

### Agile Development and Dependencies Management For Industrial Control Systems

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**CERN** 



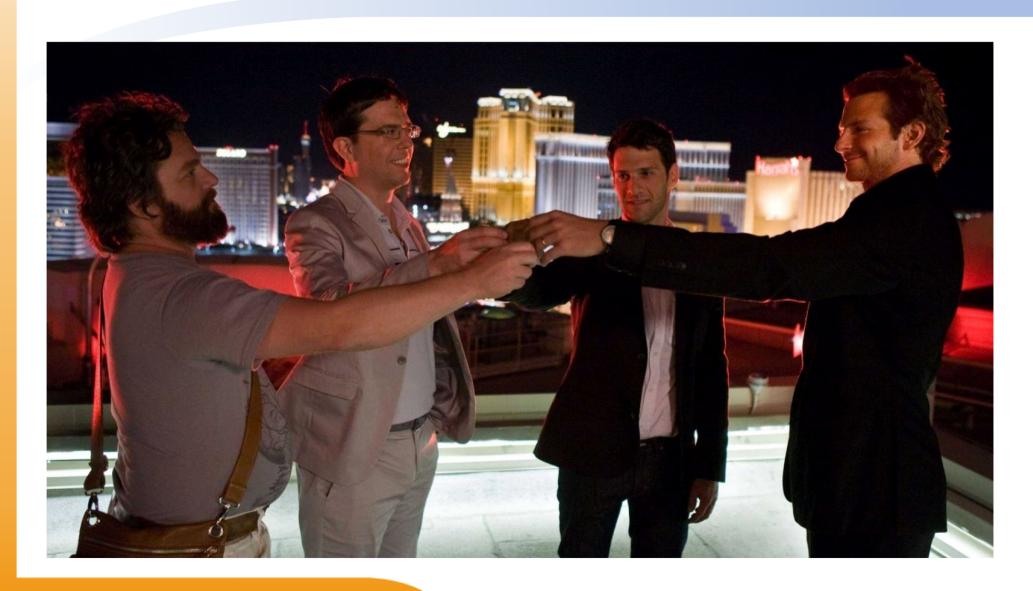
# Happy Times



- September 2002, I left the private sector to join CERN
- October 2002, I took part in my first deployment of a CERN application....
- We set off to deploy three weeks of joints efforts produced by four full-time developers...

# It started around 6.30pm like this...





# And ended around 2.30am a lot like this...





# Software engineering processes

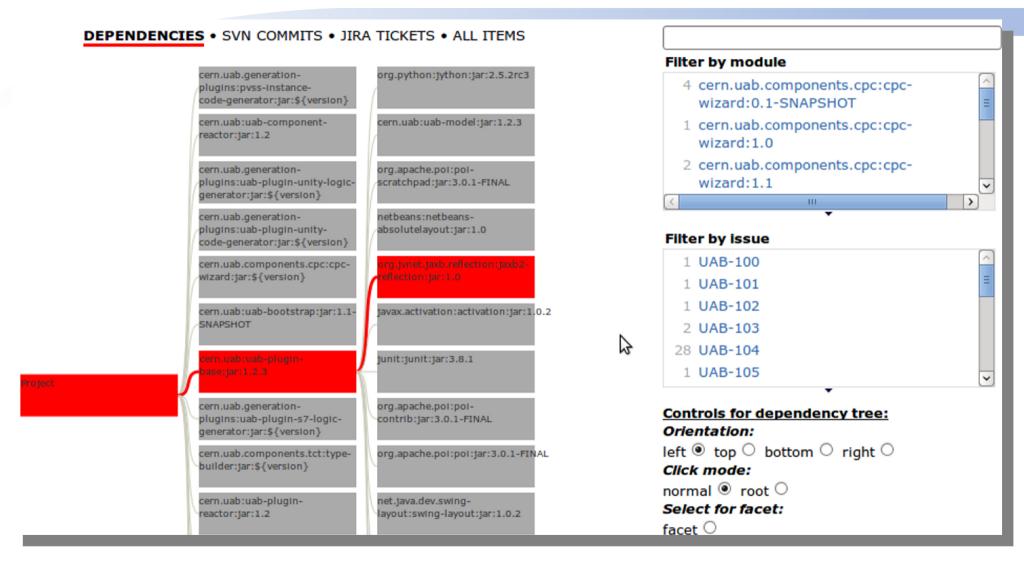


#### These would have helped:

- Change Management (not just a folder copy somewhere)
- Issue Management (not just an excel spreadsheet somewhere)
- Dependency Management (not just binaries stuffed in CVS or SVN)

## These would have helped even more





#### Navigation, Filtering, Hyperlinks



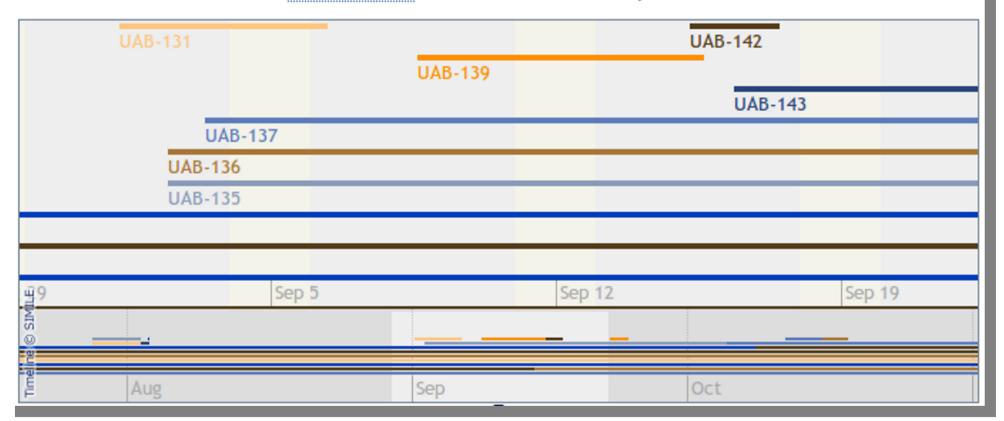
## These would have helped even more



DEPENDENCIES • SVN COMMITS • JIRA TICKETS • ALL ITEMS

9275 Items

9216 results out of 9275 cannot be plotted.



Timelines, RDF, JIRA, MIT Exhibit



#### Come and see...



- How we unified:
  - SVN activity data
  - Atlassian JIRA data
  - Apache Maven metadata
- ...Using open-source visualizations and data browsing tools
- And a standard universal data format (RDF)