



Family of Maintenance Trainers

The goal of the US Army's Family of Maintenance Trainer (FMT) program is to develop training devices using a common architecture that supports skill level development for system operation, fault diagnosis, troubleshooting, adjustments, removal and replacement, and repair tasks. The FMT program has two phases.

Phase 1

Prototype Phase

In this phase, DiSTI performed an analysis of the existing systems in the Army's inventory. This inventory consists of training devices that were primarily developed in isolation and can be described as separate "stovepiped" systems.

DiSTI developed a prototype Common Core Product Line Architecture and software baseline. The following requirement was to validate the Common Core Architecture by developing prototype maintenance trainers for multiple vehicle platforms such as:



Stryker



Bradley



Abrams



Joint Light Tactical Vehicle (JLTV)



Armored Multi-Purpose Vehicle (AMPV)

Phase 2

Production Phase

The production phase includes the development of the entire curriculum of Diagnostic Troubleshooting Trainer lessons, design, production, and installation of standard classroom configurations, and continued improvement to the Common Core architecture to support the HOT and PTT devices that are being developed under the Army's FMT program.

» **Diagnostic Troubleshooting Trainers (DTTs)** provide interactive visual and audio maintenance training in a virtual classroom environment. The classroom includes at least one Instructor/Operator Station (IOS) and multiple Student Work Stations (SWS).

» **Hands-on Trainers (HOTS)** provide high fidelity, system/subsystem full-scale representation and allow student access to hardware for fault isolation and subsequent repair training of LRUs.

» **Part Task Trainers (PTTs)** provide high fidelity, system/subsystem full-scale representation and allow student access to hardware for fault isolation and subsequent repair training of defective Line Replaceable Units (LRUs).

What is Common Core?



Although the current trainers have common classifications of software within a variant (i.e., within vehicle types for both DTTs and PTTs), there is no commonality between variants. Each variant's software architecture and source code is unique and separate.

Common Core produces a set of plug-and-play applications in the product line architecture applicable across an organization's product portfolio of legacy and future combat/tactical vehicle training systems without losing current functionality.

Benefits of Common Core



Commonality across platforms
saves money



Supports multiple vehicle
simulations in a single
classroom



Includes a Training
Management System to
track student records and
performance



Drives common hardware
usage minimizing the logistics
footprint for long-term support
of the classroom installations



Drives easy transition for instructors and
students across vehicle platforms because they
maintain the same operational look and feel

How Can You Benefit from Common Core?

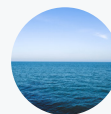
The Common Core architecture used in the Family of Maintenance Trainers is applicable to maintenance training devices on a wide array of platforms, such as:



Ground



Air



Sea

Developing maintenance and operational training solutions in a Common Core architecture improves virtual training development time and long-term system sustainability. With significant releases already complete, DiSTI continues development to add new features and functionality to the platform.

Contact The DiSTI Corporation today to learn how your organization can benefit from this award-winning virtual maintenance training system.