PLM Interest Group

PLM-ALM Standard and Reference Manual

Development of hybrid hardware/software products requires the integration of PLM and ALM. Modern "black box" software can fail to do this correctly.

This Standard shows PLM Managers the level of integration they must achieve; and is supported by a full technical analysis in the Reference Manual.

Roger Tempest, PLMIG Co-Founder

0 Executive Summary

The development and management of hybrid software/hardware products through their lifecycle has always been a complex problem.

This subject is now known as Application Lifecycle Management (ALM), but was originally referred to as Software Configuration Management (SCM).

Terminology has moved forward but solutions have not. Some vendors have provided applications that can link software development to PLM, but they tend to be "black box" solutions that hide their workings from the user.

What is worse for the PLM Team is that these applications focus on synchronising product development as it initially happens - in the "here and now". But PLM also has a requirement to maintain the complete product configuration as it existed at defined points in the past. Lack of attention to this stores up potentially serious problems for the future.

Hardware design and software design are different activities, and PDM and ALM are different systems. The most effective way of operating them together is to use the systems for the purposes for which they were intended, and to maintain a simple but rigorous interface between the two.

This document is based on a workshop run by the PLMIG in Gothenburg in 2005, when the subject was at the forefront of PLM debate. Participants included industrial companies, vendors of PLM and SCM solutions, and academic experts from the University of Mälardalen, who were the recognised leaders in the field.

The workshop produced a an explicit methodology for the best way to manage the product data between Product Data Management and Software Configuration Management systems. This document brings everything up to date with a Standard, to show what should be done: and a Reference Manual to show why.

The PLM-ALM Standard enables the PLM Team to test that everything is set up correctly. It defines the requirements that the PLM implementation must meet if it is to successfully manage the software and hardware product lifecycle.

This document also contains a PLM-ALM Reference Manual that contains all of the theory and learnings from Gothenburg; and explains this logic in a way that any PLM Manager can understand. Its methodology removes the uncertainties about the best way to manage PLM and ALM data, and allows you to implement a single, practical solution with the minimum of time and effort.

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