

indico



# What's new in the Indicoverse?

Thomas Baron & Pedro Ferreira  
Indico Workshop 2.0, CERN, October 2017

# 1st Indico Workshop



2017



# People

Pedro Ferreira is the new project and service manager since 2014

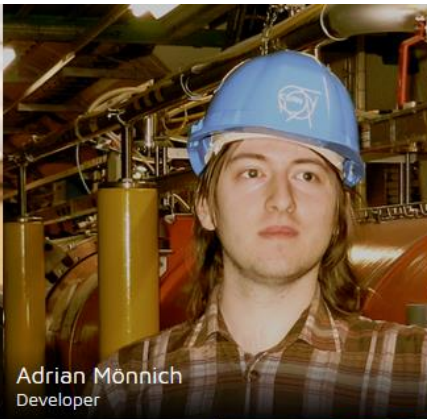
A banner for the 'FIRST INDICO WORKSHOP' held from 27-29 MAY 2013 at CERN. The banner features a background image of a cityscape with mountains in the distance. On the left, there is a small portrait of José Benito González López. To the right of the portrait, the text reads 'Indico Project Status' and 'José Benito González López'.

**FIRST INDICO WORKSHOP**  
27-29 MAY 2013 CERN

**Indico Project Status**  
José Benito González López



# People



Adrian Mönnich  
recruited as staff in  
2017

Team size stable (5)



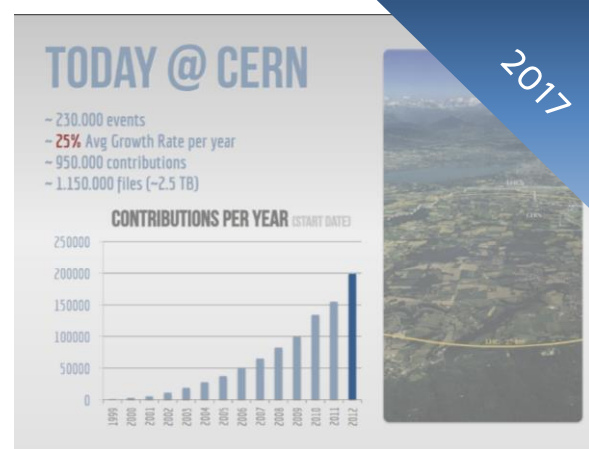
# At CERN

520.000 events

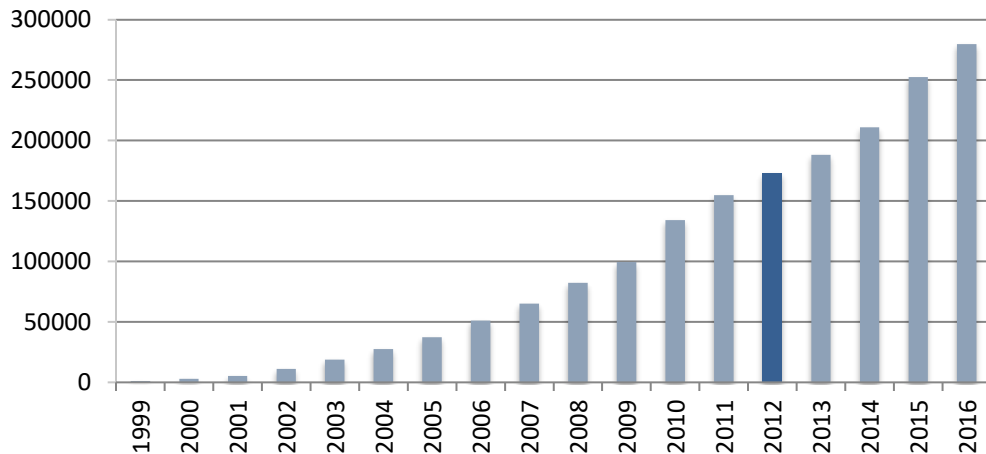
2.05M contributions

2.2 M files

Sustained growth



**Contributions PER YEAR (start DATE)**



# Branding - Logo

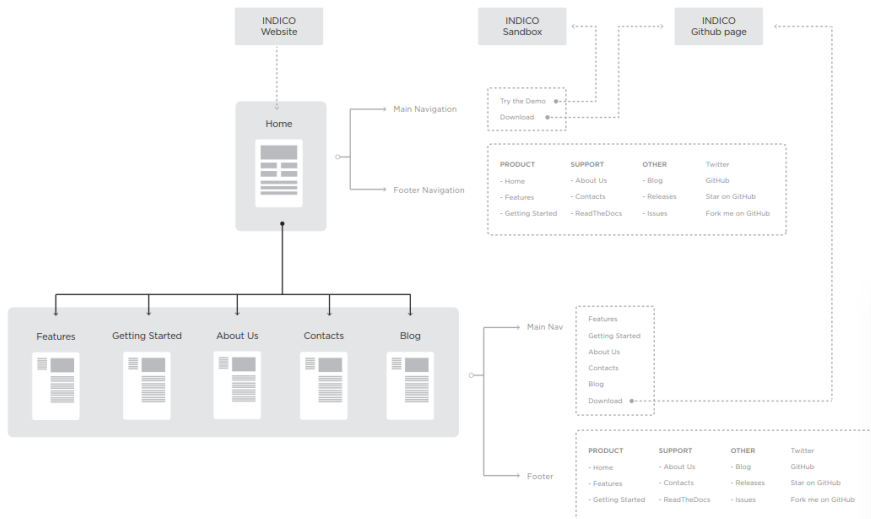




# Branding – Web Site

## INDICO

Product Website / June 18, 2014



<http://getindico.io>

# Branding – Web Estate

indico.com

indico.org

squatted

indi.co, ind.co, nd.co

exorbitant

getindico.com, getindico.org, getindico.io

indico.global, indico.events

acquired

# Branding - Trademark

## Trademark in the US, EU, CH

indico Product Plans Docs Blog Log In Get Started

## Machine Learning for Human Use

Combine your skills with the power of machine learning to discover the true potential of your text and image data.

Introducing CrowdLabel: Now label data and build custom models even faster. [Learn More](#)

Use indico's text and image analysis to create transformative tools.  
In the examples below, we'll show you how people use indico to change the way they do business.

Brand Equity Recommendation Clothing Similarity Topics Editor

indiCo WHO WE ARE CAMPUS STORE SOLUTIONS INFORMATION CENTER CONTACT US Blog Media Room Careers

## Redefining Independent

A collaborative solution for student success

indiCo is a collaborative alternative that supports self-operation of your campus store. We give you the best of both worlds and more by combining the operational efficiency, buying power, and strategic guidance promised by a chain operation with the flexibility and brand autonomy of an institutionally operated university store.

### independent = lowering the cost of education

As a collaborative of independent campus stores, we believe in:

- Disrupting the status quo to lower barriers to education and student success
- Lowering margins on course materials
- Not profiting from what students need to be successful in the classroom
- Keeping more dollars on campus to benefit students

We are focused on the success of your Institution, your students, and your faculty — not corporate bottom lines.

Student-focused


# Branding – Promotional Clip



Indico  
latest

Search docs

Installation guides  
Server administration  
Indico plugins  
HTTP API  
API reference



1

Mozilla is financially supporting open source.  
Learn more and apply by October 31!

Read the Docs

v: latest

## Welcome to Indico's documentation!

Star 250



The effortless open source tool for event organization, archiving and collaboration.

build passing license GNU General Public License v3.0 py3.6

Welcome to Indico's documentation. This documentation is split into several parts, from installing Indico to developing Indico plugins. If you're interested in the internals of Indico, check out the API documentation. Read more about Indico on our official website.

### Installation / Configuration

To simplify installing Indico, follow the [production installation instructions](#). For those who are interested in developing new features and plugins for Indico, check out the [development installation instructions](#).

- Installation guides
  - Production
  - Upgrade
  - Migration from 1.2
  - Development

### Server administration

Indico uses [Celery](#) for task management and scheduling and the [Livesync Flask plugin](#) for search integration. This part of the documentation explains how to set them up and run automatically.

- Server administration
  - Celery
  - Livesync

2017

# Software Documentation

- Installation
- Administration
- Plugins
- HTTP API
- API reference

**Learning Indico**[Introduction](#)[Categories](#) ▾[Lectures](#) ▾[Meetings](#) ▾[Conferences](#) ▾[Room Booking](#) ▾[Event Surveys](#) ▾[Other features](#) ▾

*The effortless open source tool for event organization, archival and collaboration.*

Indico is a web application which facilitates the organization of events of all sizes, ranging from meetings and lectures to big conferences. It is Open Source software, developed at [CERN](#), the place where the Web was born.

Indico offers a [wide feature set](#), which includes [reviewing workflows](#) for scientific papers and their abstracts as well as a [full-fledged room booking system](#).

Introduction video



# User Guide

<http://cern.ch/indico-user-docs>



# E-learning Clips

14 short clips

Tutorials on Indico features

Embedded in the user guide

Available [on CDS](#)



**Community**

# A Growing Community

Research

Education

International Organisations

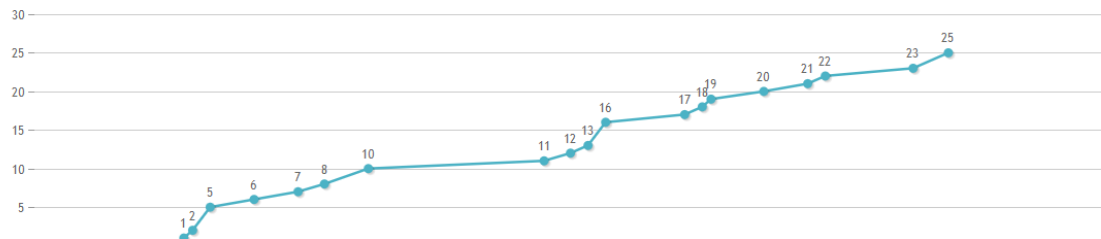
# Community

## Statistics

### Country distribution



### Registered instances



# Community

## Indico Community - Bringing everyone together

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 20 Oct 2017, 11:30

 30m

 513-1-024 (CERN)

### Speaker

 Marco Vidal (CERN)

all categories ▾ **Categories** Latest Top

Category	Topics	Latest
<b>General Discussion</b> Topics that don't need a category, or don't fit into any other existing category.	2	Welcome to the Indico Community Forums <span style="float: right;">2 Aug 4</span>
<b>Internationalization and Localization</b> Coordination of translation groups and general advice on translating Indico to other languages.	1	Portuguese Indico translation group <span style="float: right;">2 Aug 24</span>
<b>Site Feedback</b> Discussion about this site, its forum, how it works, and how we can improve it.	0	...ing the migration from 1.2 to 2.0 - help needed! <span style="float: right;">1 Aug 18</span>
<b>Administrators</b> For exchanges and requests for help regarding installation, maintenance and administration of Indico.	1	
<span style="color: red;">■</span> Migration from 1.2 to 2.0		
<b>Development</b> Discussions on the development of Indico plugins and modules.	0	
<span style="color: orange;">■</span> Plugin Development		

<https://talk.getindico.io/>

# Try it out!



**Technology**

# 2013

v1.1.x

Pure WSGI app (no framework)

Same code base since 2002

Lots of layers, different namespaces (indico & MaKaC)

ZODB-based

# 2014

v1.2

Flask-based application (w/ legacy layer)

Refactored authentication code (SSO support)

New WYSIWYG Registration Form

E-tickets



"House cleaning"



## Evolution through revolution

A 2-year Agile Experience

**3** The Indico team mostly consists of developers who stay a maximum of two years in the project. This project required a slightly larger team core, with 3 experienced developers for more than two years, almost fully dedicated to it. The rest of the team collaborated according to their availability.



**1** The road to Indico 2.0 started in 2014, with the release of version 1.9.0, the first step in a series of "hybrid" releases (based on both ZODB and Postgres) towards 2.0. Indico 1.9.10 will be the first fully PostgreSQL-based release. Indico 2.0 will include a one-time migration mechanism for users wishing to upgrade.



**2** This ambitious project implied rewriting most of a legacy source code base 200.000 lines long. A "divide and conquer" approach was used from the beginning. Known issues and bugs were addressed whenever possible.

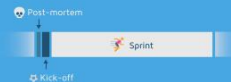


**4** Work was split into sprints, each one addressing a specific release. Sprints took from 1 to 3 months, depending on the complexity of the release. The objective was to release working code as often as possible. A kick-off meeting would precede each sprint and a consolidation period would follow the latter.



1.9.8  
78%  
source code  
rewritten

**7** Processes and tools were constantly re-evaluated at the end of each release. A post-mortem meeting was organized and everyone in the team provided their own input.



**6** Database structures and basic modules were designed collectively and implemented through pair programming. This has greatly contributed not only to accelerate the training of new members - it has promoted dissemination of information within the team.

Other used techniques and tools included unit testing, continuous integration and user interface prototyping.

**5** Development was coordinated in weekly and short spontaneous meetings. Issues were documented in GitHub and code contributions were handled through GitHub's pull requests. Asana was used for the management of immediate issues during sprints.



Travis CI

**8** Indico's Agile journey doesn't end here. We are aware that full compliance with the best practices of Agile methodologies of software development requires constant feedback from users and an even greater rate of change. These are some of the aspects we will be addressing throughout 2017.



Stay up to date at  
<https://indico.github.io>

P. Ferreira, A. Aviles, M. Kolodziejcki, A. Mönich, I. Tichopoulos, F. Vessiz  
<http://cern.ch/IT> ©CERN

"Under Computer", "Dancing Party", "Gowork", "Tiddler 2", "Report Card", "Collect" and "Skull" icons by isareid (<https://isareid.com>)

# Results

95% Python code rewritten

80k LOC less (~37% initial code base)

Modular structure of code

Functionality further split into plugins

Following best practices



# Results

PostgreSQL DB

>200 tables

Standard technology

Easy to backup, restore, replicate...



# Thanks

José Benito Gonzalez

Alejandro Avilés

Ilias Trichopoulos

Ferhat Elmas

Tommaso Papini

Jacques Dafflon

Florian Vessaz

David Andreev

**Questions?**

indico