

**REMAINING ISSUES:
EVENT BUILDER
LEVEL 3**

27 January, 1999

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Contents

Event builder

Level 3 hardware and control framework

Level 3 executable

Event builder (1)

Unresolved performance issues

- None

Unresolved system integration issues

- Full-path tests with free-running trigger in progress
- Interface software for Trigger Manager 3/4 complete (working prototype in Feb)
- Ace-usable control panel + docs (May)

Unresolved hardware/software infra. issues

- Half of the VME CPUs must be upgraded from Universe I VME chip to Universe II (end of May)

Purchasing schedule

- (April) Order ATM switch modules to expand to 16x16
- (April) Order 17 SCRAMNet VME cards

Event builder (2)

Special reset/recovery requirements

- No front-end components
- Ace will be able to reboot VME CPUs

Documents

- Design and performance tests - existing CDF 4101, 4587, 4623, and 4789
- Past mini-review presentations
<http://mit4.fnal.gov>
- Formal developer's docs – in the works
- Ace-level (user) - non-existent

Online software

- Online cluster CVS repository
Module cdfevb
- Online cluster reference copy
setup cdfevb
`printenv | grep CDFEVB`

Level 3 farm hardware and control framework (1)

Unresolved performance issues

- Expansion to 16 sub-farms

Unresolved system integration issues

- Testing full data path (untriggered) VRB through to reformatter (TRYBOS)
- Interface of output nodes to consumer server(s)

Unresolved hardware/software infra. issues

- Calibration and geometry databases

Purchasing schedule

- Bids/orders for cosmic run April-May 1999
Install in July
- Bids/orders for Run 2 Oct-Nov 1999
Install in Jan-Feb 2000

Level 3 farm hardware and control framework (2)

Special reset/recovery requirements

- No front-end components
- Ace control panel

Documents

- Existing design document CDF4551
- Past mini-review presentations
<http://mit4.fnal.gov>

Online software

- Online CVS repository
Module "level3"

Level 3 executable (1)

Unresolved performance issues

- CPU requirements still very uncertain
No final trigger table
Important chunks of code missing

Unresolved system integration issues

- Level 3 event header format (used by monitoring and consumer server(s))

Unresolved hardware/software infra. issues

- Calibration and geometry databases

Production schedule

- July 1999 – offline code usable by collaboration to make offline executables
- Sept 1999 – code development platform to let collaborators build and validate online executables. Full online tool kit.

Level 3 executable (2)

Special reset/recovery requirements

- No front end presence
- Log files, core files
- Hope to save events that cause crashes

Documents

- Existing design document – CDF4434
- In the works – L3 executable builder's guide

Offline software

- CDF Offline CVS repository
 - Level3Mods – I/O modules
 - Level3 – build job
 - Level3Control – online interface package
 - TrackingMods – regional tracking
- The Level3 package is not distributed by default but is available

To do

Feb '99

Working prototype of Trigger Manager interface to event builder.

Apr–May '99

Order ATM switch expansion.

Order VME SCRAMNet.

Bids/orders for L3 hardware – cosmic run.

Jul '99

Install new L3/EVB hardware.

L3 offline code buildable by collaboration.

Sep '99

L3 online code buildable by collaboration.

Oct–Nov '99

Bids/orders for L3 hardware – Run 2.

Jan–Feb '00

Install new L3 hardware.