GENERAL DYNAMICS Mission Systems

Trusted Network Environment (TNE®)

Multilevel Information Access and Sharing



Cross Domain Collaboration and Information Sharing

Users See Only Authorized Information

One Desktop, One Windows® Interface, All Classifications

Overview

TNE is the leading edge cyber solution in use today by the U.S. Department of Defense where multiple coalitions of interest (COI) need a trusted information broker to let them share sensitive information across security boundaries or in instances where a central user domain requires full period, bi-directional access to multiple external domains that are accredited at varying security levels. TNE offers a suite of trusted software applications, utilities, and tools that are fully accredited for cross-domain information sharing. TNE's tools are flexible and scalable enough to allow rapid inclusion of new communities on the fly without compromising the security or integrity of the data. TNE has been in use for 20 years, is certified and accredited at a JSIG baseline of MMM with CDS (all three). Intel A, Accessibility and PIIM overlays by data owners, NSA and DIA and is listed on the Unified Cross Domain Services Management Office (UCDSMO)'s cross domain baseline. TNE offers a range of options to accommodate size, weight, and power (SWaP) requirements and is currently being implemented in network operations center environments as well as on air and sea based platforms.

TNE has a flexible range of COTS hardware and software that can be customized to fit the needs of your network and integrates with your current infrastructure to minimize the cost of implementation. TNE's enterprise security manager can broker information exchange between users in different security domains without hindering the mission. TNE provides access to a multilevel environment via thick or thin clients or straight from a web browser on an ordinary Windows[®] PC to fit your information distribution requirements.

General Dynamics applies the MITRE encodings file specification within our trusted operating system to provide the multilevel backbone that segregates data by each independent classification level. This trusted OS provides warfighters with the tools necessary to do the job without relaxing their security posture. With TNE the focus is on the mission — not on the workarounds. TNE's security manager enforces mandatory and discretionary access controls as well as Role-, Privilege-, and Authorization-based controls that can be defined by the IA manager on your network. The TNE information broker delivers the data you are cleared to see when you need it by managing users, data, and non-person entities (NPE) in a style that is transparent to the user.

TNE is built for today's dynamic information environment where coalitions and countries need access quickly to sustain operations. Standing up and tearing down COIs can be performed in a matter of hours with no compromise of security control and minimal changes on the incoming partner network.

Trusted Network Environment (TNE®)

When the mission ends — or the political situation changes — TNE can immediately restrict access as necessary to protect the data.

Every file and every packet of data within the environment has a classification label assigned that can only be accessed by users or NPEs who have been granted access by the IA manager. Controlled interfaces allow external customers to contact the data broker with little to no change to their local infrastructure, allowing them as much or as little access to your information as policy permits. In this way, TNE extends its advanced enterprise security model out to networks that are otherwise capable of only rudimentary security policy enforcement.

TNE provides multilevel desktop application support with the following tools: Explorer[®], Email, Microsoft Office[®] 2007 (Word[®], Excel[®], PowerPoint[®], Visio[®], Project[®]), File Classification Label Change, Firefox[®], PDF Studio[™], Chat, Windows Terminal Services, Samba, SSH, and multilevel NFS. Web support provides the following: File Sharing, Mail Brokering, and multilevel federated search.

TNE Features at a Glance

- Multilevel support for many commonly used programs such as Microsoft Office and PDF Studio
- The ability to cut/copy/paste information between dissimilar sources of information for data fusion capabilities in a fully audited environment
- Multilevel web and database services to reduce hardware/software costs for external users
- Multilevel email client with "one window" lookdown at all email
- Single workstation access to different security domains
- Multilevel information warehouse in a single database
- Application security banner indicates classification level on every window launched
- Extensive secure network protocols: HTTPS, MLS SAMBA/SSH/SSL/NFS

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 Content filtering and checking, antivirus, integrity checking, audit services, and workflow management

Total Cost of Ownership (TCO) Savings, Upgrades

- Collapse many desktops to a single thick or thin client or a web browser hosted on a Windows[®] PC
- Use of a TNE Server can collapse many networks to one wire using MLS segregation
- Collapse IT enterprise architecture by using one MLS server to collapse many Single Level servers
- Size, Weight, And Power (SWaP) reductions as result of minimized HW/SW
- ML Web client allows use of the existing customer infrastructure

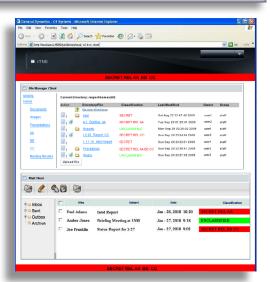
MLS Certification & Accreditation (C&A)

- C&A at a JSIG baseline of MMM with CDS, Intel A, Accessibility and PIIM overlay for TSABI and TS/SCI environment
- References: NSA, DISA, NGA, NRO, JCS/ JSIN-H, USAF/HQ AIA, JETTS AF Satellite Control Network.
- Certification: PL-4 TSABI interoperability NAVAIR (DIA, NSA, STRATCOM)
- Active theaters: air, sea, land, mobile (hardened Notebook)
- UCDMO's only MLS desktop enterprise solution

Available TNE MLS Product Line

- MLS File Server segregates and stores multiple levels of files on a central system
- MLS Mail Broker segregates and manages multiple levels of email from multiple sources

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	Copy of SP5_vmstat.sh	400 bytes	SECRET	Application	Tue Oct 20	issouser	staff	-rw	- 11
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	DEVUT7_Before_SP6	2 KB	UNCLASSIFIED	Application	Wed Nov 1	issouser	staff	-68	- 11
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Note: security classification labels shown here are for example purposes and do not reflect any actual classification; all information shown is unclassified.

- MLS Web Server provides web access to multilevel information through a web browser
- MLS Database Server segregates and stores multiple levels of information in a database
- Audit Server collects audit files within the trusted network for centralized auditing. Interoperable with industry tools such as Splunk.
- TNE Desktop (thick) provides standard TNE functionality plus removable media capabilities
- TNE Desktop (thin) provides standard TNE functionality with minimal footprint
- Controlled Interfaces provide CDS connectivity to single level networks connecting to the trusted network

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