Build/Distribution

2. More test of actual backward compatibility; eg two root trees with a variety of data types (including long long) written on machines of both endianess.

Require backward compatibility.

Autoconf/automake may solves some problems.

3. a cvs-branch per ROOT version. In order to be able to have program-crashing bug without being forced to take the head of the repository.

Namespaces

Problem with ROOT 3.01 (could 3.0/6 be branched?)

More request for cvs branches.

Web Page

4. ROOT could collect a collection of 'cute' additions (like preview of EPS)

Register project in some sort of database.

Should ROOT have an open contribution Area? Should 'trusted' developer have write access to some part of the ROOT repository?

A place where any user can post/submit and search code, not guaranted to work.

Rene: How to make the class available to the Event Viewer Classes from on experiment to another?

What about a clearing house for example?

Search method in Release notes

2. Better search engine for Web page

ROOT web site search engine: eg ref.txt and dates.

Fermilab documentation pages should be more prominent

Information/Documentations

2. Change in hierarchy (eg. TBranchObject vs TBranchElement) should be adverstised better

Better info on important changes (eg const in 3.0)

3. Documentation of root GUI classes. Add pictures to source documentation of widgets

GUI Documentation slim

ROOT documentation chapter on GUI and 3D graphics

2. Documentation of member functions in code is often missing or not clear enough (inline functions).

Way of documenting inline.

Link to correct location of inline method in header files

Cross referencing of THtml ouput into different directories ….

Logically you should not need dictionary for autodoc generation

Same class described in several source files; still want to be able to generate documentation

Show inherited methods

GZip ps files

Index page per directory/package

Community should write more how-to (think of it as a mini-publication)

More documentation on using gdb to debug compiled macros.

Requests satisfied by existing newer release
Needs STL I/O support (might be satisfied by ROOT 3.0x)
Fix colors in X3DC on 16 bits displays =>Fixed
Fix OpenGL color indices greater than 10 => Fixed
Data only in TTreeViewer. => done
Issue with the scope rules with files and canvas

CINT and ROOTCINT
Being able to generate executable version of history files
Need even more support for STL in CINT (See Brett Viren)
2. LinkDef and template, it is very order sensitive
Templates. Explicit instanciation (always difficult to maintain correct
     specialization order)
ClassDef explosion => Is the proxy/template idea usable
Separating I/O and non-I/O function separately in hope it reduces the need for
     #pragma extra_include
Function with more than 10 arguments of the same time fails without proper error
     message
Zero pointer casting results in non-zero pointer
#include doesn't execute all code in global file scope => Inconvenient because
     different behavior if same code is compiled.
We can crash ROOT a lot
     Usually need to restart
     Unloading code does not seem to work that well.
Need to make the system robust enough to be able to run for weeks and hundreds
     of script at a time.
Garbage collection and leakage control
Customized error logging in CINT
Possibility to execute C++ macro from memory buffer
Possibility to rewind/undo ROOT actions performed during session
     gInterpreter->ResetAll();
     gSystem->Unload(lib);

TQObject
Rt => not compiled => no check, lots of cast, sprintf
     No templated signals or slots (CINT limitation)
     Need a TClass for interpreted class => done?
Look at libsigc++ (templated slot/signal)

GUI
Design confusing/not professional

GUI best handled by GUI expert
Need more widget
Need tie low (see Brett Viren)
Need to stay open to QtROOT type of contributions.
Ability to have access to several displays from one ROOT process.
Optionally preserve TCanvas aspect ratio.
Improve OpenGl support => picking, change of transparency for ind object,
     3Dtext
Speed of graphics with 8 bits display and with netscape open
Problem with overdrawing contents on a canvas; (core dump when overlapping 2
     pads).
Could use a canvas design tools and/or more guidance
Would like to be able to produce gif files in batch mode.
It would be nice to be able to create gif even in batch mode.
Windows support (GUI)
Need modification of some ROOT Gui classes, eg TBrowser, TGxx classes, in
     order to have possibility to derive Web GUI classes from them.
A better way to list objects that does not include all ROOT functions, classes, etc.

I/O

3. Allow cross reference pointers across branches in TTrees. (Rene mention that
     he might be better to implement these pointers as indexes instead) (See
     STAR presentation)
Request for cross-branch (and trees and files) pointers
Support for Block I/O
     Write(Event) = ::Streamer(TBuffer)+writer(Tbuffer)
     Read(event) = read(CDF's tbuffer) + Event::Streamer
Fine tuning of error handling
Namespaces Support

New Feature requests

Poll/Select functionality in TSocket (Fons point out to TMonitor, Somebody point
     that multi-thread could be used)
Waiting for PROOF.

2. ROOT container vs STL container; Will there be a drive to adapt
Will STL container at some point replace TCollection classes
Behavior of ROOT collections is different from STL behavior, this can be
     confusing.
Container classes cannot hold non-TObjects

Have a version of ROOT/cint that is quiet for Purify.

Would like a generic interface to IDL (maybe using TStreamerInfo).

Some interfaces are obscure (SetOptFit, SetOptStat, color indices)

Could TObject::Print be more iostream friendly.

Missing algorithm like eigen-values and eigen-vector analysis.

Need a good geometry package. (Community nearly ready for such).
It is bad to have 2 geometries (root and HIGZ)

H2ROOT conversion lose message of fitted parameters

Comments
CINT inside compiled code => hidden dependencies
ROOT and Gaudi (would like real ROOT in Gaudi).
Frequent code break with new ROOT versions (due to templates, namespaces)
Recommendations/reviews of ROOT capable CASE tools (IDE, editor, debugger, profiler, UML)
ROOT should go more into DAQ and slow control
TMapFile has a lot's of problems.
Hard to follow up the frequently updated ROOT version.

CDF I/O
Cdf request continued collaboration with Philippe Canal