

# SDA server-side memory problems

- ◆ First campaign to fight this problems – beginning of October
- ◆ Using “incremental garbage collection”
- ◆ Deleting cache
- ◆ Simplifying data structures
- ◆ Explicitly freeing all collections
- ◆ “Internal” string representation
- ◆ Most of changes are trading time to memory
- ◆ 2 weeks of smooth running

# Memory problems continued

- ◆ Last weekend problems seems to appear again.
- ◆ First target – new test servlet context. Removed.
- ◆ Several ResultSets was not closed in tree servlets, in ScalarsInCollection, in SnapshotProperties – FIXED.
- ◆ Structure and “Scalars In Collection” caches now are just for last month

# New SDA tools - SDAMisc

- ◆ SDA data from Data Loggers
  - Fast “crosscuts” over big time periods
  - Excel interface
- ◆ SVG plots for derived table – TevLifetime only
- ◆ Changed design for Intensities (minor)
- ◆ By public demand SVG 2 Raster converter
- ◆ <http://www-bd.fnal.gov/SDAMisc/>

# SDA data from Data Loggers

- ◆ All SDA data is now saved in Data Logger database – thanks to Kevin Cahill
- ◆ 2 new Data Logger Nodes – CBSDA for Collider Shot data and PBSDA for Pbar Transfer Shot data.
- ◆ <http://www-bd.fnal.gov/SDAMisc/SdaFromCBSDA.jsp>
- ◆ Excel interface using macros
- ◆ Demonstration

# SVG plots from derived tables

- ◆ It directly reads derived tables from Web – numbers are what you see in browser
- ◆ Really convenient and fast because derived tables made using XHTML - thanks to Susan Panacek
- ◆ Using SAX parser directly, without JDOM – less probability to run into memory problems
- ◆ Generated every time on request, no caching
- ◆ <http://www-bd.fnal.gov/SDAMisc/TevLifeForm.html>

# New Intensities

- ◆ Line width – it now scales it without using SVG built-in scaling mechanism
- ◆ Bigger fonts for some Y labels and shot header
- ◆ Do not forget to use hiding/showing the trace!

# SVG 2 Raster converter

- ◆ <http://www-bd.fnal.gov/SDAMisc/SVG2RasterForm.jsp>
- ◆ I use Batik rasterizer for this conversion
- ◆ It theoretically can convert to 3 types: JPEG, PNG, TIFF
- ◆ JPEG conversion has a problem.
- ◆ TIFF did not correctly reflected in browsers
- ◆ "Auto" has bad quality – use 1200 x 900 instead

# Alternative rasterizers

◆ <http://www.w3.org/Graphics/SVG/SVG-Implementations.htm#viewer>