ROOT plans for 2010

General Introduction
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General remarks

- ROOT5.26 used by Alice. Will be used by LHCb soon.

- I expect CMS (and may be Atlas) to move in the coming 2/3 months.

- No rush to produce a pro release in June.

- we will have to maintain 5.26 branches for a long time.

- It is unlikely that experiments will move to 5.28 unless there is a big bonus and no risks.

- We are at a TURNING point with opportunities and RISKS

Why a TURNING point ?

- After 15 years of development and releases, it is now time to think the system in 3 to 5 years from now.

- Take our time to see the technology changes and react. This will imply a lot of prototyping and work.

- The MAIN danger is to sleep on our success. The future of the project depends on the creativity/initiatives/hard-work/risk-evaluation of each package manager.

- The next release will be my last release as project leader.

Challenges

- Move to LLVM (see Axel's talk)
  - with all the implications (parser, JIT,TFormula++,etc)

- Client-server model in Graphics and GUI
  - Client and server runs ROOT (laptop+lxplus)
  - Client is a web browser (see Fons's talk)

- Move from X11/win32 to GL (coherent 2D + 3D)

- Parallelism in many places (not only PROOF)

- Automatic & gradual/modular installation (BOOT)

Keys for success

- quality of user support and in particular the response time for mails. My rule of thumb
  - mail processed in less than 1 hour: value= 10
  - mail processed in <24h : value= 1
  - mail processed in >36h value= -10

- Do not underestimate user reports. Similar reports are symptomatic of a problem.

- Users are happy when they realized that you have anticipated a technological change.

- Of course algorithms and code quality are a must.

Mails: yes again :☺

Forum : Total = 41078

brun	4887	(11.9%, 2.10 per day)
pcanal	3521	(8.6%, 1.51 per day)
couet	2234	(5.44%, 0.96 per day)
axel	1489	(3.62%, 0.64 per day)
bellenot	771	(1.88%, 0.33 per day)
moneta	524	(1.28%, 0.31 per day)
rdm	470	(1.14%, 0.20 per day)
ganis	266	(0.65%, 0.11 per day)

Savannah: Total = 2575

brun	514	2 open	0.39%
rdm	310	10	3.22%
pcanal	299	14	4.68%
couet	293	14	4.78%
axel	257	9	3.50%
ganis	149	4	2.68%
moneta	144	13	9.03%
bellenot	112	5	4.46%

lower is better

roottalk2009

brun	152
pcanal	75
axel	54
couet	40
rdm	28
moneta	27
bellenot	18

+ rootdev (n*10000)
+ private (k*10000)

It is my intention to reduce my share by a factor 10 before June 2010.
Hoping that my successor will do better and faster.

My contribution

- **TMemStat** (along the lines of **TTreePerfStats**)

- **Parallel file merger: guidance and tests**

- **Memory pools : guidance and tests**

- **IO code optimizations (cpu) with Philippe**

- **QA with all**