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Visualization Offline Guide

Complete: 

Contacts

- **Conveners:** Ianna Osborne
- **Hypernews forum:** <https://hypernews.cern.ch/HyperNews/CMS/get/visualization.html>

Introduction

IGUANA goal is to solve all event display needs of CMS for online and offline monitoring, debugging, simulation, reconstruction, and analysis. Make it trivial to use with a professional quality interface design, possibility to use one command, and wizards to help with configurations and data fetching. Also for developers: easy to extend the functionality. Make it available to all collaborators: e.g. well packaged (together with CMSSW) and Web client to avoid local installations.

The basic idea behind IGUANA is that an application is configured at run-time from iglets (a.k.a. plugins). Say, a user wants to display Tracks, (s)he tells IGUANA (in the configuration file) to load the iglet which knows how to display Tracks. The iglets group a set of twigs (a class which knows how to display a type of a data collection). For example, the CSC iglet contains all related to CSC data twigs, such as a [VisCSCStripDigiTwig](#) class which displays [CSCStripDigi](#), etc.

IGUANACMS - Interactive Graphics and User ANALYSIS for CMS - a SCRAM-based project for CMS specific visualization based on ORCA and OSCAR. The IGUANACMS code has been migrated to the new Event Data Model and is now part of the CMSSW project.

IGUANA - Interactive Graphics for User ANALYSIS - in development since 1999. First public presentation during CHEP 2000. Developed by George Alverson, Giulio Eulisse, Ianna Osborne, Shahzad Muzaffar, Lassi Tuura, and Lucas Taylor.

Tutorials

How to check Geant4 geometry description

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How to explore Event Content

How to debug with IGUANA

How to (auto) print with IGUANA

IGUANA Tutorial at CERN, August 2007

IGUANA Tutorial at CERN, April 2008: How to run IGUANA on CAF data

Documentation

- <https://twiki.cern.ch/twiki/bin/view/CMS/WorkBookEventDisplay>

Review status

Reviewer/Editor and Date	Comments
KatiLassilaPerini - 20 Apr 2007	created template page

Responsible: IannaOsborne

Last reviewed by: *Never reviewed*