SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT (D3)
Novel Concepts and Technologies for Enable Future Building Blocks in Space Exploration and Development (3)

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PRODUCE SPACE SOFTWARE FROM SOFTWARE FACTORY

Abstract

This paper analyzes the arising challenges faced by space software production nowadays and discusses the evolutional ways to develop in the future, based on China space software engineering experience. It can give references to develop the space software engineering and industry.

Software will be more and more widely used in space systems to realize intelligence and information functions, the future aerospace industry requires enormous qualified software products under the condition of a tight schedule. The essence and features of space software is a typical kind of industrialized products like the hardware, so we can organize the developing and producing work with industrial methodologies, and set up corresponding industrialized infrastructures and capability. The main approaches include: to strengthen the space software system engineering, to promote the standardization, to build the product line with software engineering tools, to set up software parts library, to set up quality management system and social production system, and so on.