The TrackFinder GUI

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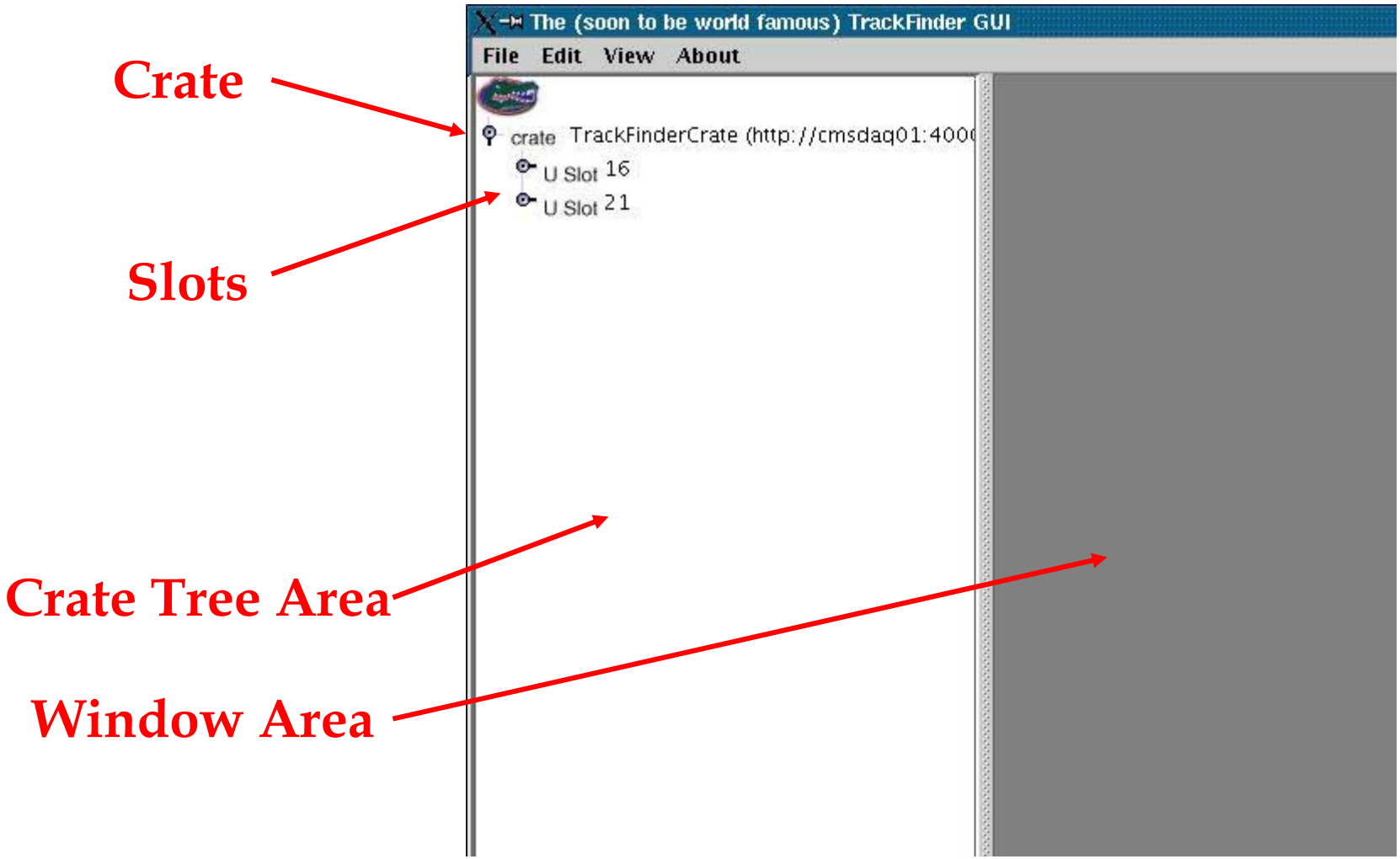
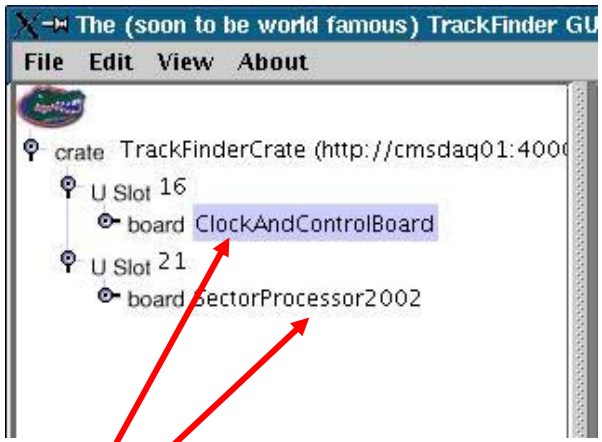
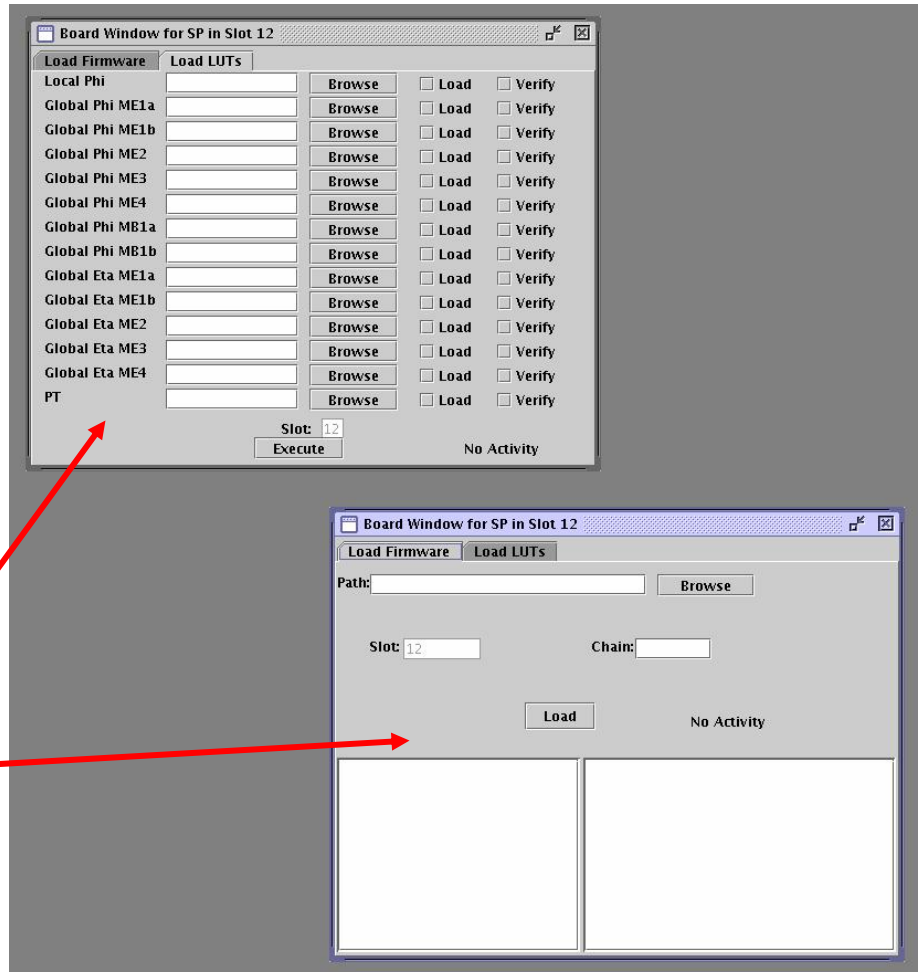
Crate/Slot Level



SP02 Board Level





Boards

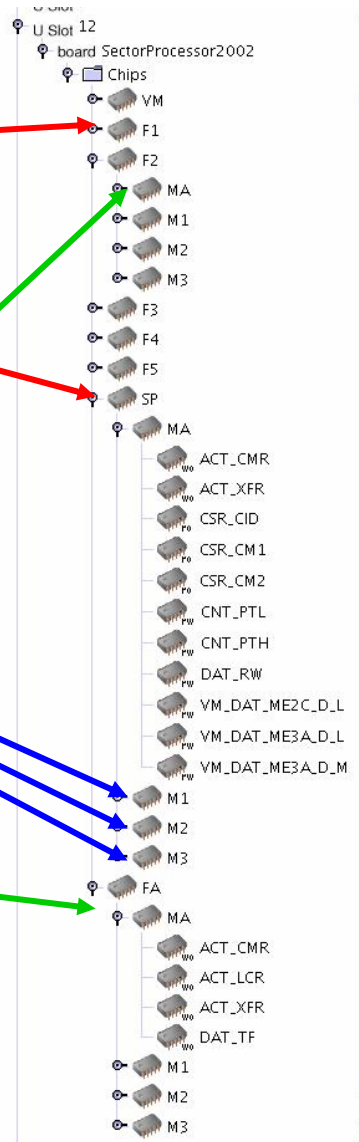
Higher level SP02 command panel windows

SP02 Chip Level

SP02
FPGA
Chips

FPGA
Muon
Registers

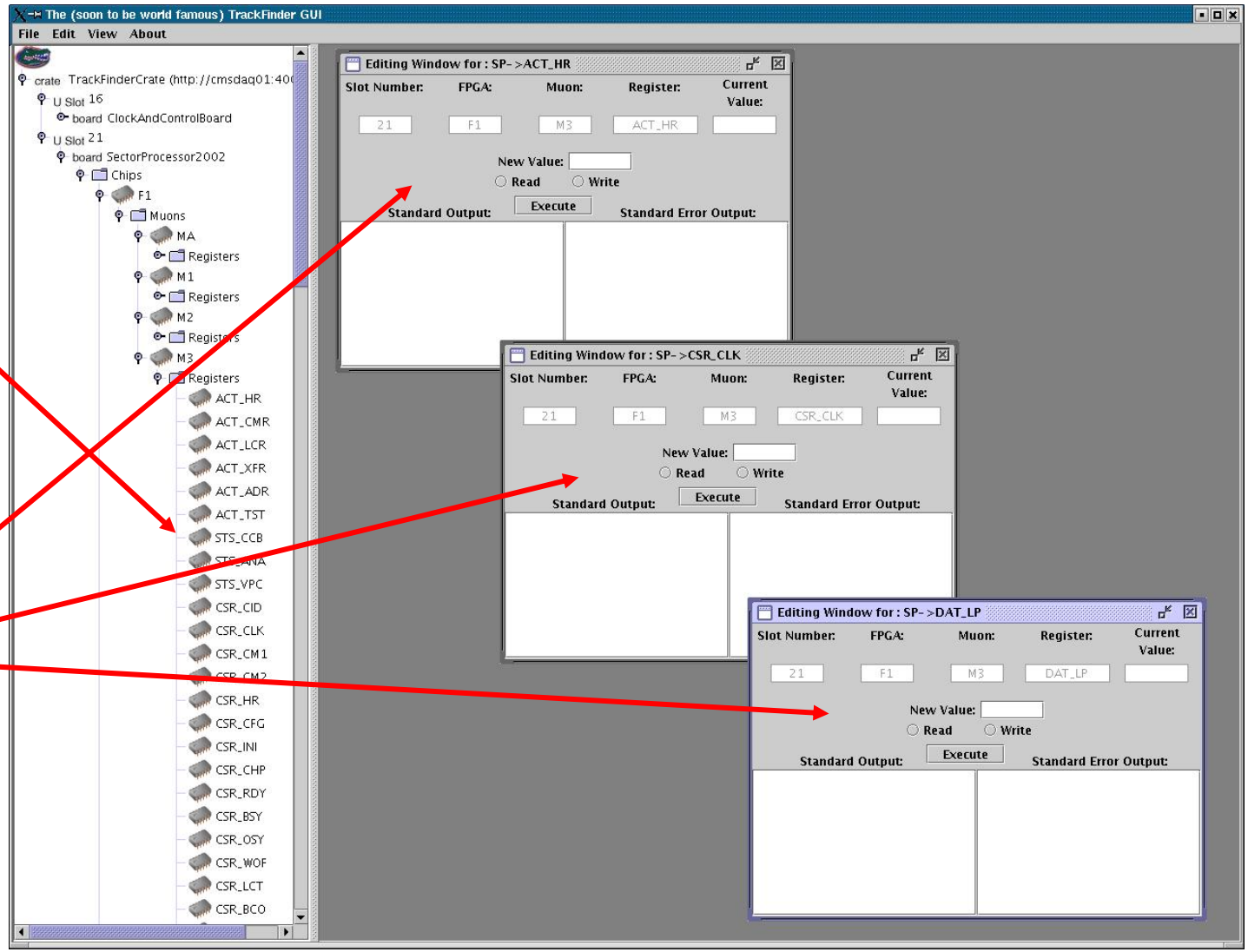
FPGA/Muon
Registers for
parallel
addressing



SP02 Register Level

SP02 Registers

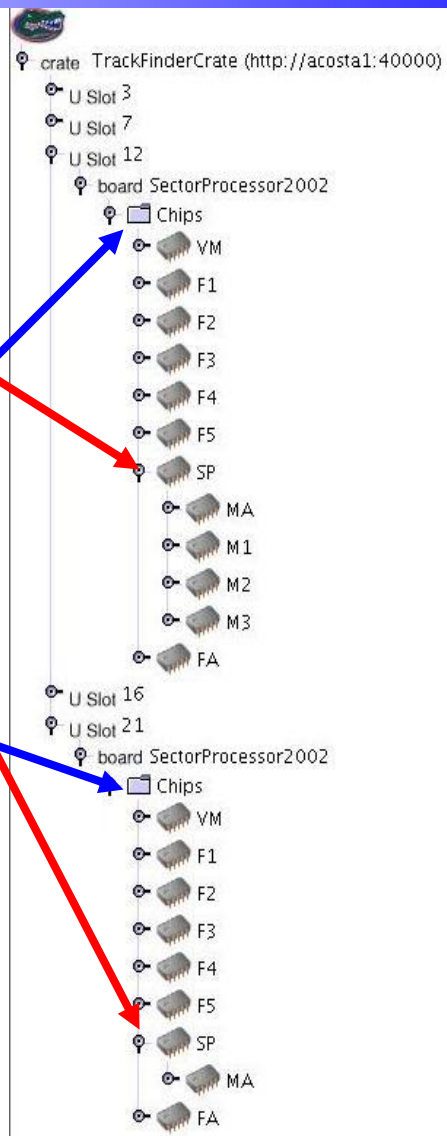
Read/write hex values into individual registers



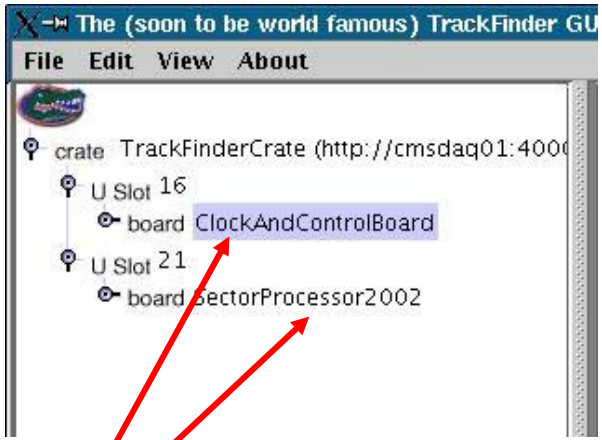
NEW: Sector Processor Registers

SectorProcessor FPGA

New XML setup routine probes for available registers in all FPGAs

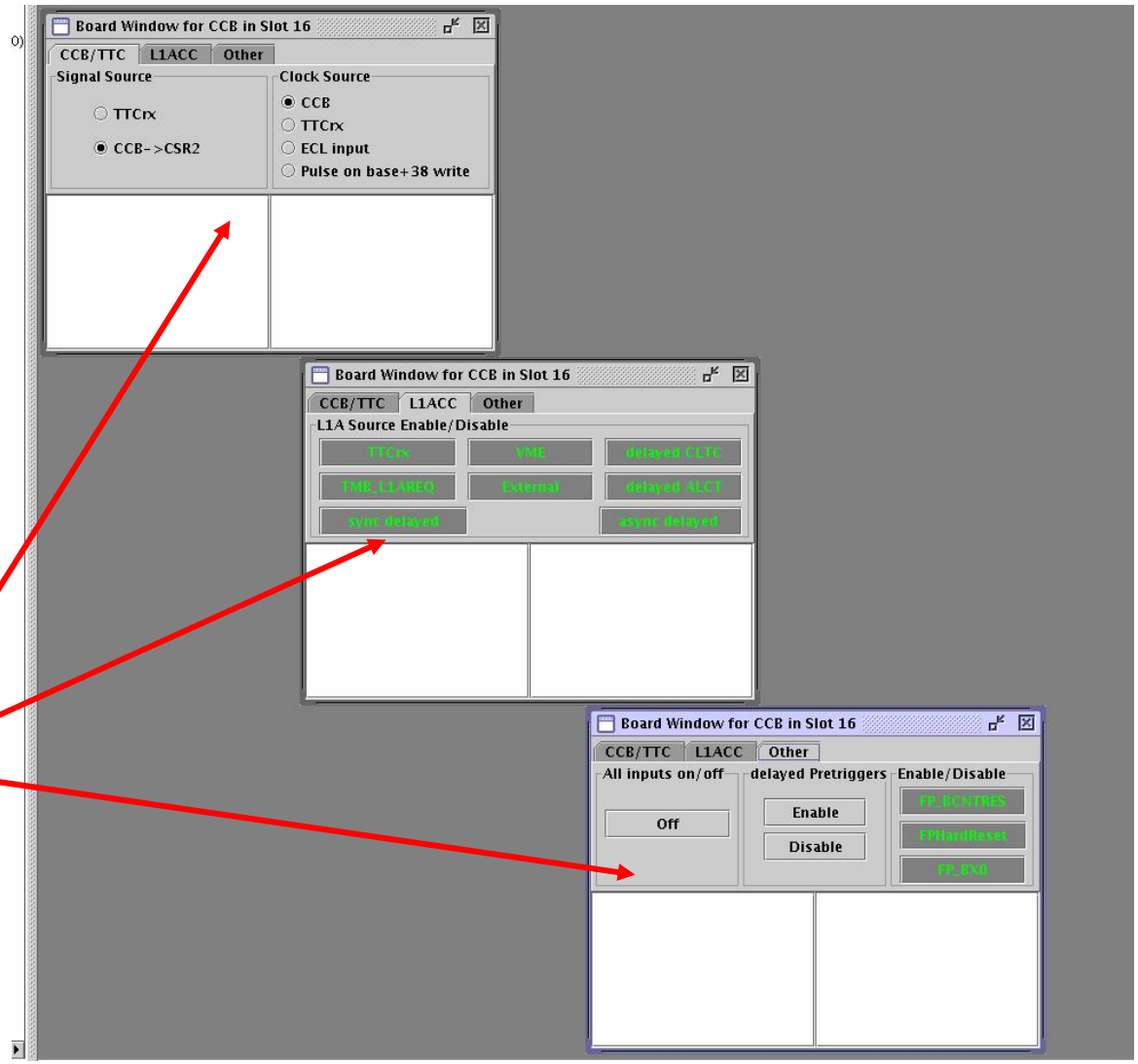


CCB Board Level



Boards

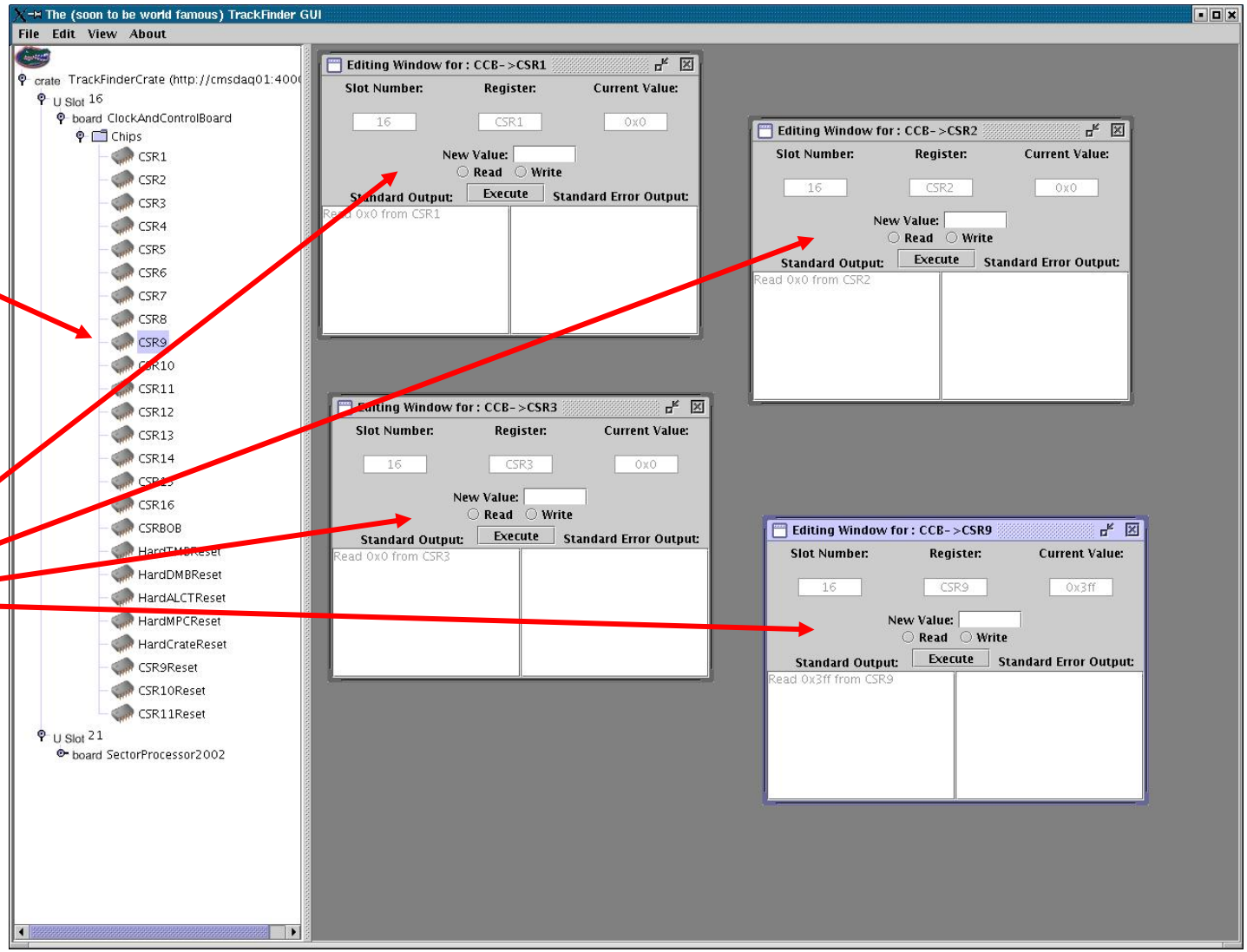
Higher level CCB command panel windows



CCB Register Level

CCB Registers

Read/write hex values into individual registers



NEW: TTCvi Window

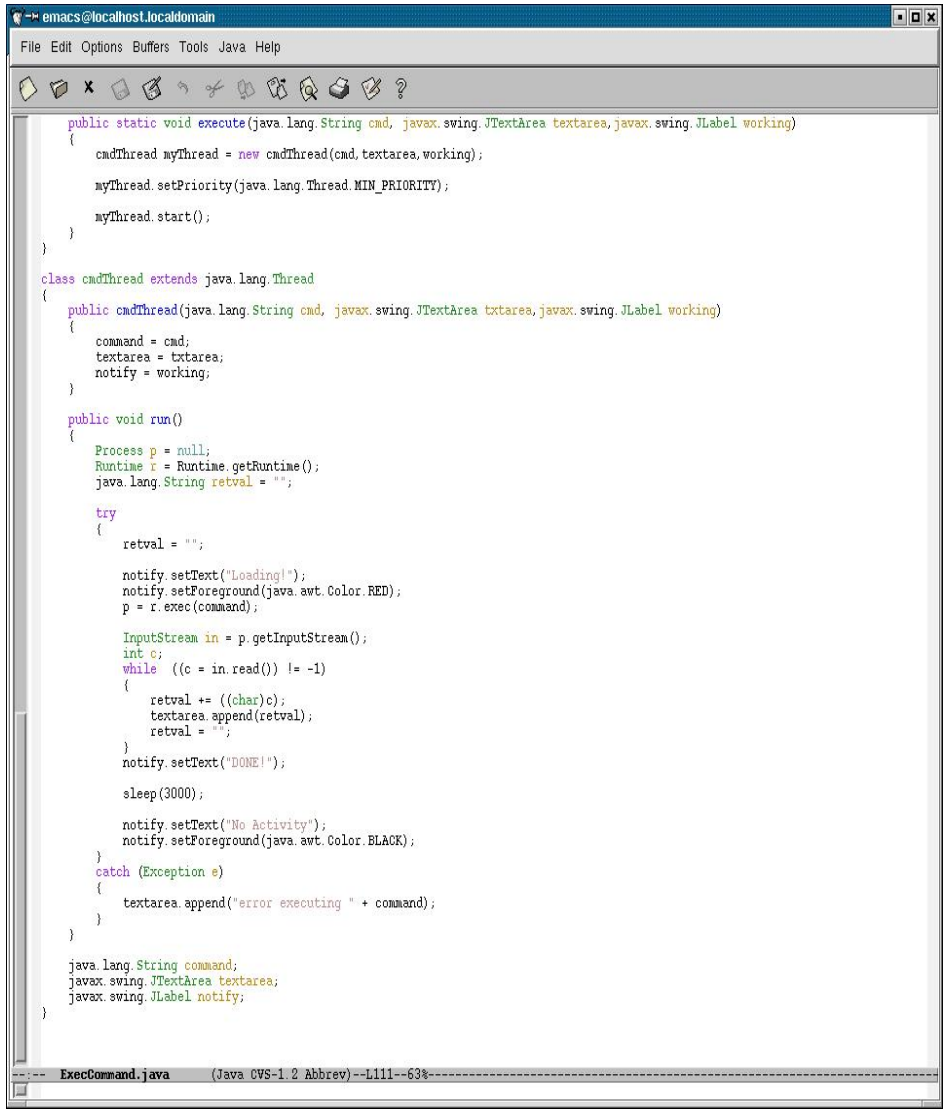
Allows for quick configuration of the TTCvi

Backend: System Interface

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



Backend: XML

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

```
<Partition name="TrackFinderCrate">

    <Definitions>
        <ClassDef>SP</ClassDef>
        <ClassDef>CCB</ClassDef>
        <ClassDef>MPC</ClassDef>
        <ClassDef>TTCvi</ClassDef>
    </Definitions>

    <Host id="0" url="http://acosta1:40000">

    <Application class="SP2002">
        <DefaultParameters>
            <Parameter name="hardwareAddressTable" type="string" value="../../../TrigData/TrackFinderCrate/SectorProcessor2002/xml/AddressTable_SP2002.xml"/>
            <Parameter name="executable" type="string" value="../../bin/Linux__2.2/readwriteRegister"/>
            <Parameter name="VMEslot" type="int" value="21"/>
        </DefaultParameters>
    </Application>
```

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
- …