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PH-DT site migration to Drupal

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PH-SFT

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Who am I?

Nefeli

IT student at NKUA Greece

Technical Student at PH-SFT, CERN (July2013-June2014)

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PH-DT and PH-SFT cooperation

Cross group project (and student!) in PH.

- A **cooperation** between PH-DT (offering the **financial support**) and PH-SFT (offering **supervision**).

- It includes the porting into Drupal and update of **PH-DT** as well as **PH-SFT sites** (and more if time allows?).

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Why this project?

- There is a great challenge to **communicate** the work done by and the identity of the group.

- I had the challenge as well as the opportunity to create a web site that **represents the work, the unique personality and the contribution of the group in a consistent and clear way, according to the style guidelines adopted by the Organisation**.

Help the group to have a greater impact

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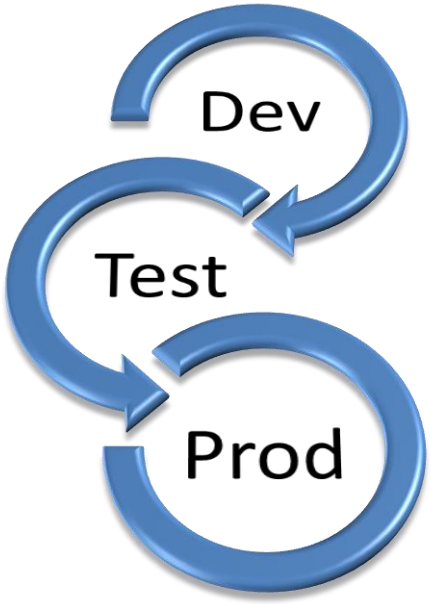
Our workflow

Drupal is based on a database. So in order to duplicate one site to an other location we just need to **clone the database.**



Dev instance : this is where we try things out. We install new modules create new Content types and Views Tweak code.

Test instance: this is where we move changes when they are ready for testing. The users are invited to test the pages and give feedback.

Prod instance: this is the final product **the only one to be visible for the public.**

Flexible and fail safe procedure

Welcome to the CERN radiation-test facility

CERN irradiation facilities (East Hall)

V1.3 (7/3/2002) Back

The Irradiation Facilities in the CERN-PS East Hall are a divisional common project of the EP-division. The service and maintenance for the different IRRAD-facilities described below are provided by the Solid State Detectors Support group PH-DT. Two types of irradiations can be performed:

Proton irradiation (Irrad-1, Irrad-3, Irrad-5)

!!! Beam Profile Monitor !!!
!!! CPS-Page1 !!! **!!! CPS-Structure !!!**
!!!CERN Safety Users Guide!!!

Using 24 GeV/c protons at the IRRAD-1 (general access) or IRRAD-3, 5, 7, 9 (restricted access) facilities.

Neutron irradiation (Irrad-2, Irrad-4, Irrad-6)

Using fast neutrons of about 1MeV at the IRRAD-2 facility.
Using slow neutron spectrum IRRAD-4 facility.
Mixed hadrons field (p, π+, π−, n, γ) TID, SEE, etc on the IRRAD-6 (restricted access)

RADMON LHC experiments, sensors for irradiation facilities.


(NIEL, IEL) Active or passive dosimeters on stock.

Other facilities outside CERN

In collaboration with other institutes, we also offer the possibility to have access to irradiation facilities outside CERN.

Access to data

You can follow the progress of the irradiation of the samples that are registered to be irradiated or can have access to information about samples previously irradiated. Dosimetry results and SET's inventory. User registration status from the facility menu selection.

Users registration

In order to use the web site to submit samples to be irradiated, the name(s) and of the user(s) and of the experiment under which the irradiation are to be

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What is the strategy

FACTS:

1. PH-DT is a large Group with many sub-teams and also has a **matrix organisation** (**cross-group activities, O(10^2) people, 12 sub-teams**).
2. Every team and activity should be **represented** in the site.
3. The site should contribute to the **smooth organisation** of the Group.
4. There is a great amount of **equipment** that the Group has and an infrastructure in order to **pin-point and book-keep it** is needed.
5. There is a great amount of **spaces** (laboratories, assembly halls, offices etc) and they change usage form time to time.
6. The site should be **scalable and sustainable.**

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What is the strategy

STEPS:

1. Get the **general specifications** from the head of the group**.**
2. Meet with a **limited** amount of diverse **teams** and get the specifications of their **needs**.
3. Create the draft of the **main structure**(Content Types, Main Pages).
4. **Implement** the pages for those teams by adjusting the structure to their needs.
5. Use those pages as **portfolio** to help the rest build their pages.

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Thinking ahead

FACTS:

As most pages in CERN the main editor and **superuser** of the site after its completion is going to be the **secretariat** of the group.

Every team will be **editors** of their pages.

Drupal 8 is going to be released in 2014. It is reasonable to assume that CERN will **migrate** at some point.

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Stick to CERN

PRECAUTIONS:

We have used mostly **CERN supported** tools in order to create a site that is **sustainable and supported out of the box (no special cases).**

For the very few cases that we could not solve only with CERN modules we used only modules that are **heavily supported** by the **Drupal community.**

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What we used

CERN-Supported Infrastructure

- CERN theme
- LDAP module
- Indico module
- CERN – Maps automatic redirection
- CERN Profile (!)

CERN-Supported community

Entice

Drupal-Supported Modules

- Superfish
- Devel generate
- Media
- Panels

And More

Drupal-Supported community

Drupal

Ensuring Sustainability

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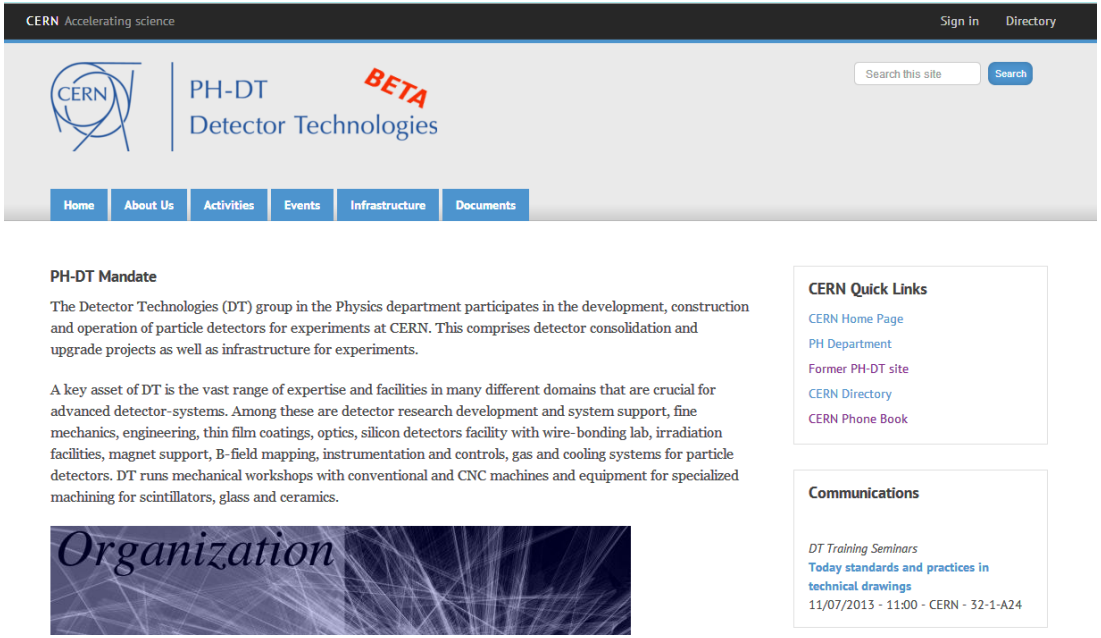
Where we are

http://new-ph-dep-dt-test.web.cern.ch/



- The site is almost finished
- CERN branded
- Automatic connected to Indico and LDAP

Thin Film & Glass service

Optical Quality Control Lab

For the 2 branches of our lab we have set up a quality control lab to qualify surface characteristics and optical properties. Several Microscopes and Spectrometers allow us to analyse the outcome of our work. Our main tool is a Perkin Elmer Lambda spectrometer equipped with different accessories. Spectral, diffuse and total reflection or transmission can be measured from 200 to 800nm. For the far UV range we have a custom build and quite unique spectrometer measuring down to 150nm.

Read more

Glass&Ceramics Workshop

Initially started as PH Glassblower workshop we do still have all kind of dedicated diamond tools for cutting, turning, and milling Glass and Ceramic materials. A high precision CNC milling machine has complemented this unique CERN service. We do offer precise machining of Prototypes as well as small production series for the different CERN experiments. LYSO Crystals and Ferrite machining are some exotic examples for the expertise of our workshop.

Read more

Thin Film Lab

In the Thin Film Lab we provide a CERN wide coating service of metallic, dielectric or organic materials under PVD process. This covers small samples for proto types as well as bigger productions for final detector construction. For reflective layers Aluminium coatings are usually used but all kind of other metals can be evaporated. We have a longstanding experience in the production of UV enhanced mirrors for Cherenkov light reflection in RICH detectors systems. Dielectric layers are mostly used for protection of the metallic reflectors or the enhancement of reflection or transmission.

Read more

Previous Pause Next

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Where we are

Great use of **Views** for aggregation and **Tags** for division of content.

Especialy in the Equipment pages.

Equipment

Olympus SZX7

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Previous Pause Next

Title	Description	Location
Schaublin 48T	CNC milling machine for surfacing, contour, precise holes and complex parts	3/R-003
Graziano SAG 12	lathe: round parts up to diameter ~200mm	3/R-003
Tyslide	small sawing machine for Ceramic parts	3/R-001
Tyslide2	small sawing machine for glass parts	3/R-001
Diamant board sawing machine1	Circular saw for glass plates and tubes	3/R-001
Diamant board sawing machine 2	Circular saw for ceramic plates and tubes	3/R-001
Sand blasting device	Small sand blasting machine for roughening of surface	3/R-001

Tools to ease everyday Group life have been provided

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Lessons learned

- **Drupal experience:** manipulation of content, creation of consistent structures, easing the work of the editors.
- **CERN related Drupal experience:** CERN modules, hosting service, ENTICE, troubleshooting.
- **Group image:** how to represent the identity of a CERN group which is supporting experiments and drives innovation of technology.

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Next steps

The new SFT web site

- **SFT Group** is smaller than DT but **very active**
- Multiple activities.
  - Big HEP software projects.
  - **Participation and organisation** of conferences, workshops, trainings and educational activities.

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Challenges we faced

- **Documentation**/usage guides Indico and LDAP.
- **Way to support** more than 2 layers menu.
- **Profile pages** of the members with **automatic deletion** of previous members (thanks to Eduardo Alvarez Fernandez for his input).
- **Responsive main content** and central support **deadlock.**
- Cars representation and booking (thanks to Silvia Tomanin for her help).

Services

Infrastructure for Detector R&D

- Solid State Detector Lab
- Irradiation Facilities
- Thin Film & Glass service
- Wire Bonding and Reliability Testing Service

Infrastructure for Experiments

- B-field mapping & Magnet support
- Detector cooling systems
- Gas Systems
- strumentation & Controls

R&Ds

- Gas Detector R&D
- Micro-technologies
- On-detector cooling R&D
- Radiation Tolerant Silicon Detectors

Collaborations with Expiraments

Current Projects

- AEGIS
- ALICE Operation and Detector Upgrade
- ATLAS Operation and Detector Upgrade
- CAST
- CLOUD
- CMS Operation and Detector Upgrade
- LCD Studies
- LHCb Operation and Detector Upgrade
- NA62
- TOTEM M&O

Completed Projects

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Proposals

- Support a popular and actively maintained **menu module** like Superfish.
- Support a module that allows us to have a **date as a field** such as Date.
- Support **Panels, EVA**.
- **Responsitivity for the main content** (images scaling, blocks rearrangement).
- **Compose a proposition for browser support strategy** (what browsers, until what version etc).
- Share asap timescale and migration strategies for **Drupal8**
- **Clear communication lines** (Clear documentation catalogue. Clear way to communicate with every team. CERN Infrastructure “Starting pack” for beginners).

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