



PLM Interest Group

PLM-SCM Guidebook

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0 Executive Summary

This PLM-SCM Guidebook was created by members of the PLM Interest Group (PLMIG) based on a 2-day workshop held in April 2005. It puts in context the difficulties encountered when developing software in a PLM environment, and provides an explicit methodology for the best way to manage the product data between Product Data Management (PDM) and Software Configuration Management (SCM) systems.

In any environment where complex products are developed which consist of both physical (hardware) and logical (software) components, there will be problems in managing the product data. These problems are often hidden, because of a general misconception that hardware design and software design are similar activities; and when they are uncovered, there seems to be no clear solution to them.

This Guidebook makes clear the differences between hardware and software design so that the problems can be understood. It sets out a straightforward and practical solution that can be applied to any company that creates hybrid products, and explains how to apply it so that the correct PDM-SCM relationship can be maintained in your own organisation.

At the heart of the Guidebook are the principles that:-

- (i) we need to manage the Product Structure; and,
- (ii) each member of the overall design team works most effectively with the tools for his/her own discipline.

Hardware design and software design are different activities, and PDM and SCM 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.

The Guidebook Methodology removes the current uncertainties about the best way to manage PDM and SCM data, and allows you to implement a single, practical solution with the minimum of time and effort.

This Guidebook is not a theoretical study of new academic knowledge, but was created with that input. Just enough theory is included to enable the correct decisions to be made about the approach. It is not necessary to understand the theoretical relationship between PDM and SCM in order to implement the solution. That remains the ongoing task of academia. In the meantime, the PLM-SCM Guidebook Methodology can be applied within your business now.

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