



Defense Information Systems Network (DISN) Test and Evaluation Network (DTEN)

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Background

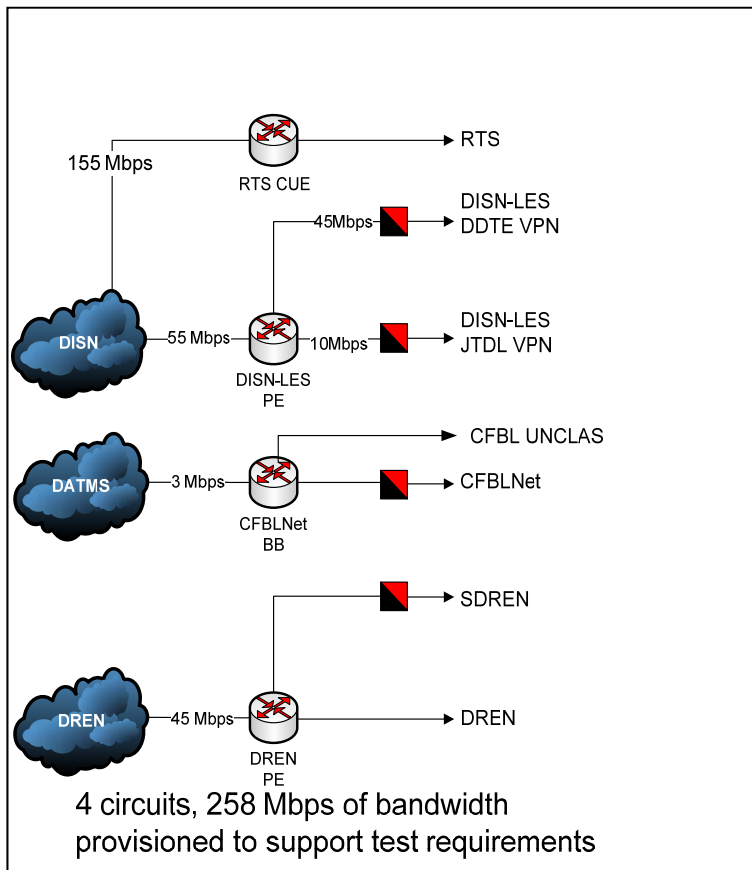
- **Proliferation of DoD related Test, Evaluation and Certification (TE&C) networks**
 - Multiple transport and enclaves required to support mission
 - High network cost and underutilized assets
 - Testing with assets on different networks difficult and costly
- **DISA/MITRE network study in 2008 researched requirements and issues and provided recommendations**
 - Reasonable cost
 - Ability to rapidly reconfigure network and connections
 - Persistent WAN and bandwidth supported by automated provisioning tools
 - Shared connections with other T&E organizations
 - Improved availability and persistence of the T&E network

Background

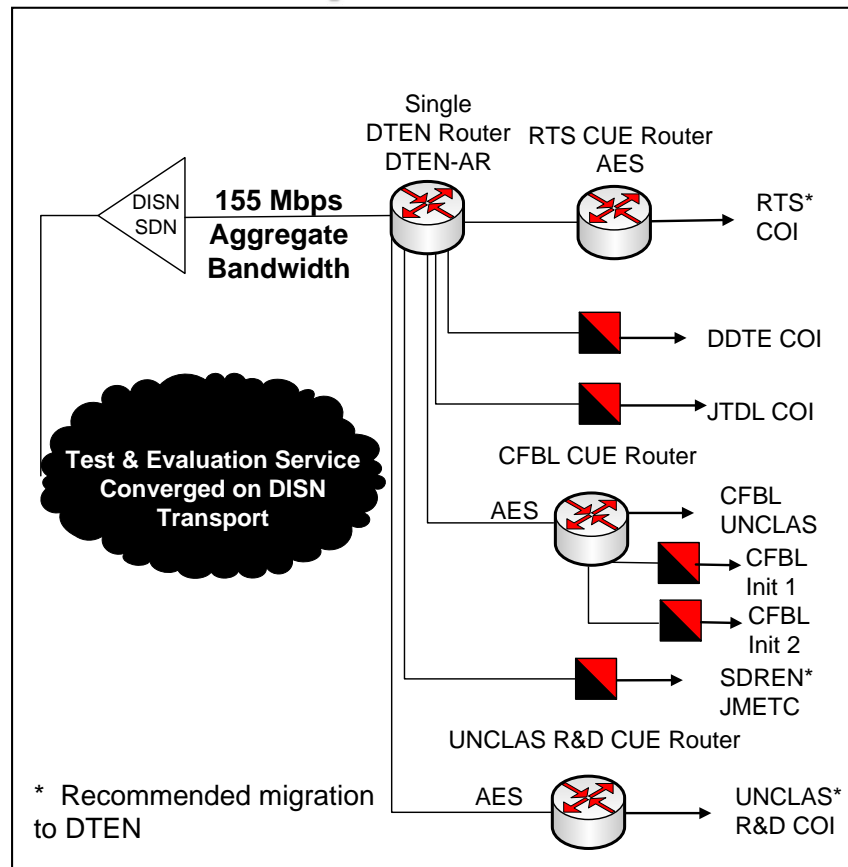
- **DISA has created a consolidated DISN T&E network (DTEN)**
 - Reduced cost
 - Improved responsiveness to T&E community requirements
 - Agile accreditation and connection approval process
- **TE&C infrastructure is a Joint Enabling capability**
 - DTEN initiative creates a common IP transport and support process to encourage and facilitate the use of the DISN
 - Current users included Distributed Development Test Enterprise (DDTE) and Consolidated Federated Battle Laboratories Network (CFBLNet)
- **DTEN vision is a service provided to all DoD T&E**

DTEN Example

Multiple Transport Service Providers



Single DISN Transport Provider



Requirements

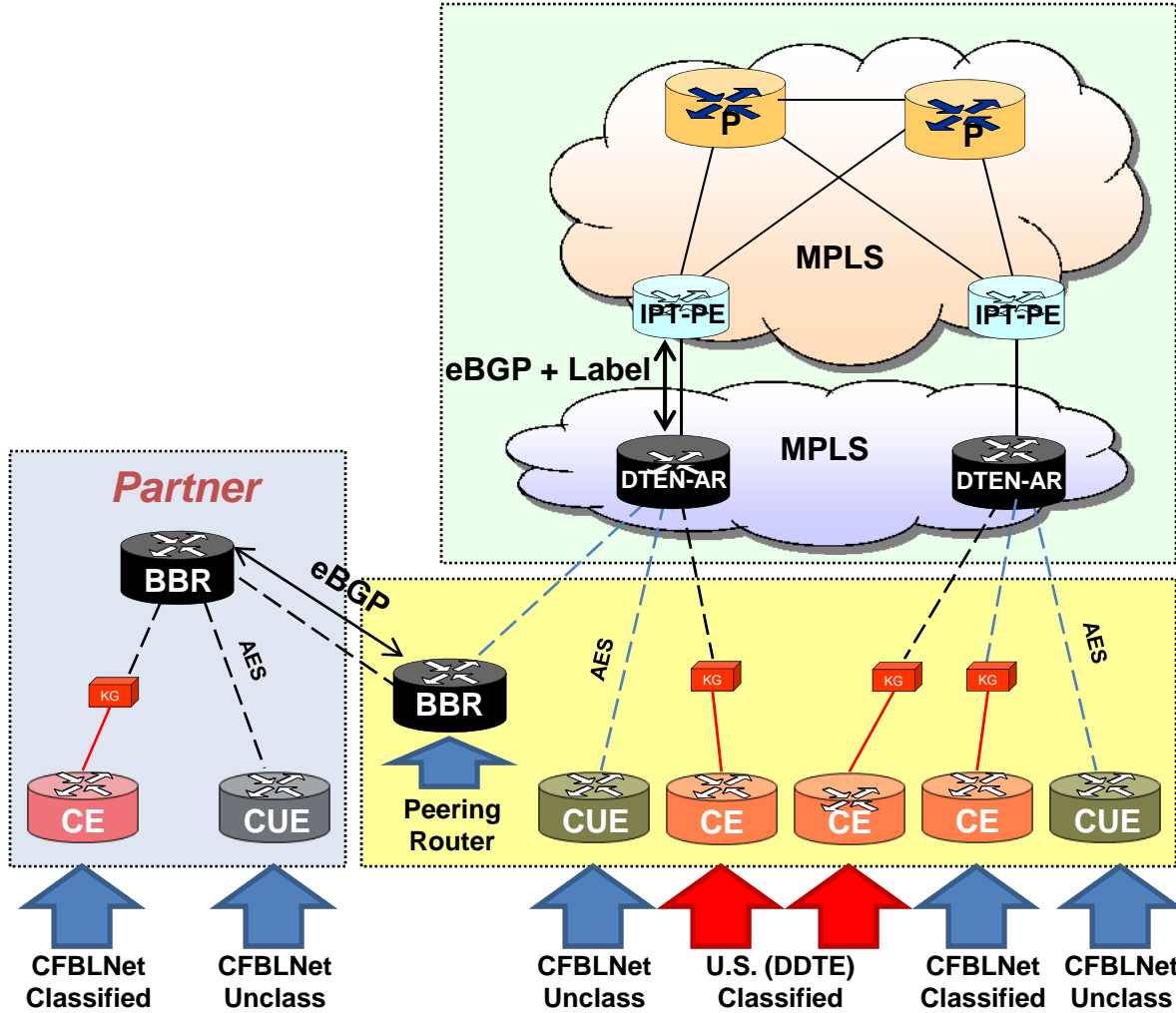
Requirement	DTEN Solution
Reduced cost	1. Reduces number of DoD and non-DoD T&E transport providers
	2. Uses existing transport
	3. Uses Defense Subscriber Service (DSS) model
Agile Network Management	1. Provides DTEN NOC responsive to T&E requirements
	2. Event coordination and bandwidth management of the TE-AR router
	3. Provides the COIs DTEN network performance reports
	4. Responsive COI solutions that meet acquisition community T&E requirements
Agile Connection Approval	1. Connection approval for labs made by the COI (Zone C T&E Enclaves)
	2. DTEN provides transport of encrypted (NSA Type 1 or Advance Encryption Standard) data across the DISN

Milestones

- **Oct 2010: IOC-1**
 - DISA adjusted FY11 DISN-LES rate structure, migrating from customer funded to DISA funded DSS model effective 1 Oct
 - Published current DISN-LES rate letter eliminating MRC
 - Network Services absorbing DISN-LES costs for FY11
- **May 2011: Improved Zone C connection Process**
 - Pilot using “Permission to Connect” Process for DDTE
 - Briefed DSAWG on Coalition Peering
- **Sept 2011: IOC-2**
 - CFBL begins migration to DISN-IP Core
 - Establish DTEN NOC
 - Finalize DTEN CONOPS
- **Feb 2012: DTEN Ready for external DISA use**
 - Processes and costs finalized

Final DTEN Solution

February 2012



DISN Core:
MPLS Label Transport

DTEN:
*Combine U-OTPEs with BBRs
MPLS VPN Separation
US Only T&E VPN and
Coalition T&E VPN*

HAIPE and Enclave:
*Managed COI service
Type 1 HAIPE or AES on RTR
BBR for peering with Partner*

COI Testing

R&D

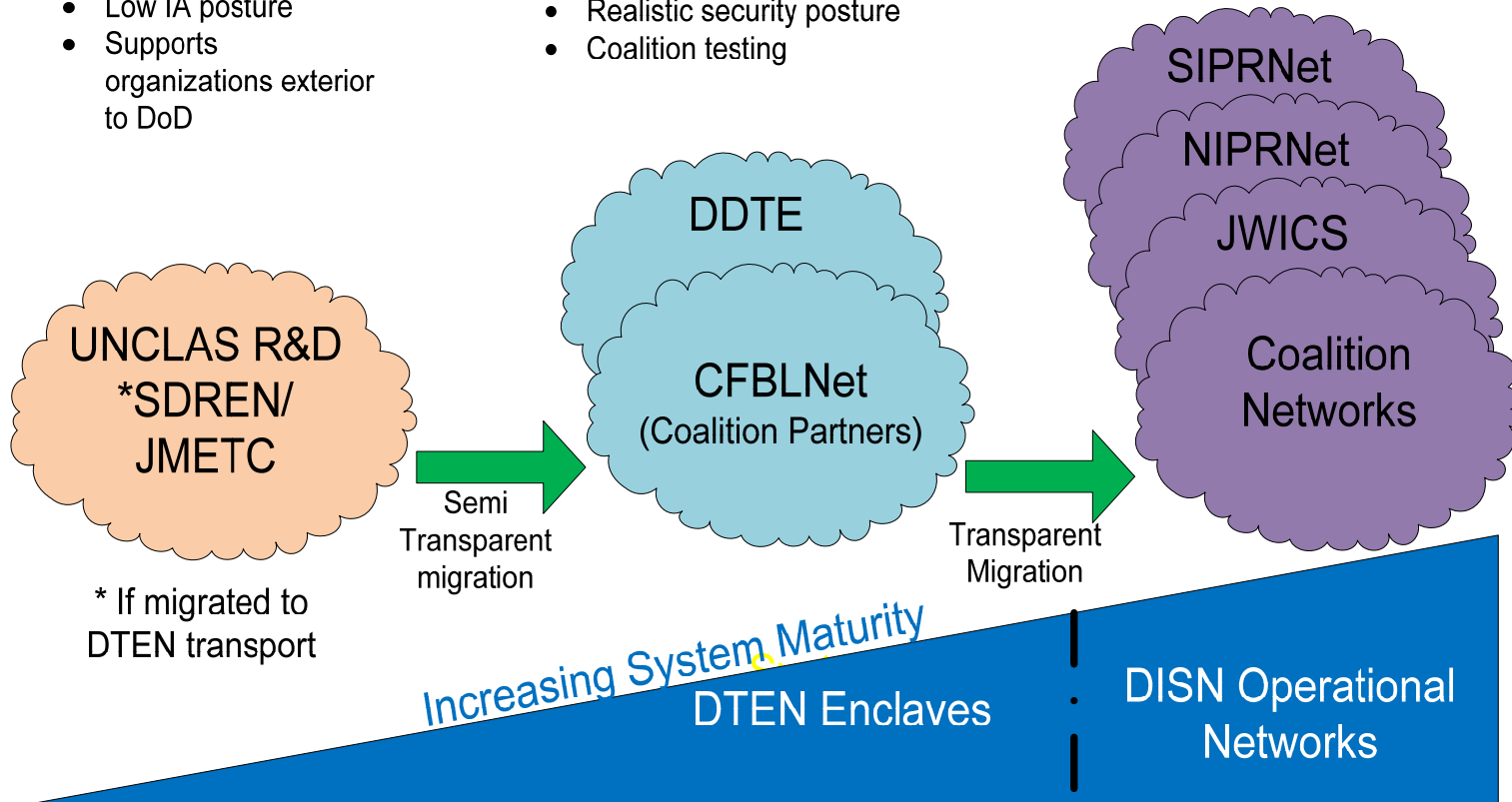
- Low level maturity
- Use of M & S
- Operationally generated data
- Low IA posture
- Supports organizations exterior to DoD

T&E

- Post MS B approaching MS C
- Moderate level of maturity
- Use of M&S, HWIL/SWIL, live systems
- Realistic security posture
- Coalition testing

Operational Environment

- DISN Services
- Tactical edge deployment



Testing Required Throughout Lifecycle

COIs established to meet the correct security environment requirements

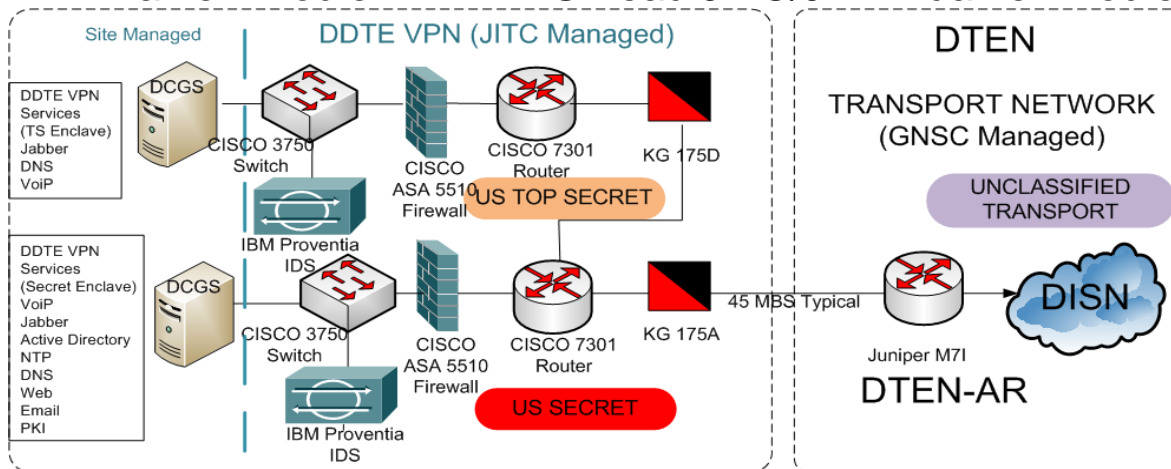


Purpose: The Distributed Development Test Enterprise (DDTE) is the US SECRET and TOP SECRET Net-Centric certification test environment. It provides a DoD enterprise and technical capability to support developers, testers, and Warfighters in addressing DCGS FoS mission and interoperability requirements. Environment is now available to non-DCGS systems in related mission areas.

Capabilities: Instrumented network and application performance measurement tools with the capability to simulate operational network characteristics. Temporary progressing to permanent Cross Domain capability to CFBLNet. Located at 15 CONUS Sites.

URL: http://jitc.fhu.disa.mil/projects/jnoc/jnoc_public.html

COI Contact: Mr. Daniel Knodle DDTE FG Lead JITC/JT4A daniel.knodle@disa.mil



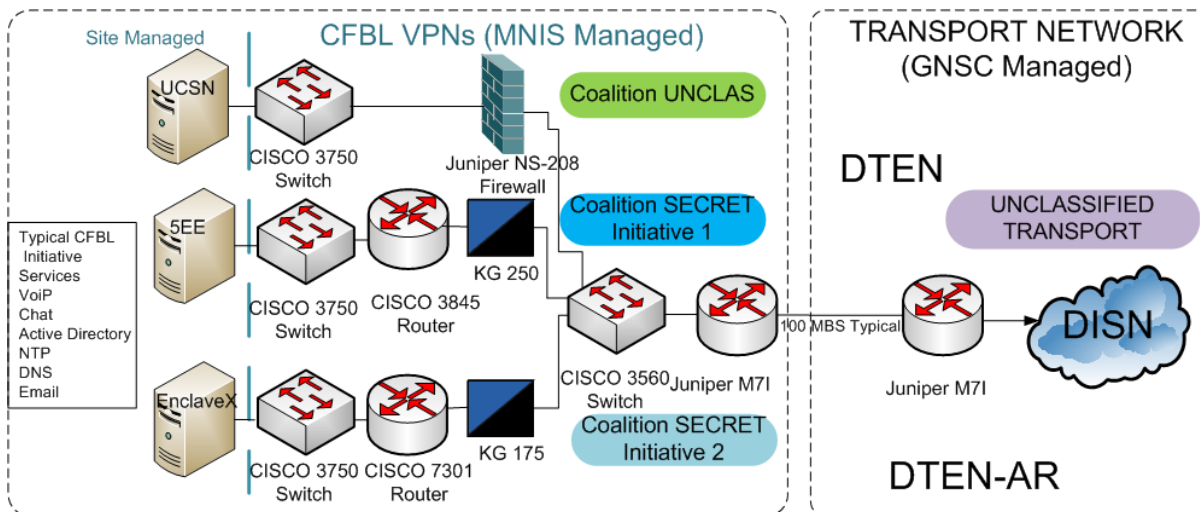
Typical DDTE Node

Purpose: The Combined Federated Battle Laboratory (CFBL) Network (CFBLNet) is a multi-national network used to evaluate combined C4ISR shortfalls, assess solutions and improve coalition information exchange capabilities. Test and evaluate new capabilities.

Capabilities: Multiple COI VPNs with network services representing operational coalitions with Cross Domain Solutions to other TE security enclaves (to include DDTE) used to recreate and correct operational deficiencies as well test new capabilities. Located at 36 CONUS and over 150 OCONUS sites.

URL: <http://www.disa.mil/cfblnet/index.html>

COI Contact: Mr. Russ Richards CFBLNet Manager PEO-C2C russ.richards@disa.mil



Typical CFBLNet Node

Summary

- **DoD T&E networks have grown in cost and number due to a variety of mission requirements**
- **The DTEN provides an operationally realistic T&E network solution that meets DoD requirements**
 - **Reduced cost**
 - **Agile Network Management**
 - **Agile Connection Approval Process**
- **DTEN pilots are currently underway with DDTE and CFBLNet communities**
- **Expected full operational capability for DoD-wide use February 2012**



Questions?

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