HL-LHC Resources request

Date: 2016-09-29

Project/Activity: WP#

Title Position/Task: Software Engineering and Support in EDMS Service focused on HL-LHC activities.

Description Project:

EDMS (edms.cern.ch - Engineering Data Management Service) is the digital engineering memory of the laboratory, storing design and manufacturing data of various components installed at CERN (e.g. the dipoles in the LHC tunnel). It has more than 4000 active users and allows to manage (edit, share, control, comment, approve, version, etc.) over 1.5 million documents and items.

To extend its discovery potential, the LHC will need a major upgrade to increase its luminosity (rate of collisions) by a factor of 10 beyond its design value. The HL-LHC is the project that will develop the new technologies and be in charge of the design, production, installation and commissioning of the equipment required to reach this objective.

The challenges ahead of HL-LHC require better support in terms of engineering data management, therefore new functionality is needed in EDMS.

Task: You will join the EDMS team to:

- Analyze requirements coming from the HL-LHC project in the scope of engineering data management.
- Adapt EDMS and related tools to support more complex (longer) equipment codes – one of the current primary needs of HL-LHC.
- Design and develop web interface components and core business logic in the EDMS technical environment (Oracle Database, Java, GXT) according to present and future requirements of HL-LHC, e.g. item lifecycle and versioning, Engineering Change Request related functionality
- Develop system integration with asset management system Infor EAM (e.g. creating/linking assets to items)
- Develop system integration between EDMS and CAD (e.g. linking EDMS items to CAD designs, synchronization of item parameters),
- Enhance data import tools to better support massive data creation and update
- Participate in testing and code reviews, preparation of documentation
- Provide user support within the scope of HL-LHC: bug fixing, EDMS configuration, data import

Profile: Software Engineer

Experience:
Experience in software design and development, specifically in the domains of web development and relational databases.

Specific details: Good knowledge of Java and SQL programming languages, knowledge of web technologies (HTML5, CSS, JavaScript), familiarity with GWT and SCRUM methodology would be an advantage. Good level of English.

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Visa Budget Officer: B. Delille		*Date:* 2016-09-29
Distribution List: UPM, IST		

Proposal:

To be filled by the University with reference to list of candidates or team work proposal