

HOW LEADING SPACE MANUFACTURERS STAY IN CONTROL AS COMPLEXITY GROWS

Space programs are becoming more software-defined, autonomous, and interconnected. As complexity grows, organizations must maintain control across requirements, engineering, software, manufacturing, and mission assurance.



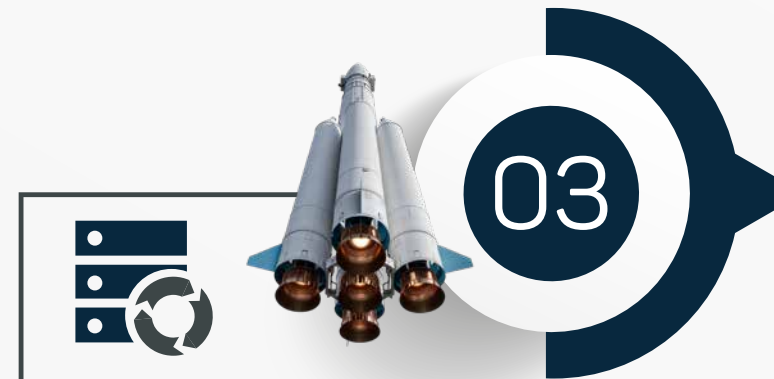
ADAPTING TO EVOLVING MISSION REQUIREMENTS

Space organizations need connected requirements that can adapt to mission updates, customer priorities, regulations, and evolving objectives without disrupting downstream engineering activities.



COORDINATING HARDWARE & SOFTWARE DEVELOPMENT

Mechanical, electrical, software, and systems engineering teams increasingly develop products in parallel. Organizations need shared data and traceability to keep changes synchronized across disciplines.



BRINGING COMPLEX SYSTEMS TOGETHER

Modern space systems integrate hardware, software, electronics, and autonomous capabilities that must be continuously verified and validated throughout development.



SCALING ACROSS CONFIGURATIONS & PROGRAMS

As programs expand across suppliers, mission variants, satellite constellations, and product baselines, organizations need visibility into every approved configuration and engineering change.

WHY IT MATTERS:

Prevent late-stage redesigns, protect program schedules, and maintain system integrity.

Improve cross-functional coordination from a shared engineering baseline.

Detect issues earlier, reduce costly rework, and increase confidence before launch.

Prevent configuration drift and maintain approved baselines across programs.



PROGRAM GOVERNANCE, COMPLIANCE, & TRACEABILITY

Mission success depends on maintaining traceability across requirements, engineering decisions, verification evidence, manufacturing records, and program documentation throughout the product lifecycle.

WHY IT MATTERS:

Accelerate certification, strengthen audit readiness, and reduce launch risk.



HOW PTC HELPS SPACE ORGANIZATIONS MAINTAIN CONTROL

PTC helps space organizations connect requirements, engineering, software, manufacturing, testing, and configuration data through a digital thread that maintains visibility, traceability, and control from concept through launch.