



# EMI QA Reports

Lorenzo Dini (CERN)

SA2.4 Task Leader

# Outline

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# Process and Product Metrics

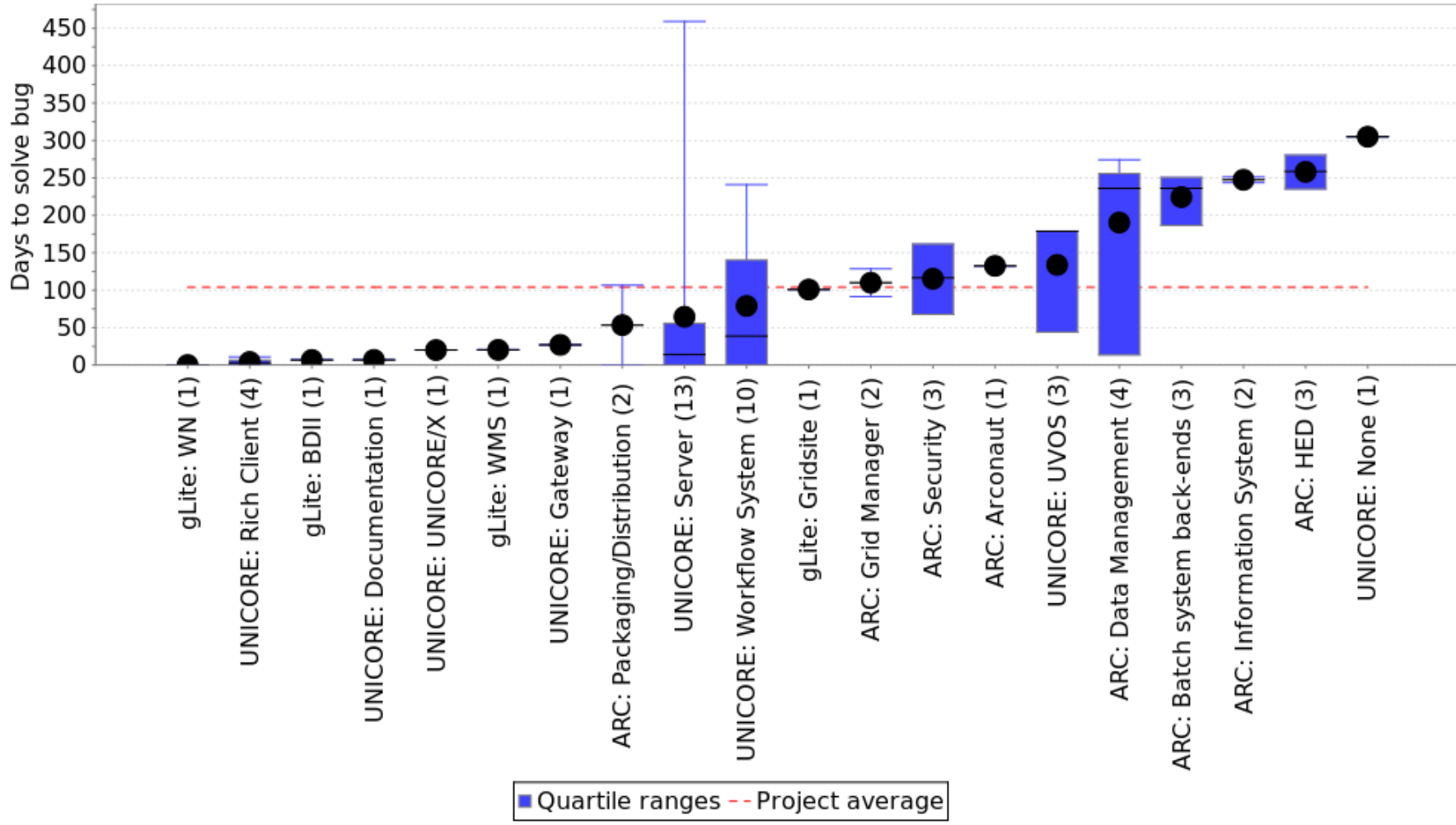
- The goal of process metrics is to identify improvement opportunities in the way the software is developed and tested, from a process point of view. In our context the main sources of process metrics are the Defect Tracking tools used in EMI.
- Product (or internal) metrics measure certain characteristics of the product like complexity, changeability and testability. At the moment we rely on static code analyzers to measure these characteristics.

# QA Report Generator Workflow

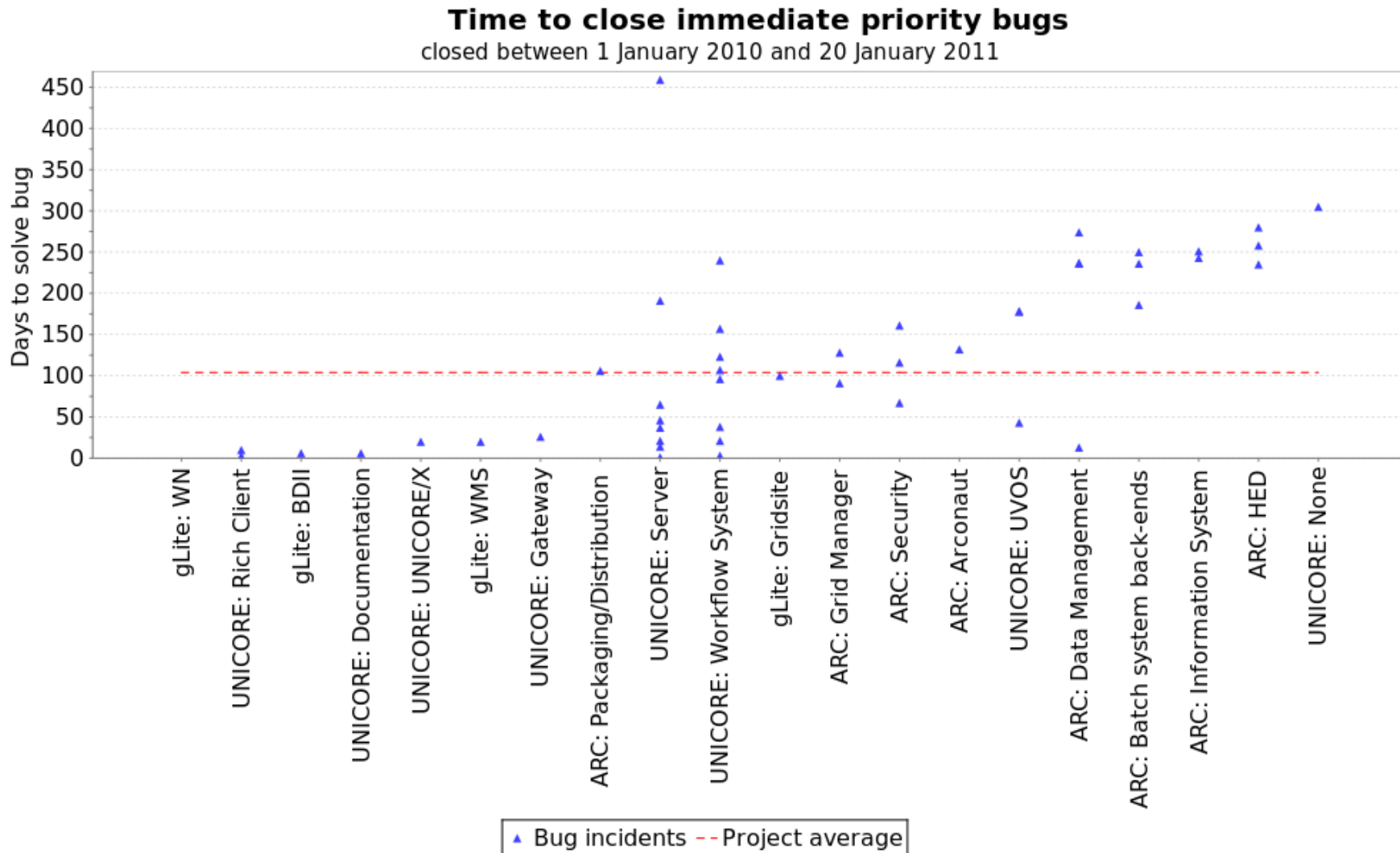
- Process Metrics
  - XML Exporters extract metrics from Defect Tracking Tools and make them available for analysis.
- Product Metrics
  - ETICS builds trigger QA plug-ins according to profiles (--autoprofile).
  - QA plug-ins produce QA metrics.
  - The ETICS Repository stores all QA metrics for every build ever existed.
- The QA report generator queries the ETICS repository and the Defect XML files and produces reports.

# Time to close immediate bugs (1)

**Time to close immediate priority bugs**  
closed between 1 January 2010 and 20 January 2011

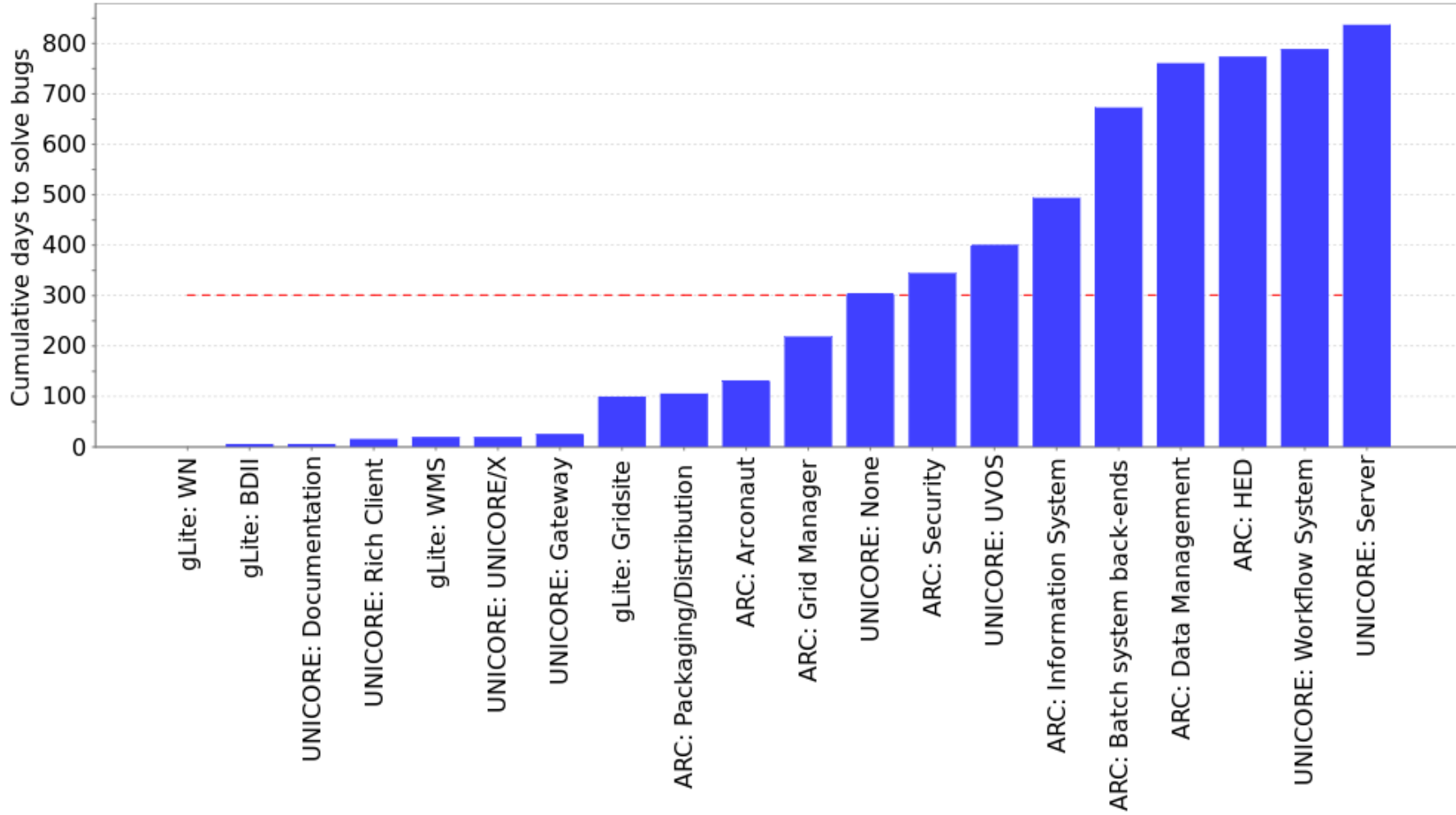


# Time to close immediate bugs (2)



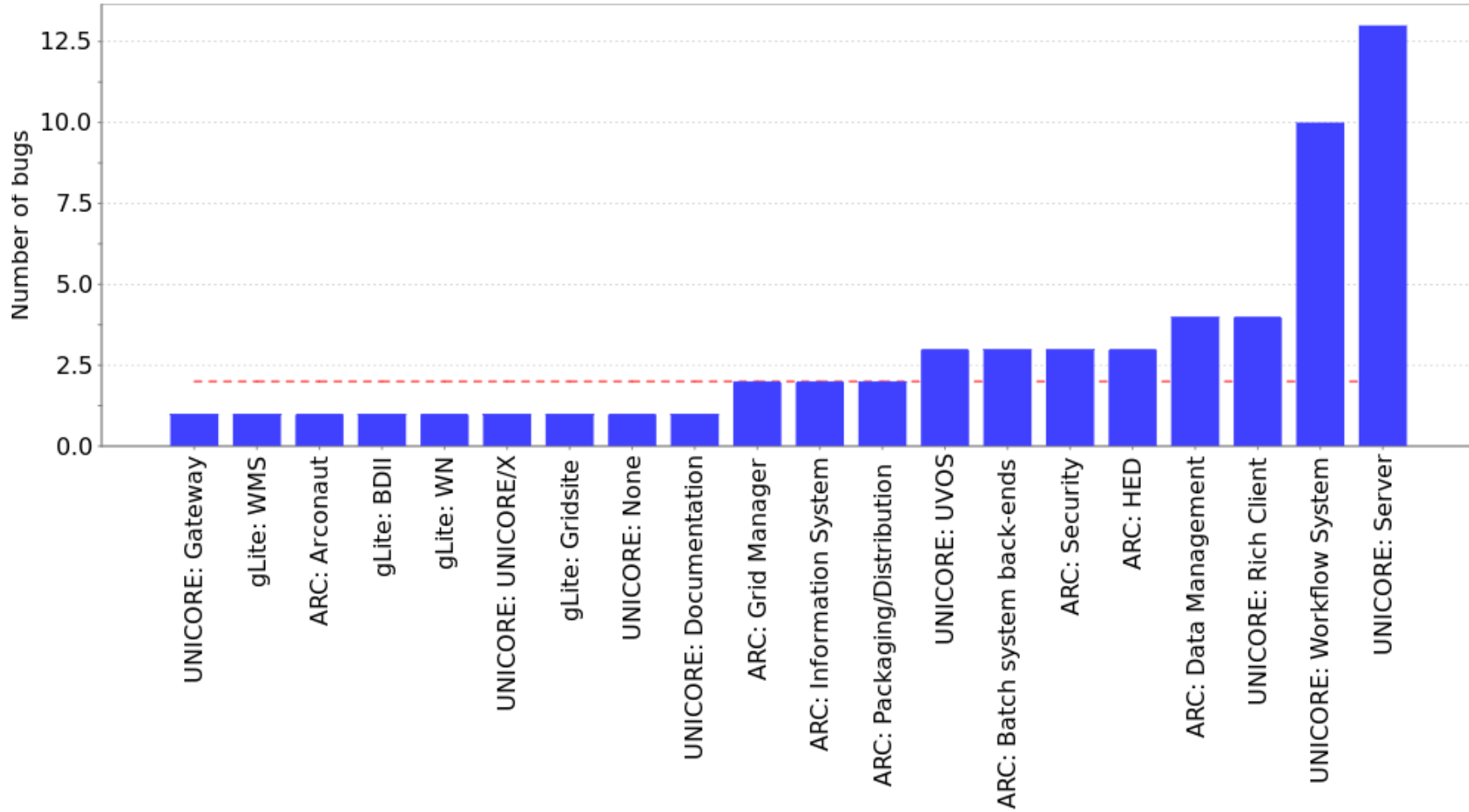
# Cumulative days open immediate bugs

Cumulative days open: immediate priority untouched bugs  
submitted before 20 January 2011



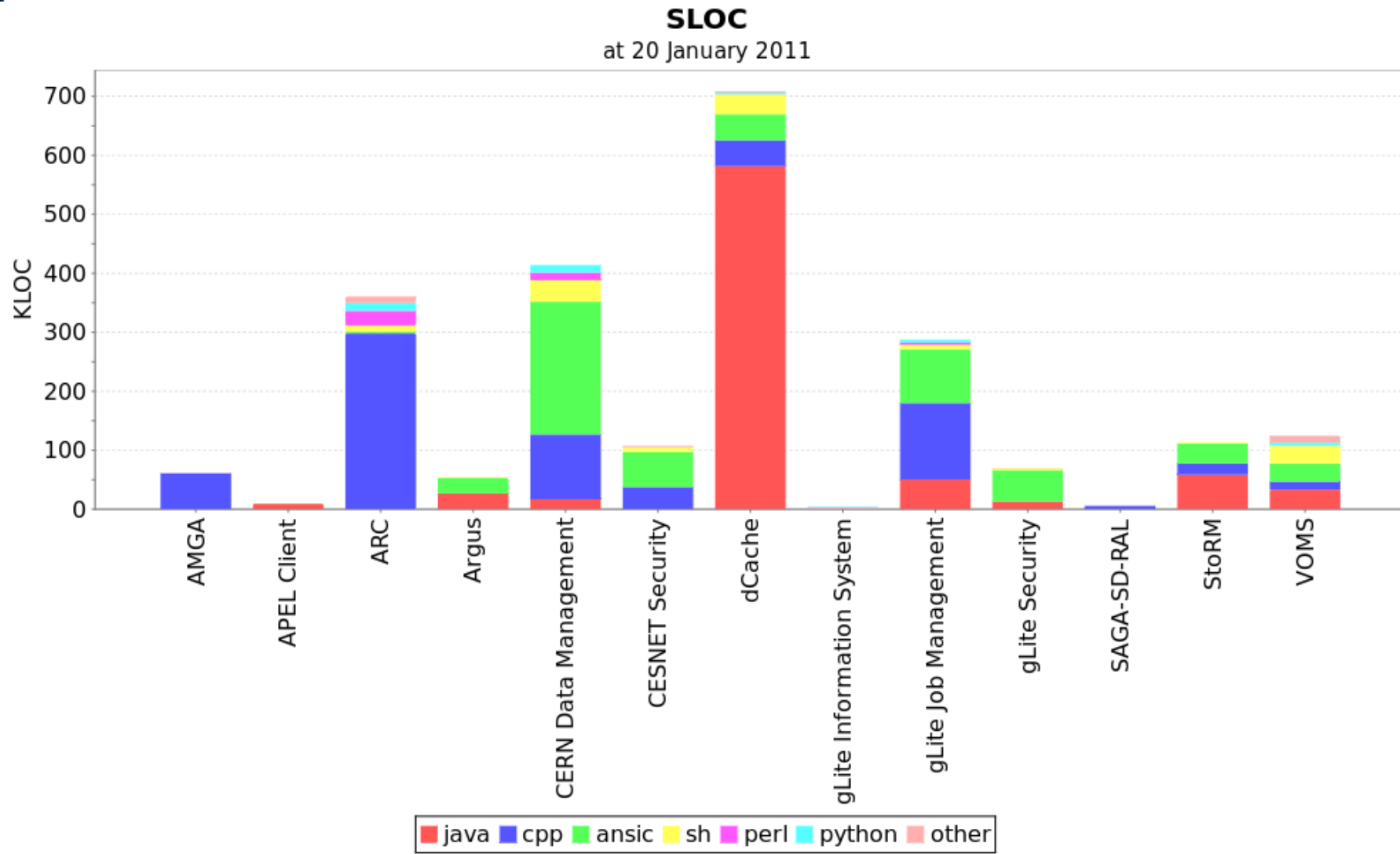
# Number of immediate bugs

Number of immediate priorityuntouched bugs  
submitted before 20 January 2011



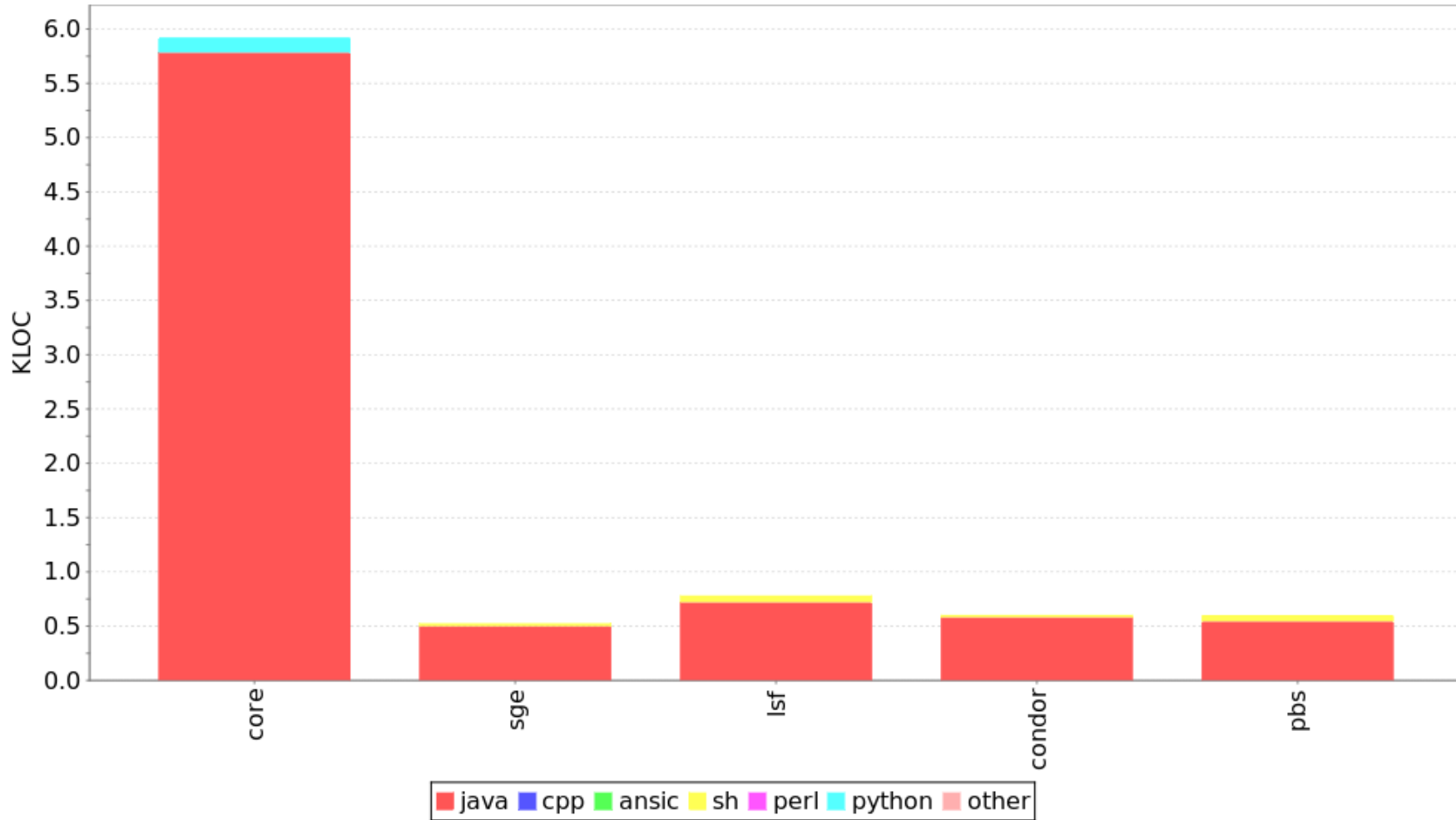


# SLOC per PT

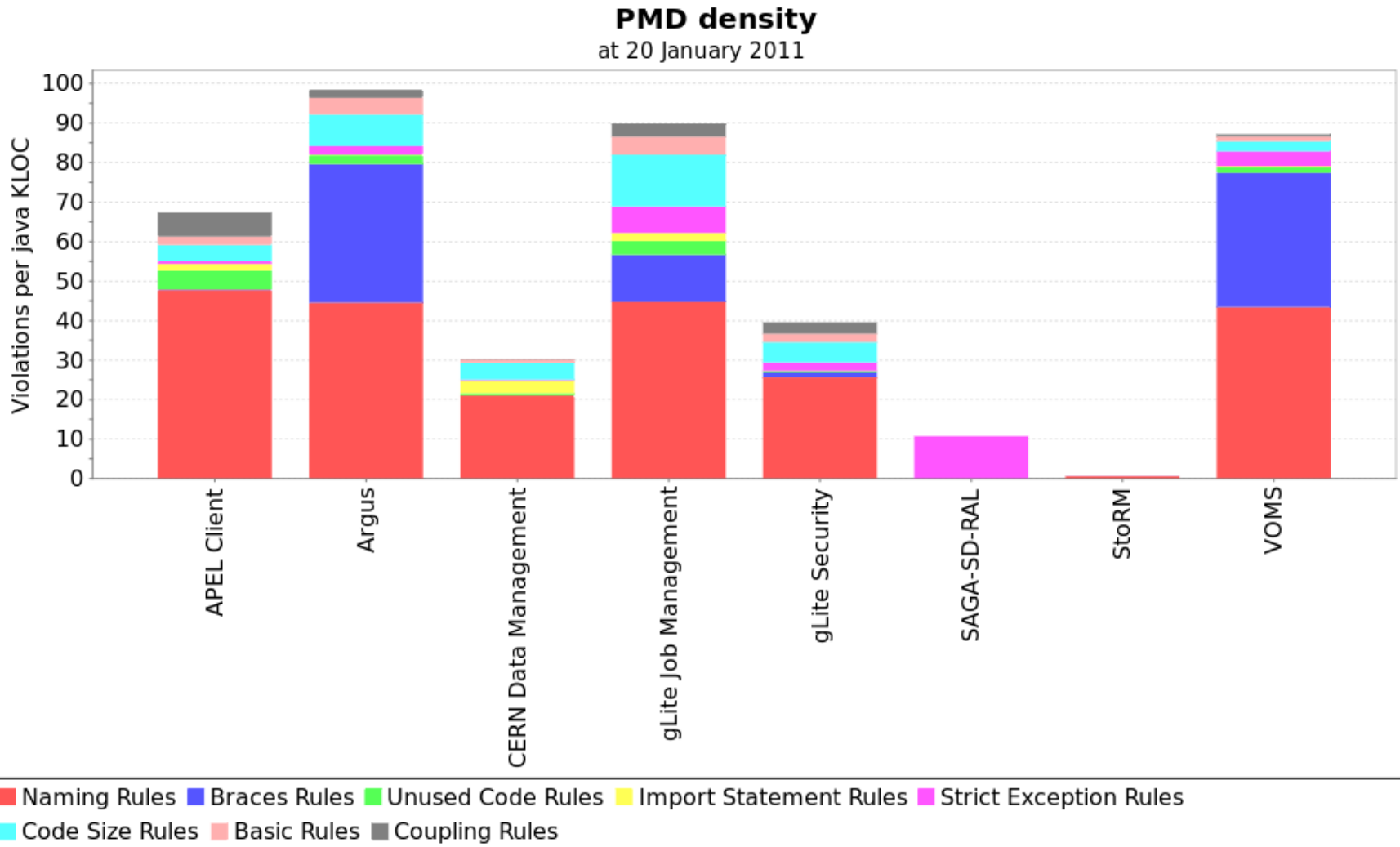


# SLOC Example: APEL Parser

SLOC  
at 20 January 2011

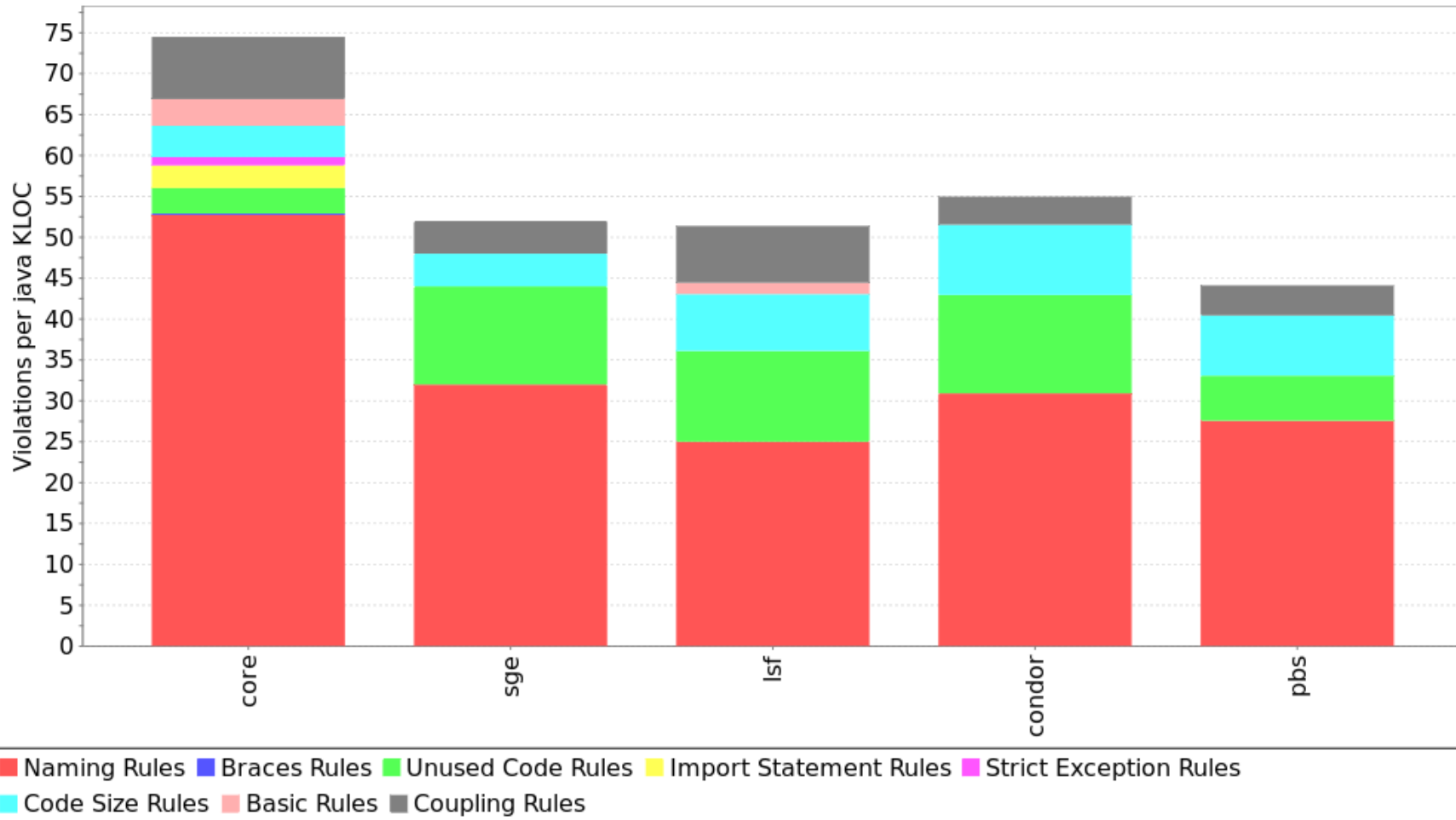


# PMD per PT



# PMD Example: APEL Parser

**PMD density**  
at 20 January 2011



# Produced Reports

The QA Report Generator produces:

- EU-Deliverable document with the project QA summary. This document will be edited and then sent as the official QA report to the EU.
- Daily QA report with summary and detailed information about the project, PTs and products. This report will be publicly available after the nightly build to all members.



**Thank you**

**EMI is partially funded by the European Commission under Grant Agreement INFSO-RI-261611**