



Offering Global Collaboration Services

beyond CERN and HEP communities



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CHEP 2015 沖繩本島

Outline

Current Status of Services

Motivation to Expand

The Proposal/Model

What's Done

What's Next

Vidyo

Globally deployed Infrastructure

3 years old service

consolidated on the day-to-day activity of the
Community

Intensive usage

Large-sized user base, multiple use cases

8k meetings per month

daily working meetings, remote teaching,
outreach events

50M minutes of activity per year



CERN Vidyo Infrastructure



- 2 portals (redundant)
- 26 routers
- 10 gateways
- 12 phone accesses

Indico

Mature Software Project

> 10 years old

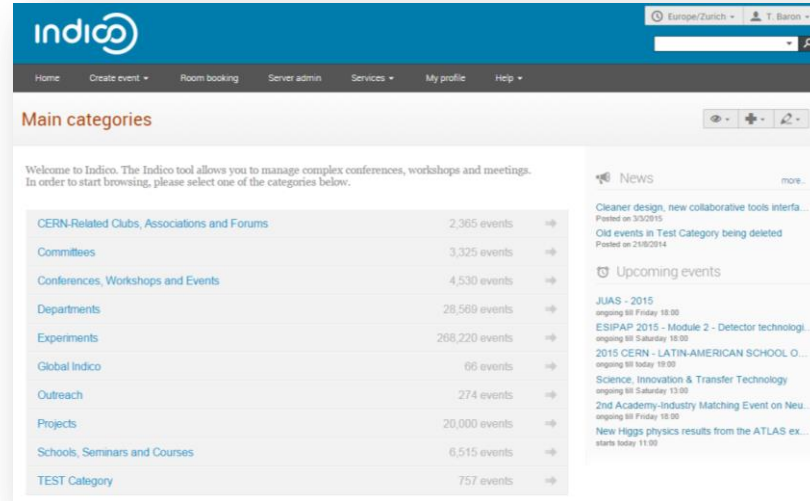
Open Source

Developed at CERN

Medium-sized “community of instances”

More than 150 active servers

Most of them in HEP (but growing)



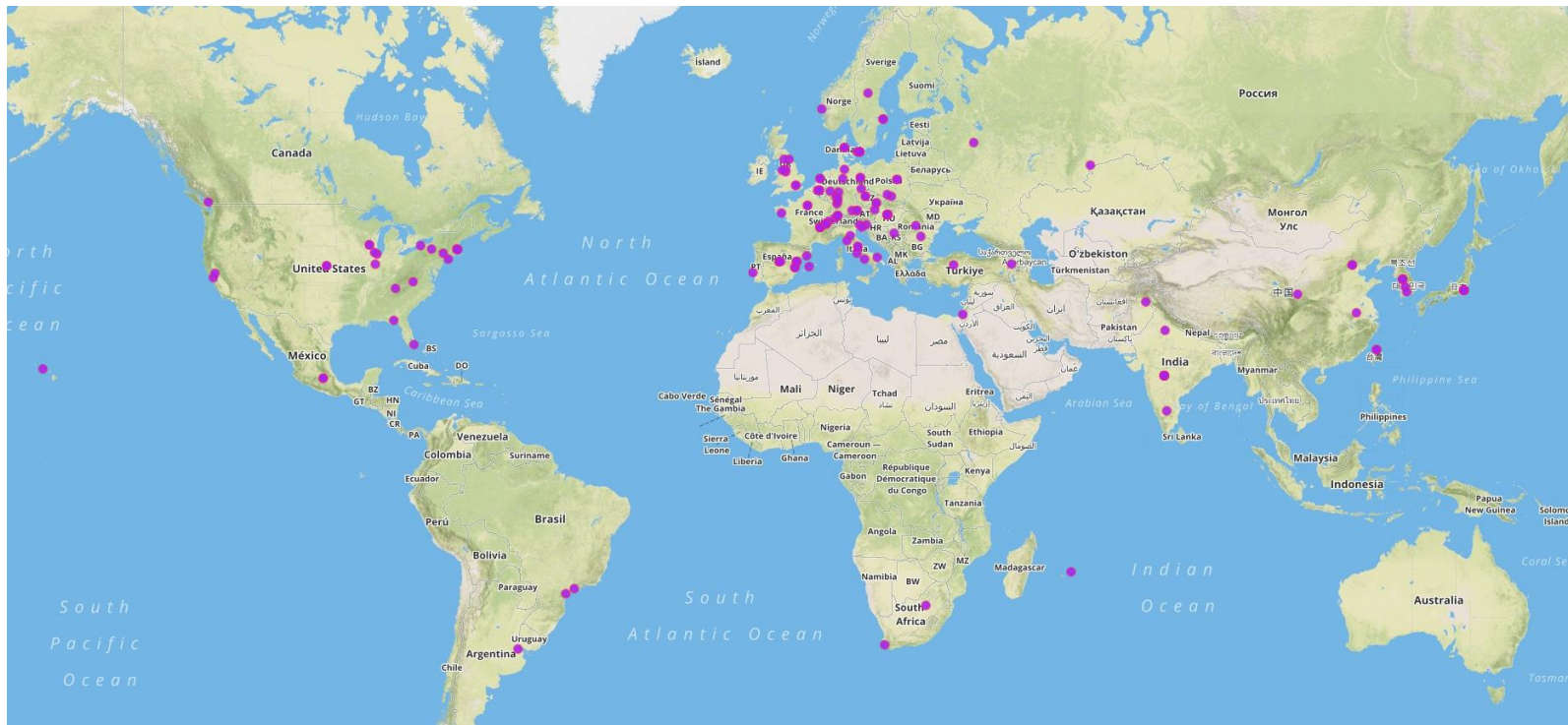
The screenshot shows the Indico website interface. At the top, there is a blue header with the Indico logo and a navigation menu with items: Home, Create event, Room booking, Server admin, Services, My profile, and Help. A search bar is visible on the right side of the header. Below the header, the main content area is titled "Main categories" and contains a table of event categories. To the right of the table, there is a "News" section with several news items.

Category	Number of events
CERN-Related Clubs, Associations and Forums	2,365 events
Committees	3,325 events
Conferences, Workshops and Events	4,530 events
Departments	28,568 events
Experiments	268,220 events
Global Indico	66 events
Outreach	274 events
Projects	20,000 events
Schools, Seminars and Courses	6,515 events
TEST Category	757 events

News section items:

- Cleaner design, new collaborative tools interfa...
Posted on 3/2/2015
- Old events in Test Category being deleted
Posted on 21/8/2014
- Upcoming events
- JUAS - 2015
ongoing till Friday 18:00
- ESIPAP 2015 - Module 2 - Detector technologi...
ongoing till Saturday 18:00
- 2015 CERN - LATIN-AMERICAN SCHOOL O...
ongoing till today 19:00
- Science, Innovation & Transfer Technology
ongoing till Saturday 13:00
- 2nd Academy-Industry Matching Event on Neu...
ongoing till Friday 18:00
- New Higgs physics results from the ATLAS ex...
starts today 11:00

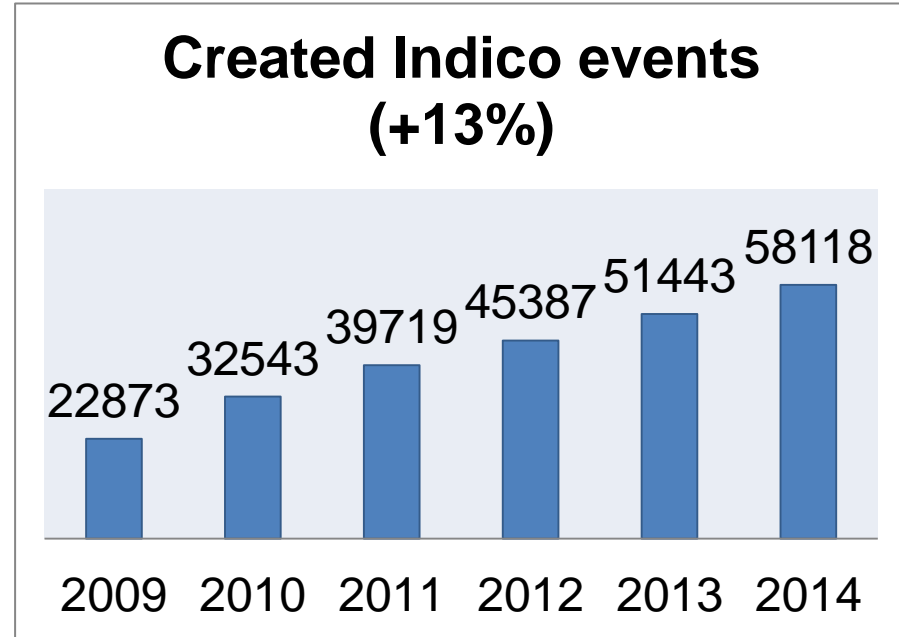
Indico Instances



Indico

At CERN

- > 330K events
- > 1.5M individual files
- ~ 25K unique visitors/week



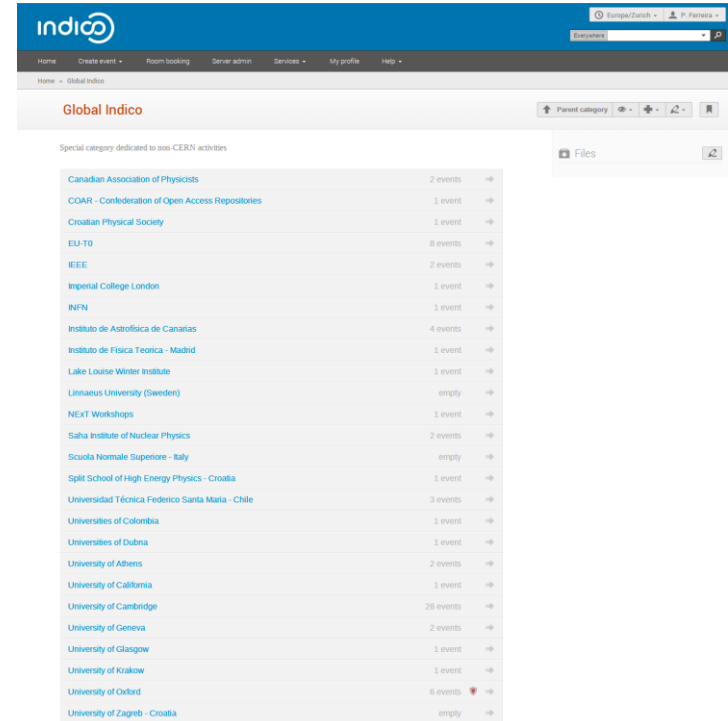
Indico

At CERN

Event creation restricted
Relation to CERN required

“Exception” requests

Events in separate category



The screenshot shows the Indico web interface. At the top, there is a navigation bar with the Indico logo and user information. Below the navigation bar, the page title is "Global Indico". A sub-header indicates a "Special category dedicated to non-CERN activities". The main content area displays a list of event categories with their respective event counts and a right-pointing arrow icon. The categories listed are:

Category	Event Count
Canadian Association of Physicists	2 events
COAR - Confederation of Open Access Repositories	1 event
Croatian Physical Society	1 event
EU-TO	8 events
IEEE	2 events
Imperial College London	1 event
INFN	1 event
Instituto de Astrofísica de Canarias	4 events
Instituto de Física Teórica - Madrid	1 event
Lake Louise Winter Institute	1 event
Linnaeus University (Sweden)	empty
NEXT Workshops	1 event
Saha Institute of Nuclear Physics	2 events
Scuola Normale Superiore - Italy	empty
Split School of High Energy Physics - Croatia	1 event
Universidad Técnica Federico Santa María - Chile	3 events
Universities of Colombia	1 event
Universities of Dubna	1 event
University of Athens	2 events
University of California	1 event
University of Cambridge	28 events
University of Geneva	2 events
University of Glasgow	1 event
University of Krakow	1 event
University of Oxford	6 events
University of Zagreb - Croatia	empty

Motivation to Expand

Successful Experience in HEP

service integration, scalability, criticality

Approach from several institutes and organizations

Beyond HEP, mostly

“How can I use your Vidyo/Indico for my Community in a secured, dedicated and customized way? I’m willing to pay.” 😊

Right now... Issues

Users

Need a CERN account to create meetings in Vidyo

- Guests can be invited but can't be meeting owners

Need switching between servers depending on where the event is organized

Meetings

Same topic, different servers... ***duplication***

No “one place” where to find things or access meetings

Institutes/NRENs/International Collaborations

Need to maintain an Indico server... again, other ***duplications***...

Need to maintain their own non-scalable expensive legacy videoconference infrastructure

Resources that could otherwise be spent elsewhere

“CERN” Advantages

(Vidyo & Indico) @ CERN

Always up to date

De facto “Global Infrastructure” (Vidyo)

De facto “Central Instance” (Indico)

Both Services seamlessly integrated

Central Support (Premium 😊)

Everyone wants to use it! 😊

How can Global Science and Research profit from these advantages eliminating the issues?

The Proposal

A world wide Global Service offering

Hosted/Maintained by **CERN**

A single (distributed) **infrastructure**

Shared by different **communities within and beyond HEP**

Properly **isolated** and **customized**

Federated User Identity and **Access Control**

In agreement with each community policy

Model under discussion

Partnership with GEANT Association

CERN provides infrastructure and know-how

GEANT acts as a facilitator

closer to “end clients”

e.g. NRENs, International Collaborations

mechanisms for charging costs and user support already in place on other fields



2 portals (redundant)
26 routers
10 gateways
12 phone accesses

CERN
Tenant

Tenant
1

Tenant
2

Tenant
N



Vidyo Portal

CERN
Federated
SSO

indico

Community
1

Community
2

Community
N

Facilitator

Organization 1

Organization 2

Organization N

What's Done - Vidyó

Technical Model defined

But also the Legal one is proposed

compliant with CERN's Mission

... and the Business Model

cost recovery

that doesn't disrupt potential commercial competition

What's Next - Vidyo

2015 – First **communities** move in

1st pilot for an European NREN starting on the 1st of June

Others may follow

2016 – Global service Consolidation

Improve AAA models

Develop cross service business models

Integrate with Global Indico (when relevant)

What's Next - Indico

2015 – work on **communities** feature

Financed by CERN's KT Fund

Taking advantage of DB developments

Integrated search within communities

2016 – Global service

Develop Business Model

First communities move in

Cross-server migration tool

