for the crate tree

The layout of boards within the crate is given by a XDAQ-style XML file made for the TFGUI

```xml
<Partition name="TrackFinderCrate">
  <Definitions>
    <ClassDef>SP</ClassDef>
    <ClassDef>CB</ClassDef>
    <ClassDef>NF</ClassDef>
    <ClassDef>STC</ClassDef>
  </Definitions>

  <Host id="0" url="http://accept:40000">
    <Application class="SPT0000">
      <DefaultParameters>
        <Parameter name="hardwareAddressTable" type="string" value="../Data/TrackFinderCrate/SectorProcessor2002.xml/AddressTable_SP2002.xml"/>
        <Parameter name="executable" type="string" value="../bin/Linux_2.6.18/readwriteRegister"/>
        <Parameter name="NUMslot" type="int" value="81"/>
      </DefaultParameters>
    </Application>
  </Host>
</Partition>
```
To Come

• Add MPC interface for backend (for in-Crate tests)
• Add more panels for configuration and higher level commands (in progress)
• Add panels for crate wide configuration and testing procedures
• Replace console program calls with XDAQ SOAP messages
• Add B-GO section to the TTCvi control window
• ...