

Massive Open Online Course on Grid Computing

Monday, 16 September 2013 09:00 (8h 30m)

Description of Work

Initially we started by investigating already available related MOOC courses and platform providers. This made us familiar with the features and format of most courses. We found out that most popular platforms are only open for teaching institutes (universities). This resulted in our choice for the platform of the University of Amsterdam, based on Sakai CLE. We used a stand-alone instance installed in a VM to experiment with the Sakai CLE features (group management, quizzes).

Based on the outline we created a tree structure of the topics of the Grid course. We then gathered content from various sources such as scientific publications, online wiki's and cookbooks in order to create the content for the video lectures, assignments and lecture slides). To support the presentations we created a number of animations to demonstrate key Grid concepts using D3.js.

To allow the course participants to have a hands-on experience we have configured a virtual machine with software (such as Torque and Topos) to support the exercises. In addition we have set up a dedicated account on the user-interface machine and arranged temporary certificates to create the recordings of the examples used in the lectures.

Meanwhile we approached a number of external contributors. Most were willing to participate by contributing lectures about their own experience on using the Grid. These range from high-energy physics, structural biology, and climate modelling to scientific gateways. We provided them with instructions on freely available recording tools and feedback on the drafts of their materials. We anticipate receiving the first round of recorded use cases in due course.

Preferred Day if any (Demos - Mon, Tue, Wed)

n/a

Printable Summary

The 'Massive Open Online Course (MOOC) Development' project aims to provide online courses for the education of students and researchers on e-infrastructures and particularly on the Grid Infrastructure. Recent developments in MOOC platforms enforced the massive distribution of educational content to worldwide audiences. The project envisions contributing to the circulation of free knowledge with the creation of a MOOC on e-Infrastructures. The content will be available to both current EGI participants and potential new users via an online MOOC platform. As part of this project we document the development to be used as reference for EGI on setting up other MOOC courses.

Here we present information about the course structure developed so far. We show the topics of the course: an overview of the teaching modules in general, and use cases from different grid-related fields. We also give information about the platform we have chosen to host the course and how you can enroll.

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Session Classification: Posters display

Track Classification: Virtual Research Environments and Enabling Technologies (Gergely Sipos, Peter Solagna)