

RECENT PROGRESS ON WEB SERVICES FOR SFT

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TASKS



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- ROOT Primer to Notebooks

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- PIWIK for CERNVM



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- PIWIK for CERNVM
- Websites:
 - ◆ EP-SFT
 - ◆ EP-DT
 - ◆ EP-DEP
 - ◆ ROOT
 - ◆ EP-NEWS
 - ◆ IML
 - ◆ CODER
 - ◆ launching page for ROOT in the browser



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- New websites launching:
 - ◆ LPCC



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 - ◆ launching page for ROOT in the browser
- New websites launching:
 - ◆ LPCC
- News from Drupal at CERN



ROOT PRIMER IN NOTEBOOKS

A BIT ABOUT THE PROJECT

So far a very complete and helpful documentation about ROOT can be found in the ROOT Primer, both in PDF and HTML versions. Although experience suggests that learning by doing is a great way to grasp new subjects and increase own skills.

The Primer is a very useful tool since it is suggested to absolute beginners and used in the ROOT Summer Students Tutorial.

Goal of this project is to create an interactive space collecting text, code, and images together, and allowing the user to modify and see the altered results immediately.

This opportunity is given to us via the use of Jupyter Notebooks.



GOALS OF THE PROJECT

- We aimed to have the current ROOT Primer just better
- We want the **PDF** and **HTML** versions of the Primer just as we do now
- Make use of the **jsroot** library for **interactive** graphs

GOALS OF THE PROJECT

- Additionally we want one **centralised** spot to **edit** the Primer
- All the team should be able to edit the Primer
- The other versions should be **automatically re-created** from the notebooks every day
- We also aim to add the Primer to the already existing **ROOT** learning material



WHAT HAS BEEN DONE

- The ROOT Primer was moved to 9 individual jupyter notebooks
- ~All code snippets are working interactively both on Jupyter and HTML versions
- A github repository has been put in place for easy editing and syncing of the notebooks content as well as easy passing the rights to admins
- The notebooks are also available in SWAN



WHAT HAS BEEN DONE

- A **script** aggregates the content and creates html and pdf versions of the Primer
- A **Jenkins job** is taking care of re-creating the PDF and HTML versions daily and updating them online
- The process has been **merged with the ROOT documentation creation** (rootspi) and has been running successfully for the past days*

PIWIK FOR CERNVM



A BIT ABOUT THE PROJECT

CERNVM is a widely used project, offering pre-configured environment for scientific computing in a Virtual Machine.

Having users all around the world makes the task of understanding how the product is used very challenging: How much CPU is given to each VM? Is the interactive mode favoured over the batch mode? So the idea of creating an automated tool reporting usage statistics was born.

The problem of tracking usage statistics is long solved for websites by using tracking servers. Piwik is a widely used (also the CERN choice for official websites) open source solution that we decided to customise for our needs.



ABOUT PIWIK

- PIWIK is a usage statistics tool widely used for website tracking
- Offers a range of plugins
- Offers an HTTP API
- Can be triggered from a simple curl command
- Offers a variety of views for the statistics based on date range and variables



THE PLAN

- Use PIWIK to track usage of CERNVM VMs
- Collect data:
 - CPU
 - RAM
 - Disk space
 - Type of VM (interactive or batch mode)
 - VM life time
 - Experiment using the VM
 - Geographical location of the VM

WHAT IS DONE

- The server is up in <http://cvm-piwik02.cern.ch/piwik/index.php>
- A database is set-up on database on demand service of CERN
- Customisation is in place in order to enable **custom value tracking** for all requested variables
- There is a script in place to **ship data to the server over API**

HOW IT LOOKS

RAM		
RAM	ACTIONS	UNIQUE ACTIONS
⊕ 16	66	66
⊕ 08	65	65
⊕ 01	64	64
⊕ 04	55	55
⊕ 02	40	40

1-5 of 5

CPU		
CPU	ACTIONS	UNIQUE ACTIONS
⊕ type5	66	66
⊕ type4	65	65
⊕ type1	64	64
⊕ type3	55	55
⊕ type2	40	40

1-5 of 5

DISK		
DISK	ACTIONS	UNIQUE ACTIONS
⊕ 0128	63	63
⊕ 1024	62	62
⊕ 0256	61	61
⊕ 0512	55	55
⊕ 2048	49	49

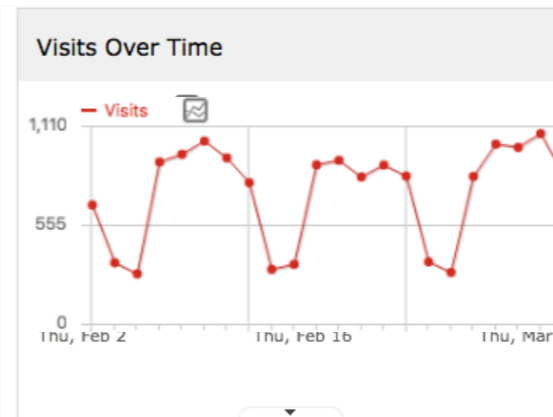
1-5 of 5

INVOTYPE		
INVOTYPE	ACTIONS	UNIQUE ACTIONS
⊕ on_	116	11
⊕ off	115	11
⊕ cdt	45	4
⊕ Value not defined	14	1

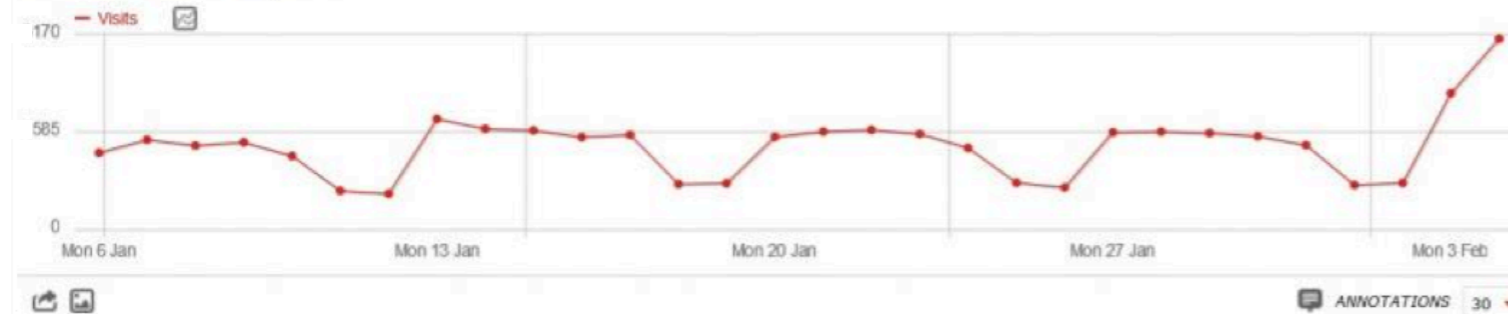
1-4 of 4

VMTYPE		
VMTYPE	ACTIONS	UNIQUE ACTIONS
⊕ 0ac48	1	1
⊕ 00b7d	1	1
⊕ 0b9ed	1	1
⊕ 0b527	1	1
⊕ 0da8f	1	1
⊕ 0f9a6	1	1
⊕ 1a4b8	1	1
⊕ 1a7e6	1	1
⊕ 1aa48	1	1
⊕ 1ac7d	1	1

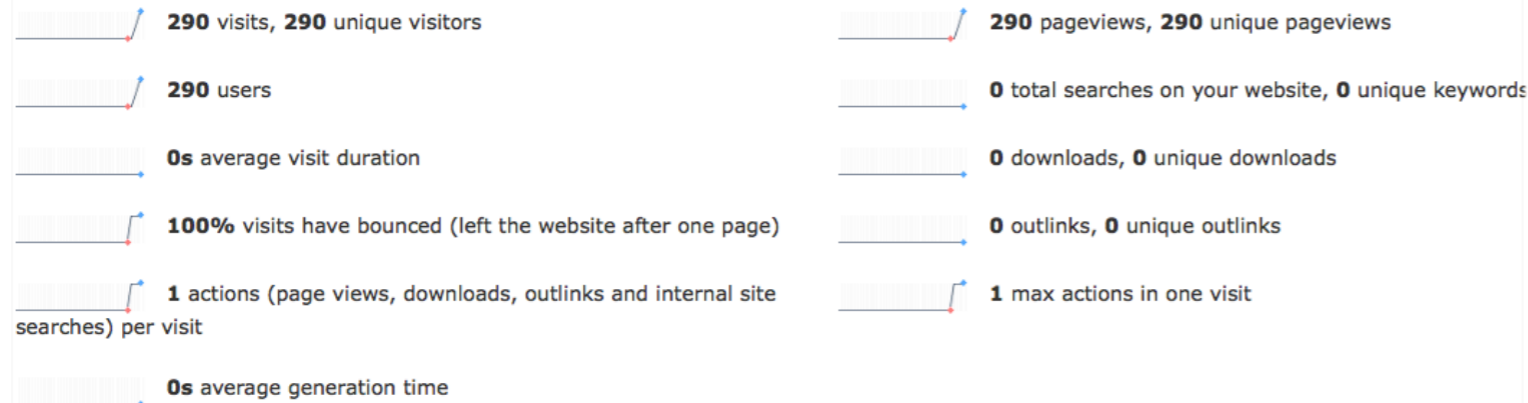
1-10 of 290



Evolution over the period

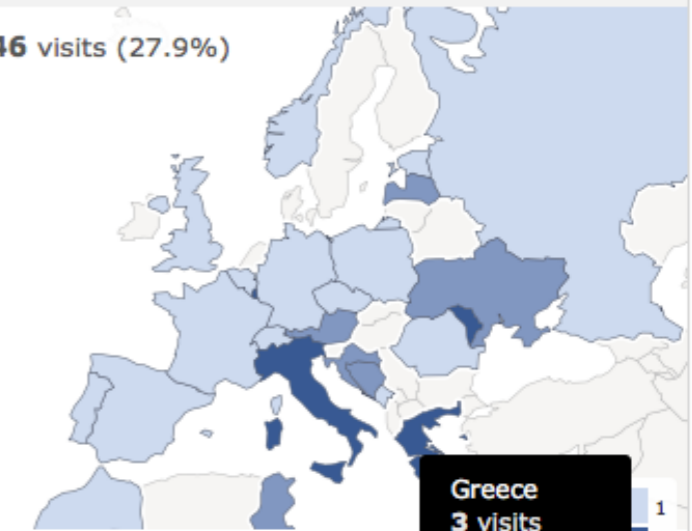


Report



Visitor Map

46 visits (27.9%)



Greece
3 visits
(6.5%)

Visitor Log

Friday, March 3, 2017 - 09:13:14

IP: 128.141.0.0

c8359b01424538f1



Direct Entry

1 Action

[View visitor profile: c8359b01424538f1](#)

1. _cputype1_ram01_disk0256_vmtype7b3ea_invotypeon_
<http://10.0.2.255>

Friday, March 3, 2017 - 09:13:13

IP: 128.141.0.0

84b1a1bbb2ed7468



Direct Entry

1 Action

1. _cputype4_ram08_disk0256_vmtype67c47_invotypeoff
<http://10.0.2.255>

NEXT STEPS

- Incorporate the script in CERNVM
- Set-up an opt-out mechanism for the users
- Test performance
- Push for hosting the server in IT

WEBSITES



BASELINE WORK



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- ▶ Maintenance/Updates

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- Resolving editor’s **rights/e-group** issues after moving from PH to EP



BASELINE WORK

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- **Assistance with publishing newsletters**



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- **Resolving editor’s rights/e-group issues after moving from PH to EP**
- **Assistance with publishing newsletters**
- **Advising there projects on web related issues**



LPCC WEBSITE

- Finalised the website's **structure and design**
- Migrated **content**
- Set up **mechanism for mass-importation** of paper's information from other CERN infrastructure
- **To be launched** in the next couple of weeks



LPCC - SNEAK PEAK -

LHC Physics Center at CERN

[Welcome](#)[About](#)[LHC working groups](#)[LHC publications](#)[Events](#)

Welcome to the LPCC website

News

LHCC open session and Students Poster Session

02/02/2017 The Open Session of the 129th LHCC meeting will take place on Wednesday Febr 22, 9am, in the Main Auditorium of CERN:

<https://indico.cern.ch/event/609813/>

The traditional LHC Students' Poster session will then take place in the afternoon, 5-7pm, in the Salle des Pas Perdu (the area between the Main Auditorium and the Council Chamber). Refreshments will be served. The list of posters will soon appear on

<http://indico.cern.ch/event/608530/>

STATUS OF LHC OPS

LHC status, ["page 1"](#)

Current fill luminosity

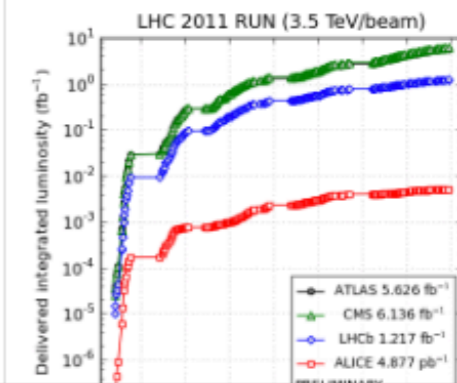
"Page-1", [tutorial](#)

Exp's status, ["page 3"](#)

LHC [weekly plan](#)

[LHC programme coordination](#)

[LHC integrated luminosity charts](#)



DRUPAL NEWS



CERN IS MOVING TO DRUPAL 8



MOVING TO 8: WHY?



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- The last release of Drupal 8 is scheduled in **3 years when security updates for Drupal 7 will stop**: We need to be ready
- After security updates stop the IT will pull the plug of all **Drupal 7 websites immediately**



TIMELINE



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- We will have themes for Drupal 8 websites at **September-October** so production can begin

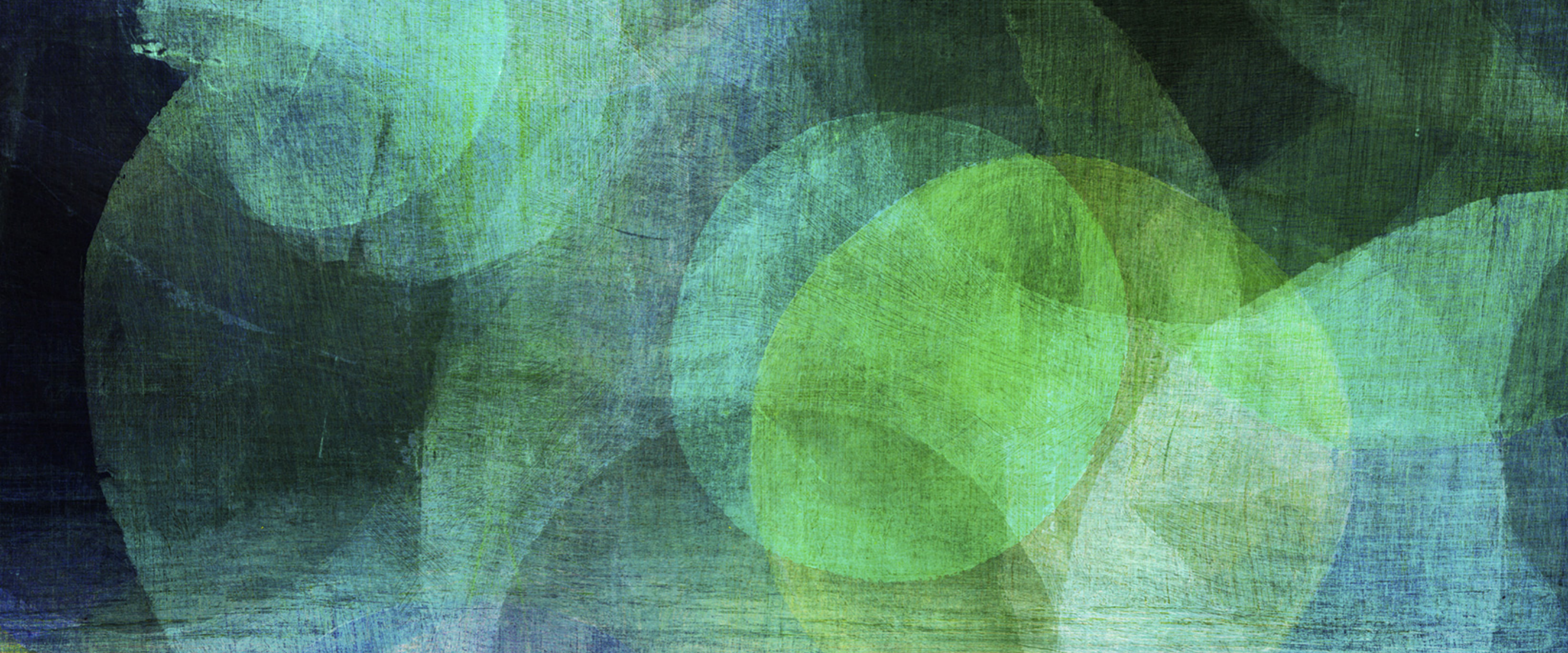
- The home.cern website will launch in **June** when other CERN websites in Drupal 8 **can launch** as well



A GREAT THANKS

- Danilo, Olivier, Bertrand, Enric
- Jakob, Gerrardo
- Sergei
- Angela Ricci and the secretaries of EP
- Mar Capeans Garrido and Valerie Seguin
- Roger Forty, Panagiotis Charitos
- Sotirios Voutas and Eduardo Alvarez Fernandez
- Michelangelo Mangano





THANK YOU

