



Production & Infrastructure

MDC4 production overview

Finding your way around (WEB)

Data set location

Statistics, Chains ...

Horror Stories

Memory consumption

Infrastructure

Resources now and then ...

Disk space re-allocation

Future Plans





MDC4 production overview

Finding your way around

`/STARAFS/comp/prod/ProdSummary.html`

`/STAR/html/comp_1/mdc/MDC4_general.html`

`/devcgi/dbMCDataSetQuery.pl`

Data set location

- All log files are in `/star/rcf/prodlog/MDC4/log/trs`.
- `/star/data11/MDC4/reco/auau200/mevsim/mdc4_cocktail/central/year2001/hadronic_on/trs`
`/star/data14/MDC4/reco/auau200/mevsim/mdc4_cocktail/vertex_5_3/year2001/hadronic_on/trs` contains the Au+Au mevsim simulations.
- `/star/data14/MDC4/reco/pp200/pythia/default/minbias/year2001/hadronic_on/trs`, contains the pp events.
- `/star/data14/MDC4/reco/auau200/starlight/mdc4/default/year2001/hadronic_on/trs`
`/star/data14/MDC4/reco/auau200/starlight/mdc4/f21270/year2001/hadronic_on/trs`
`/star/data14/MDC4/reco/auau200/starlight/mdc4/rho/year2001/hadronic_on/trs` contains the peripheral events.

Chains, statistics

<i>Data Set</i>	<i># of events</i>
Au+Au 200, mevsim	20 K
Au+Au 200, mevsim vtx	12 K
p+p 200, Pythia	124 K
Au+Au 200, peripheral	93 K





MDC4 production overview

Chains used

MDC4, ppMDC4, PostMDC4

Details can be found at

/STARAFS/comp/ofl/software_releases.html

To keep in mind

MDC4 chain change on May 1st

Emc, FTPC and QA changes

/STAR/html/comp_1/mdc/MDC4_general.html

Also announced by Lidia in starsoft

Changes on May 5th : PostMDC4 chain

FTPC bug fix, sss fixes

Change from srs to sss





MDC4 production overview

Horror stories ?

HPSS hick-ups

version 4.2 problems (IBM contacted)

Some major disk problems

New ZZZZX Raid disk unreliable so far

Does not seem to perform as expected

NO real effect on production

~ 85 % run-time

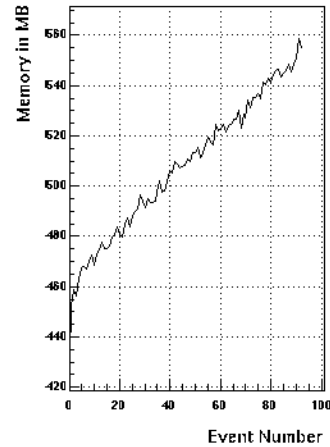
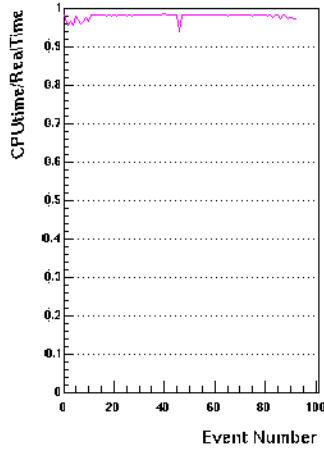
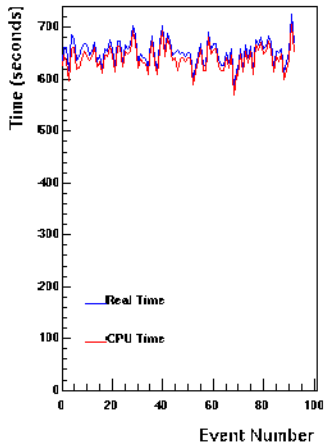




Memory Consumption

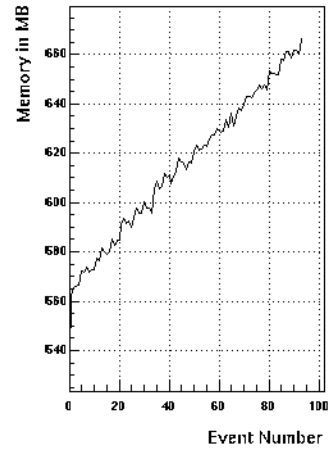
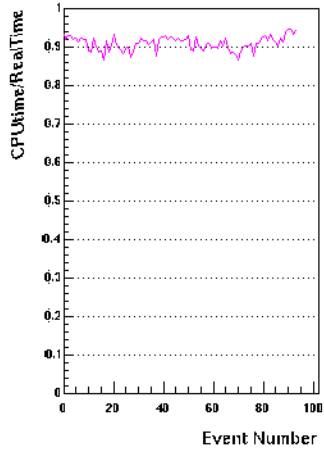
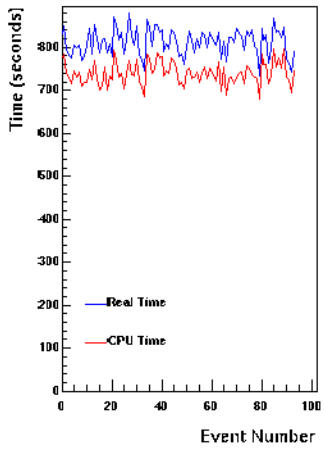
MDC4

Loss/20 events = 19.67 MB



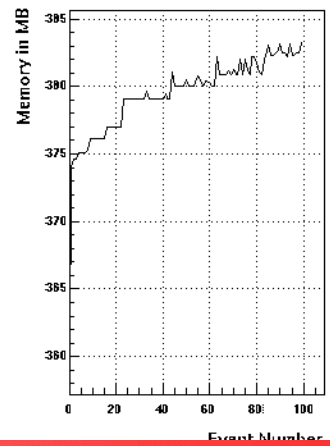
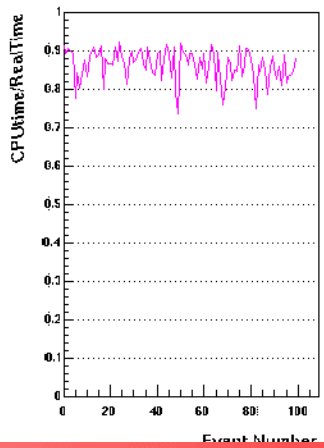
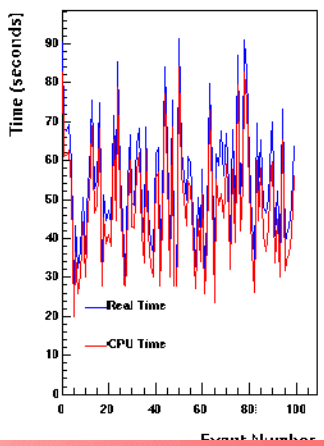
Post MDC4

Loss/20 events = 17.99 MB



ppMDC4

Loss/20 events = 17.76 MB





Memory Consumption

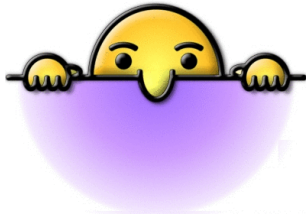
<i>Chain</i>	<i>Time/event (sec)</i>	<i>Loss MB/20 events</i>	<i>Typical</i>
MDC4	650	19.67	Au+Au
ppMDC4	50	17.76	pp
postMDC4	750	17.99	Peripheral

Some work to be done

Profiling ?

Code Sanity ?





Infrastructure

Resources (now)

cas : 48 nodes, 6001 to 6048

018 to 027 LSF only (no interactive)

6004 reserved fro QA

crs : 49 nodes, 6001 to 6049

Confusing ?

Resources (after upgrade)

cas : 60 nodes

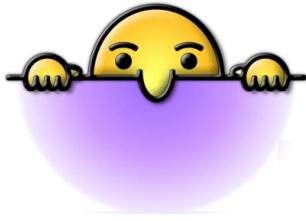
Will make the last 10 for LSF only

crs : 37 nodes, but with more resources

2* faster CPU, twice the memory

Will be equivalent to 148 actual crs





Infrastructure

Disk Space

<i>Disk name</i>	<i>Size GB</i>	<i>Purpose</i>
/star/data01	372	PWG
/star/data02	372	User scratch
/star/data03	372	Production
/star/data04	372	Simulation/Staging
/star/data05	372	Production
/star/data06	372	Production
/star/data07	417	Production
/star/data08	417	DAQ
/star/data09	372	Grand Challenge
/star/data10	100	Grand Challenge
/star/data11	500	Production
/star/data12	360	Production
/star/data13	1000	Unkonwn
/star/data14	1000	Unkonwn
/star/data15	1000	Unkonwn
/star/data16	717	Unkonwn
/star/data17	500	Unkonwn
/star/data18	860	Unkonwn
/star/data19	1000	Unkonwn
/star/data20	1000	Unkonwn
/star/data21	1000	Unkonwn
/star/data22	300	Unkonwn

<i>Disk name</i>	<i>Size GB</i>	<i>Purpose</i>
/star/data01	372	PWG
/star/data02	372	PWG
/star/data03	372	PWG
/star/data04	372	Simulation/Staging
/star/data05	372	User scratch
/star/data06	372	User scratch
/star/data07	417	DAQ
/star/data08	417	DAQ
/star/data09	372	?
/star/data10	100	Grand Challenge
/star/data11	500	Production
/star/data12	360	Reserve
/star/data13	1000	Production
/star/data14	1000	Production
/star/data15	1000	Production
/star/data16	717	Production
/star/data17	500	Reserve
/star/data18	860	Production
/star/data19	1000	Production
/star/data20	1000	Production
/star/data21	1000	Production
/star/data22	300	Reserve

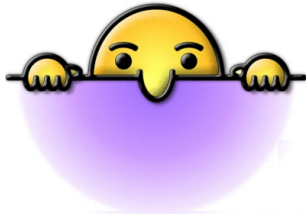
PWG space * 3

User scratch * 2

DAQ * 2

+ some reserve (catastrophe planning)





Future Plans

Library Build

Use of AutoBuild

Combined with AFS cloning

Greater stability

Transparent to user, easier export

Would appear only if code actually compiles

Retreiving files from HPSS

Useful for DAQ tests, PDSF export ...

DataCarousel : tool already tested

Will be released as soon as disk layout reshape is done.

Will require users to be reasonable

