# GENERAL DYNAMICS Mission Systems

# **TVE Trusted Multilevel Computing Solution**

Simultaneous View of Multiple Security Levels on a Single Computer



Note: security classification labels shown on this equipment are for example purposes and do not reflect any actual classification; all information shown is unclassified. CNN web image courtesy CNN.

UCDMO Cross Domain Baseline listed

Integrated High Assurance Platform® (HAP) technology

Simultaneous views of multiple domains

Cost-effective computing platform and network consolidation

Available on multiple computing platforms

Easy to use and manage

Easily integrates into existing networks

### **Overview**

TVE is a multilevel computing solution that allows users to simultaneously view and access multiple security levels, operating systems and domains from a single computer, eliminating the need for multiple computers. TVE is easy to use, manage and deploy into your network. An ideal desktop consolidation system, TVE provides significant cost savings associated with IT equipment, network infrastructure, labor, space, weight and power improving operational and environmental efficiencies.

## **Trusted Data Separation**

TVE creates Virtual Machines (VMs) within a single computer with industry leading VMware<sup>®</sup> virtualization technology. Each VM can run different operating systems and security levels in separate windows on a shared computer and monitor. These windows can be viewed separately or simultaneously. TVE is **proven secure** through extensive evaluation, certification, and accreditation efforts (DoD and IC Certified) and is UCDMO baseline listed.

# **Trusted Platform**

Available on both Dell<sup>®</sup> and HP<sup>®</sup> configurations, TVE utilizes the latest trusted computing technologies such as attestation, Trusted Platform Module (TPM), and trusted execution technology from Intel<sup>®</sup> to create the most secure computing platform today.

# **User Scenarios**

**Safe Browsing** — TVE enables users to contain risk associated with Internet web-browsing. It protects your network assets and critical applications from hackers, viruses and even insider threats. Having access to the open internet as well as protected networks on a single computer brings cyber security to the desktop.

**Decreased Size, Weight and Power (SWaP)** — Eliminating computing platforms also eliminates the power to run them, IT labor associated with management and the hassle and costs associated with transportation. TVE also consolidates your network, which enables the TVE to utilize one wire to connect to multiple networks, reducing your network infrastructure requirements.

**Assured Information Sharing** — TVE allows you to share information and network access with specific communities of interest whether it be coalition partners or in an emergency situation such as disaster relief where first responders need to communicate with multiple organizations at multiple levels.

# **TVE Trusted Multilevel Computing Solution**

#### **Certifications and Accreditations**

- Unified Cross Domain Management Office (UCDMO) Baseline Listed
- TSABI and SABI Certified and Accredited

See website for latest release information.

#### Simple Enterprise Management

TVE incorporates Enterprise Management features that simplify configuration and maintenance of TVE-enabled platforms, utilizing Microsoft® Systems Center, a powerful cost-effective suite of management tools. The Enterprise Management features can be accessed and administered either from the servers themselves or remotely from network-connected management computers connected to the TVE Enterprise System Services management enclave. This allows a network of TVE-enabled computers to be centrally managed, resulting in IT labor savings and increased efficiency.

#### **System Integration and Support**

General Dynamics offers several support services to assist users with the integration and installation process of TVE as well as training for administrators.

#### **Benefits**

#### End User Benefits

- Simultaneous view into multiple network domains
- Use existing applications and operating systems
- Improves efficiency
- Smaller footprint on desktop
- Intuitive, easy to use (Windows<sup>®</sup> look and feel)
- 24/7 help desk support



#### CTO/CIOs, Enterprise

- Approved, trusted security
- Decreased total cost of ownership
- Commercial open standards
- COTS hardware
- Assistance available for site accreditation and integration

#### **Administrators**

- Centralized management
- Network and user access control
- Easy technology transitions

#### **Operational Environments**

- Low-risk threat environments
- Trusted users
- Unclassified through Secret
- Secret through Top Secret/SCI



#### Client Operating Systems Supported

Supports several installed secure virtual machines (subject to processor speed and installed RAM), including:

- Red Hat<sup>®</sup> Enterprise Linux<sup>®</sup> 4 (32-bit/64-bit), Linux<sup>®</sup> 5 (32-bit/64 bit)
- Solaris<sup>™</sup> 10\*
- Windows<sup>®</sup> 2000\*
- Windows<sup>®</sup> XP (32-bit/ 64-bit)
- Windows<sup>®</sup> Vista (32-bit/64-bit); SP1 (32-bit/64-bit); SP2 (32-bit/64-bit)
- Windows<sup>®</sup> 7 (32-bit/64-bit); SP1 (32-bit/64-bit)
- Windows<sup>®</sup> Server 2003 (32-bit/64-bit)\*
- Windows<sup>®</sup> Server 2008 (32-bit/64-bit)\*
- Windows<sup>®</sup> Server 2008 R2 (32-bit/64-bit)\*
- \* To be validated









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