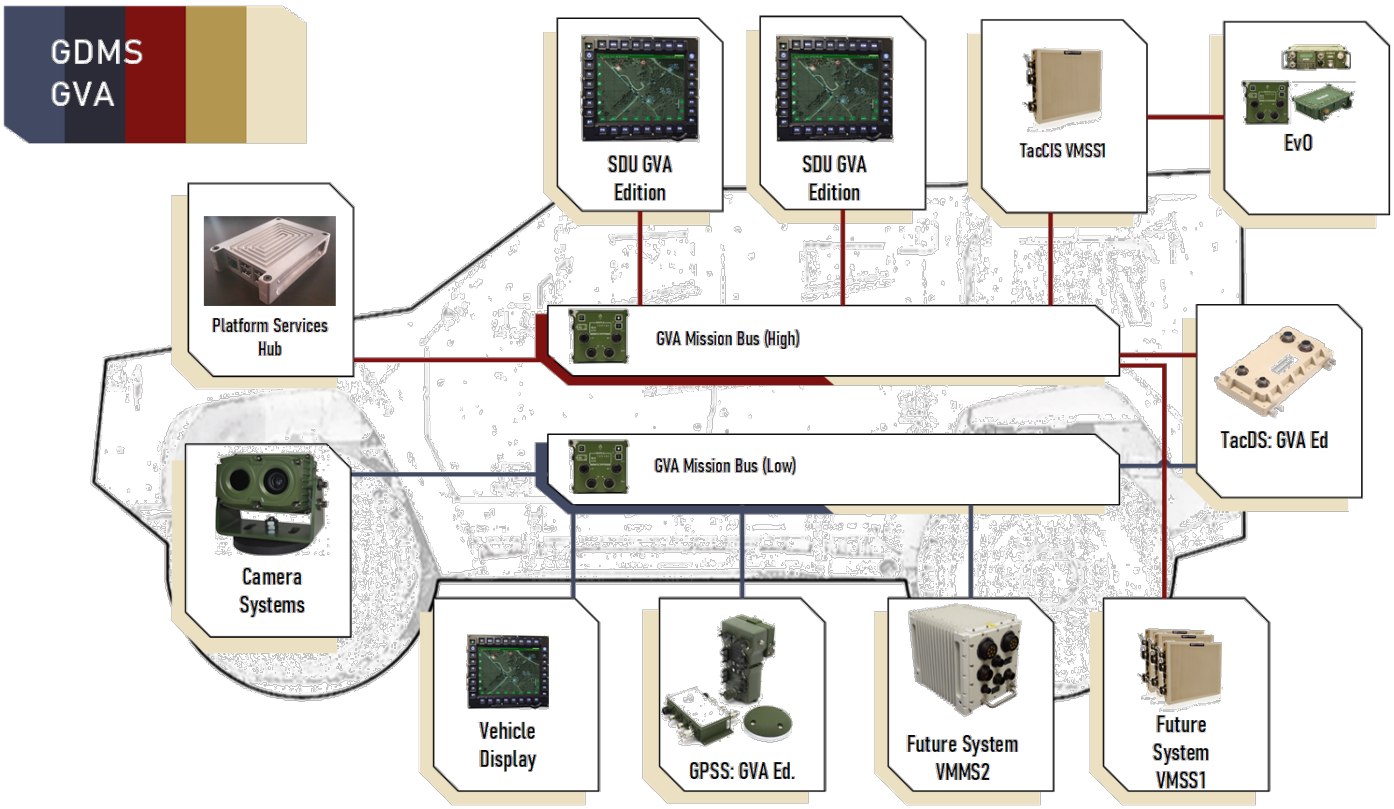
GENERAL DYNAMICS
Mission Systems

GVA Platform Services Hub

The Generic Vehicle Architecture Platform Services Hub (PSH) provides a Platform or Vehicle Mission System Integrator with the core GVA services to enable integration of Base Vehicle, Platform and Mission Sub-systems into a coherent Platform Mission System. Scalable and designed for compatibility with LDM V9.0.1 and Def-Stan 23-009 will continue to track standards and develop versions compliant to the latest issue.



Satisfy essential GVA service requirements with a single GVA appliance.

All essential GVA infrastructure services in a single appliance

Low footprint compute requirements – ARM or x86 dual core with 4GB Ram

Provides vehicle compliance with LDM V9.0.1 and Def-Stan 23-009

GDMS GVA Product Family

- Smart Display: GVA Edition
- GVA Assured Position Navigation and Time
- GVA Vehicle Mission Subsystem hosts.
- GVA Cross Domain (TacDS)
- GVA Mission Bus

Essential Services for GVA Compliance

PSH provides the platform infrastructure integration services required to enable integration of GVA systems. These services are essential to integrating sub-systems and components onto the data infrastructure. They describe the behavioural ways the networked devices interact with each other as a whole system and include the Arbitration, Platform Configuration, Initialisation and Registration functions allowing sub-system synchronisation essential to the smooth running of the platform.

Services Description

PSH includes the following essential infrastructure services:

- GVA Registry Service
  - The registry service allows GVA compliant components and subsystems connected to a GVA based vehicle Mission System. This standardisation ensures that GVA compliant mission sub-systems and Resources from different manufacturers can configure and initialise when connected to vehicle mission systems provided by different system integrators.
- GVA Arbitration Service
  - The Arbitration Service provides the mechanism for arbitrating/allocating control of controllable resources [Operator] to commanding resources [sub-system] (for example a sensor to a display). This allows for a safe and unambiguous interaction with the sub-system.
- GVA Platform Configuration
  - The Configuration Service provides the platform with the initialisation information and operating parameters for both discoverable and non-discoverable resources.
  - Provides a persistent capability that enables the platform to maintain information about its discoverable resources including during power cycles. (both warm and cold boot).
  - Allows detection and management of any configuration anomaly: unexpected new resources, missing resources and changes to software/ firmware and hardware versions.
- GVA UCMS, HUMS Storage and HUMS Export
  - The Usage and Condition Monitoring Service (UCMS) Provides the mechanism for gathering, processing and storing system data related to the operation and status of equipment operating onboard a platform.
  - This provides the integrated Platform HUMS Service as defined by the GVA Defence Standard 23-009 Part 3.

Technical Information

Minimum Computing Requirements

- Windows 10
- 2GHz Dual Core CPU
- 4 GB of RAM
- 60 GB free SSD disk space*
- 100MB Ethernet

*dependant on number of system components and length of HUMS storage requirements.

Standards Compliance

- Land Data Model 9.0.1
- GVA Registry Services V2.3
- GVA HUMS Export Description V1.0
- GVA Command Response Protocol V1.1
- GVA Defence Standard 23-009 Part 1 Issue 4
- GVA Defence Standard 23-009 Part 3
- GVA Defence Standard 23-009 Part 7 [Soon]

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