CyberC4:Proxy – Efficient CDS Enabling Technology

Many popular Cross-Doman Solutions (CDS) can use Extensible Markup Language (XML) constrained by XML Schema Definition (XSD). The benefit to this approach is that rules for CDS described by XSD files are much simpler to manage than stove-piped CDS solutions. This creates both an opportunity and a problem for CDS in SATCOM environments. The opportunity is reduced time to accreditation and the problem is that most endpoints in the system do not natively converse in XML conducive to CDS scrutiny. CyberC4:Proxy positions itself on both sides of the CDS solution to efficiently translate between the CDS-friendly XML and the native satellite ground system Application Programming Interfaces (APIs.) Usually, that API is Ground Equipment Monitoring Service, or GEMS, but the CyberC4:Proxy can be extended to accommodate other APIs.

Software Based and Lightweight
CyberC4:Proxy is a software-based solution that runs on Linux systems. It can run on physical hardware on premise, in the cloud or in containers. Each proxy application is light on system resources.

Secure and Flexible Transport
CyberC4:Proxy is Secure Sockets Layer (SSL) capable and configurable to use FIPS compliant cryptographic algorithms along with user provided or self-signed key material. CyberC4:Proxy is configurable to use UDP and TCP/IP to communicate with endpoints and CDS solutions.