The Unlimited Power of Test Automation and GCCS-M

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Abstract

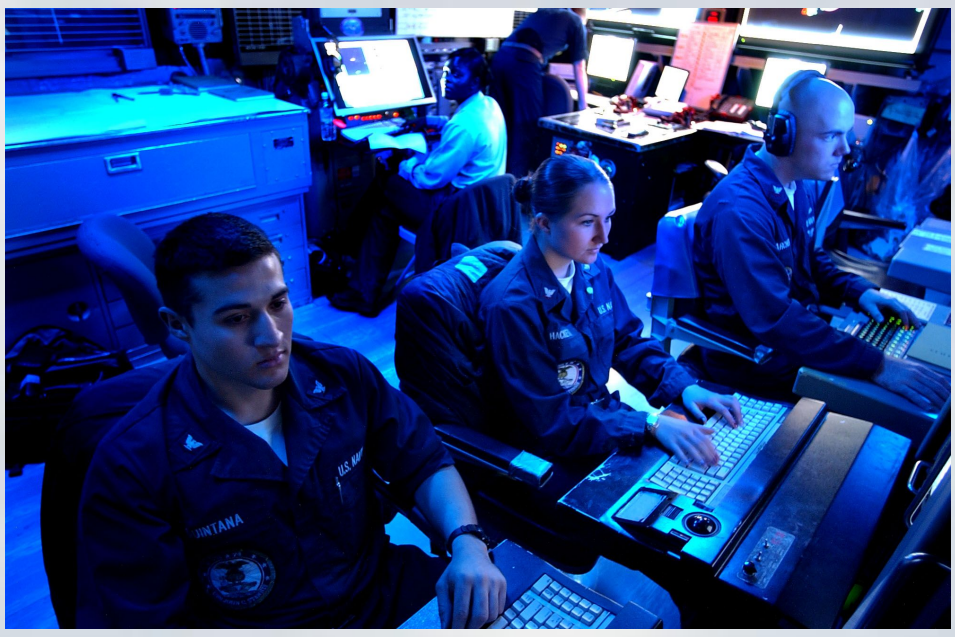
We live in a society where the men and women doing their part for the United States Navy must spend weeks upon end away from home primarily due to technological stagnation. Our research serves to fix this by cutting time in the installation and testing of the Global Command and Control System - Maritime on naval vessels.

Global Command and Control System - Maritime

GCCS-M fuses, correlates, filters, maintains, and displays location and attribute information on FRIENDLY, HOSTILE, and NEUTRAL land, sea, and air forces, to support command decisions.

Wildly Important Goals (W.I.G.)

- Installation and testing of GCCS-M; NIEF @ Old Town
- Newly Automated Systems Verification and Testing (SOVT)



Testing Arsenal

- Test Complete
- Automated actions
- Image-Based verification
- Windows app object detection
- Intelligent and well-designed algorithms

Test Cases

- General functionality
- Closest point of approach
- Creation of tracks
  - Naval ships
  - Space
  - Friendly - Hostile

Statistics & Achievements

57% faster testing • Approximately 12 days cut on-board

Automated, one-click testing • High scalability and versatility