



## A Guide to TCG Demonstrations

RSA Conference 2009  
General Dynamics C4 Systems

### Trusted Virtual Environment: A Military Grade Solution Built on Commercial Trusted Computing Technologies

The TVE Workstation is a Commercial-off-the-Shelf (COTS)-based computer built using High Assurance Platform® (HAP) technology. The HAP technology was developed under contract to the National Security Agency (NSA). Each TVE computer has the ability to simultaneously host multiple operating systems in different security domains. The TVE Workstation can host thick-client or thin-client operating systems, making it a true hybrid-client computer. The TVE Workstation offers affordable and easy-to-manage multi-level and cross-domain capabilities to end-users with the initial implementation in a desktop or console form-factor. It allows the end-user to have multiple operating systems, such as Microsoft® Windows® or Linux®, running in different security domains such as Secret, Secret Rel A and Unclassified or in different caveats within a single security level. Its advanced security features are provided both by hardware assistance using Trusted Execution Technology (TXT) from Intel® and by high robustness Hypervisor software from General Dynamics. By adding high robustness security only at critical points in the workstation's security architecture, TVE products can keep pace with most technology advancements with low re-certification effort. The result is a useful, cost-effective, and evolvable solution set allowing the end-user to access and process information from multiple security domains on the same physical workstation at the same time. TVE has been certified and accredited in accordance with DCID 6/3 requirements for a PL4 system.

#### TVE Specific Equipment

- (1) Dell Optiplex E6400 TVE Workstation running R1.1.2
- (1) 22 inch widescreen Monitors
- Ethernet Connectivity

#### Will Demonstrate

- TVE Login
- Virtual Machine Login
- Virtual Machine operation
- Multiple virtual machines
  - Google Earth in oneVirtual Machine
  - Commercial Video (movie or otherwise) in second Virtual Machine
  - Commercial Video and Internet Access in 3<sup>rd</sup> Virtual Machine

# GENERAL DYNAMICS