



Getting Started Proposal

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- Main Goals
- Current Status
- New Prototype Description
- Example of Chapter Reorganization
- Discussion





Target - novice ROOT users with their specific needs

- Cover all important points that form the base of using ROOT, i.e. handle and analyze large amounts of data in a very efficient way
- Add gradually knowledge to what they know.
- All users are intelligent but not well informed about the topics.

- Improved presentation by make this manual
 - Clear – users see exactly what we mean
 - Complete – all necessary information is available
 - Concise – “zero” time for searching
 - Relevant – adds gradually knowledge to what users know and does not labor what they already know
 - Correct – no mistake





Collection of chapters on different subjects

- Contents is large and vary from “A little C++” to complex examples of using trees in analysis
- Top-down method is not applied in the entire document; it is available in many chapters
- User’s Guide v5.12 statistics:
 - Chapters 28 (from 1 to 47 pages)
 - Pages 449 (in total 479)
 - Paragraphs 17 318
 - Words 190 417
 - Index entries ~800
 - File size 12.9MB (compressed images)





To separate the doc in 2 parts:

- Getting Started
 - The framework architecture
 - Basic components and collection classes
 - CINT the C++ interpreter (ACLiC)
 - ROOT dictionary
 - Adding a class
- ROOT User's Guide
 - All the rest





- Contact information
- Conventions of using ROOT manual
- Installing ROOT
- Organization of the ROOT framework – an ‘practical’ overview of data defined objects, functions and curve fitting, minimization, graphics and visualization classes
 - Simple examples making histograms and ntuples
 - Filling them
 - Simple formulas and functions
 - Fitting
 - Drawing
- Environment setup
- Logon and Logoff scripts and history file





Basic Components



- Variables, data types
- TObject class
- Different class categories
- Collection classes
- Class dictionary
- Object ownership





CINT the C++ interpreter



- ROOT command line interface
- ROOT script processor
- Debugging scripts and tracking memory leaks
- CINT environment and commands
- ACLiC compiler

- Regular expressions ?





- Structure of a program and what is stored in its memory resident dictionary
- The use of dictionary information
 - Input/Output
 - Object inspector utility
 - Browser utility
 - Dynamic linker
 - Context menu generation
 - Signals/slots communication mechanism
 - Automatic HTML documentation





- Default Constructors
- Adding a class with a shared library
 - LinkDef.h file
 - rootcint
- Adding a class with ACLiC





Example: Graphics and GUI



- Graphics containers: canvas and pad
 - Coordinate systems and converting between them
 - Axis - linear, log and time scales
 - Updating the pad
- Attributes of graphical objects
- Graphical primitives
- Interacting with graphical objects:
 - Selecting, moving, resizing
 - Copy, paste
- Toolbar, status bar and graphics editor
- Create and modify a style





Discussion



- Your opinion/criticisms are welcome and will be included here:

