



PICARD

Platform for Integrated C3 & Response Defense

A common endpoint for all sensors, products, systems, and results.



The PICARD platform offers an elegant data integration solution for operational technology and other non-traditional systems to meet the demands of National Security. Enabling the mission today and catalyzing the capabilities of tomorrow, it mitigates vulnerabilities from common legacy systems. The design and architecture scale to handle the speed of information, quantity of data, and a growing ecosystem of new technologies. PICARD delivers actionable intelligence, for decision-making any time, any place, any circumstance.

Challenges in operational environments

Mission demands require speed and adaptation, but incorporating and maintaining non-traditional systems is a costly and slow process. Common hurdles include:

- Complexities of protocols, data formats, and system capabilities
- Large quantities of raw data to be fused, cleansed, and processed
- Accessed through restrained compute on legacy systems such as SCADA, weapon systems, and industrial control systems with significant cyber security risks

Key benefits

PICARD provides one common endpoint for all sensors, products, systems, and results. Instead of architecting data flows and large numbers of integrations, teams can quickly instantiate PICARD, connect their operational technology and start interacting with the data immediately — offering a time to value of a few days.

PICARD incorporates a configurable data-pipeline to route and process all data. Through its drag-and-drop interface, users can route data, process workflows, trigger events, and even integrate machine learning classifiers into their information flows.

PICARD bastion hosts and zero-trust networking significantly lower the risk of incorporating legacy and other potentially vulnerable systems into your environment, unlocking all that data otherwise trapped by disconnected environments.

PICARD works in a data center — and a backpack.



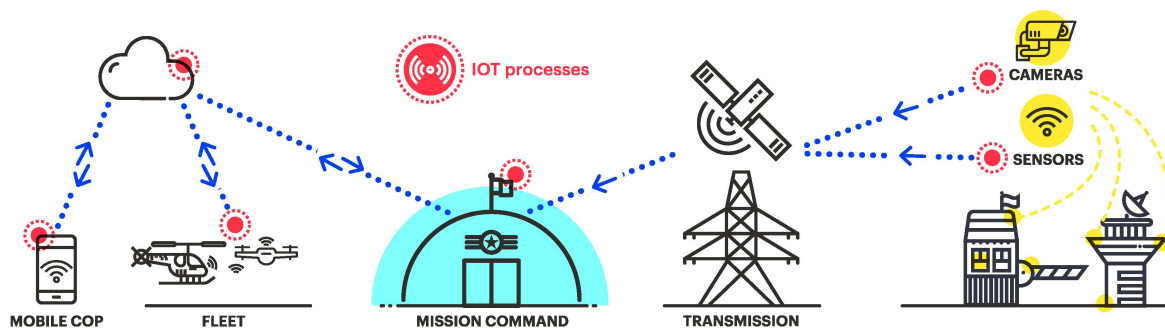
The fundamentals

PICARD is a Government off-the-shelf edge platform containing adapters that interpret protocols and schemas to a common language. This allows the platform to act as a universal translator between disparate systems.

In addition, PICARD contains a data pipeline for processing and augmenting data and a framework

anyone, or anything, from anywhere, as long as they are authenticated and authorized, can interact with the system to meet specific mission needs. PICARD is also cross-domain capable.

Finally, the system uses a federated edge model that leverages cloud in responsible ways. This allows for insights whether disconnected at the austere edge or



for launching microservices. Moreover, it includes a secured, enclaved cloud platform that provides enterprise services such as PKI, cybersecurity, logging and monitoring, a data lake, and reserve of hardware for intensive workloads. It also provides secure connection to enterprise and Internet resources. PICARD delivers industry standard DevSecOps and CI/CD pipeline practices in the cloud and to the edge. The platform is containerized and built on microservices and open APIs.

Operational benefits include certificate management, continuous monitoring, updating, scans, and patches 24/7 providing an authority-to-operate that can quickly evolve. In addition, cloud capabilities such as auto-scaling, load balancing, and high availability across regions, combined with global access me that

crunching heavy machine learning algorithms with a high-speed connection to the cloud. It is optimized to scale down to small single-board computers but designed to scale up to enterprise capabilities.

Our roadmap

To meet the growing needs of National Security, PICARD continues to grow our protocol adapters suite, meaning new implementations will increasingly be plug-and-play. Our data pipelines become more capable as we strive to make PICARD “environment aware” — auto-scaling data sampling, aggregations, storage, analytics, and communications to the compute (CPU, RAM, GPU, storage) and network capabilities under which it is running.