Wednesday, October 23, 2024

2:30 pm - 2:50 pm

Software X

Josh Mills

Account Executive

Red Hat

Abstract:

Red Hat will provide an overview of Red Hat's alternative CANES/Agile Core Services design that simplifies the existing architecture by collapsing the infrastructure and application layers in the existing system into a single consolidated platform where containers and virtual machines operate side-by-side. The concept, known as Software X, decouples the hardware from the software and enables over-the-air delivery of core CANES and ACS services. Further, the design and prototype are designed to be installable on HW1.2 and later shipsets during a 30 day availability period.

CANES/ACS Solution:

CANES is partnering with Red Hat Consulting to design and build a Proof-Of-Concept of the Software X concept at NIWC LANT using representative CANES HW1.2 from the USS Champlain.

The Software X strategies include:

30 day Backfit Capability: Enables rapid deployment to the fleet on CANES HW 1.2 baselines and newer.

Rapid Capability Delivery: Push CANES/ACS updates to the fleet in hours, not weeks or months or years. Permits the fielding of an MVP and evolving that baseline dynamically based on fleet feedback.

Hardware Agnosticism: Modular design deployable to

Existing legacy hardware already installed on platforms

New hardware stacks

Mix of Legacy/New hardware

ZTA Enablement: Providing CANES as a service via App Arsenal allows PMW 160 to implement ZTA strategies gradually and push atomic changes quickly and incrementally to a single fleet-wide software baseline.

Modular Data Centers: Distributing data and applications across multiple points shipboard and simultaneously across geographically dispersed data centers can help ensure continued service in the event of a disaster.