CROSS DOMAIN TRANSFER FOR TACTICAL IN-THEATER INFORMATION SHARING
Data sharing is essential to the rapid, accurate, and precise execution of customers’ missions. With the persistent threat of cyber-attack, penetration, and data loss, protecting data integrity during the sharing process is of the utmost importance. Nowhere else is data protection greater than in tactical, mobile missions involving ongoing data collection where space is limited and the risk of data integrity loss and tampering is greatest; such as aircraft (manned and unmanned), ships, and armored vehicles.

A guard software solution enables data to pass from one system or network to another securely. Guards are used in situations where the data being passed or the data destination is sensitive or classified. Guards enable highly complex, bi-directional or multi-directional, automated data transfer between multiple domains or systems.

FORCEPOINT SMALL FORMAT GUARD
Based on customer requirements for a small, lightweight guard requiring low-power, high throughput, and low latency that operate outside of traditional data centers, Forcepoint developed the Forcepoint Small Format Guard. Forcepoint Small Format Guard supports robust security protocols and is adaptable to specific mission needs where strict size, weight, power, and cooling (SWaP-C) specifications are required.

In many cases, mobile forces’ missions are focused on data collection from a variety of sources. Once that data is collected it must be moved and shared between the appropriate recipients – human or machine. Forcepoint Small Format Guard is a software solution that can operate on a single board computer (SBC), Advanced Telecommunications Computing Architecture (ATCA) processor board, or other ruggedized systems. Forcepoint Small Format Guard was developed to meet the secure data transfer needs of customers with SWaP-C requirements – from highly complex flying data centers with heavy redundancy requirements to a single system operating in a Forward Operating Base (FOB). Customers who need small, lightweight guards that require low-power usage and operate outside of traditional data centers are excellent candidates for Forcepoint Small Format Guard.

Specific needs can vary from customer to customer and mission to mission. Solutions
at the tactical edge, for example, must be tamper-resistant in the event that the device or vehicle is lost, stolen, or captured. Some missions require bi-directional transfer while others require one-way only. Forcepoint Small Format Guard was designed with the flexibility to support a wide range of different customer environments (Figure 1).

THE NEED FOR FORCEPOINT SMALL FORMAT GUARD

Forcepoint Small Format Guard can work in conjunction with secure data stores like those found in some aerial vehicles. This provides the ability to perform classified missions while allowing the hardware to be unclassified at power off. Additionally, data flow policy can be selected based on the type of mission to be performed.

For ground forces operating in a FOB, Forcepoint Small Format Guard can be mounted in a transit case allowing for collection and viewing of data from both US and coalition networks. Forcepoint Small Format Guard’s design allows it to be simply turned on or off without complex administration.

DESIGN AND DEPLOYMENT

Forcepoint Small Format Guard leverages the data handling capabilities and security design of Forcepoint’s successful and widely deployed Forcepoint High Speed Guard. Forcepoint High Speed Guard, approved to move data between the nation’s most sensitive networks for Top Secret and Below Interoperability (TSABI) and Secret and Below Interoperability (SABI), has a rich history within the US Department of Defense and Intelligence Community for its deep security, rich functionality, fastest available transfer rates, and flexibility. Forcepoint Small Format Guard is a Commercial-Off-The-Shelf (COTS) software solution that runs the Red Hat Enterprise Linux operating system with SELinux on a variety of x86, 64 bit hardware platforms. This allows customers the most flexibility of any small form factor guard solution.

MISSION SPECIFIC CONFIGURATIONS

Forcepoint Small Format Guard is loaded with configurations specific to the type of mission being executed. Each configuration is built using the Forcepoint Small Format Guard Configuration Builder software tool set. This tool set is typically located in the customer’s factory development environment. Only approved configurations can be loaded on Forcepoint Small Format Guard.

For the administration of Forcepoint Small Format Guard is simplified with predefined mission configurations that are applied as needed. Operation of Forcepoint Small Format Guard is designed to be autonomous without human interaction or specially trained users. At power-on, Forcepoint Small Format Guard loads and becomes operational. All that is needed at mission completion is to power off Forcepoint Small Format Guard. While active, logging is done to either a remote customer Audit Review System or local disk to maintain a post mission audit trail.

For the Forcepoint Small Format Guard enables the secure transfer of virtually any type of data, bi-directionally across any number of classified and unclassified networks – critical to mission success. A single Forcepoint Small Format Guard can support up to twelve different security levels.

CONCLUSION

Forcepoint Small Format Guard delivers secure data transfer, meets SWaP-C requirements, and provides the flexibility and security to match the mission. With the addition of Forcepoint Small Format Guard, Forcepoint has further broadened their
ability to deliver premier guard technology and expertise even more efficiently and effectively to customers with in-theater cross domain needs.

Forcepoint cross domain products have been designed to meet or exceed extensive and rigorous security Certification & Accreditation (C&A) testing by the Defense Intelligence Agency (DIA) and the National Security Agency (NSA) for simultaneous connections to various networks at different security levels. Forcepoint offers an experienced Professional Services team to guide customers through the technical implementation and C&A processes. Forcepoint’s cross domain products have a proven track record of proactively preventing government and commercial organizations from being compromised, while fostering the secure access and transfer of information.