### **TANGRAMPRO®**

# SAFETY, SECURITY, AND CORRECTNESS FOR MISSION-CRITICAL SYSTEMS



Mission-critical systems need software to do exactly what it's supposed to – and nothing else. Traditional engineering processes don't accommodate the complexity of software. Integration occurs late in the cycle, making it challenging and costly to address issues that arise during V&V. Even when software meets functional requirements, it often fails to be safe, secure, or correct.

It's time to change the way we approach verification and validation for software-driven systems.

### **NAVIGATING THE SHIFT**

### MODERNIZED V&V WITH TANGRAM PRO

#### **Automatic Code Generation**

# Improve security and correctness during implementation.

Tangram Pro automatically generates secure interfaces— the "glue code" that connects software components and systems.

Serialization and deserialization is used to harden interfaces by blocking incorrect or malicious communications.

#### **Integrated Testing**

#### Test early and often.

With Tangram Pro, engineers can include testing and assurance tools in reusable workflows that integrate with DevOps pipelines. Full spectrum analysis at each step of development provides users with early detection of errors and clear, actionable test outputs.

#### **Correct by Construction**

## Adopt the cornerstones of building correct software.

Tangram Pro creates modular component architectures and implements functionally correct code. This hardens the interface between components, automatically implementing system-level security to reduce attack vectors from cyber intrusion.

With Tangram Pro, V&V begins at implementation – resulting in software that is correct at creation and systems that are cheaper, faster, and safer to deliver.

