Integrated Test and Evaluation Center (ITEC)

... computing service support for advanced concept development and prototyping

The ITEC is the computing resource center for the Pacific Joint Information Technology Center, providing an agile computing environment for military health and interagency research and development, testing, and evaluation missions.

A Mission Assurance Category III facility, the ITEC is designed to be an agile computing resource for pilot and prototype efforts in the MHS software acquisition and development lifecycle. The ITEC provides developer sandboxes—testing environments that confine code changes and experimentation to isolate effects on live systems. In support of the MHS refactoring of the enterprise architecture, the ITEC delivers virtualization and cloud technologies to provide system designs that fit into the future MHS system architecture.

ITEC Sandbox Environments

Sandbox A

Virtually Managed Systems A collection of an operating system,

commercial software, and/or custom applications that are hosted as a virtual machine.

Operating System (OS)

Run multiple instances of different operating systems on one physical machine and manage resources across virtual machines.

Virtualization Infrastructure

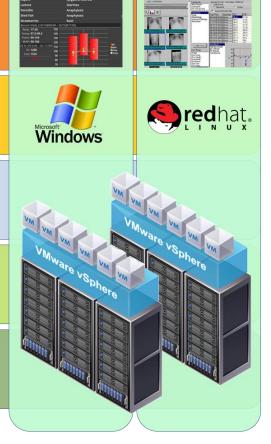
vCenter provides management of resources and application provisioning.

Computing Resource Pool

The ITEC leverages resource pooling to gain efficiencies and agility to serve its customers more effectively.

Storage Area Network (SAN)

The SAN stores the virtual image library, and all virtually managed systems can be provisioned to any VLAN within the ITEC.



Sandbox B

Core Services

Virtualized Hosting

Virtual hosting services for R&D and interagency requirements. Isolated development sandboxes for untested code changes and experimentation.

MHS/VA Enterprise Applications

MHS development environment that mirrors production systems. Access to legacy systems (CHCS, VistA, etc.) and future-facing technologies (Janus, SOA/ESB).

IT Support

Systems and data administration, cybersecurity support, configuration management, and support desk services.

Documentation/Code Library

Developer access to a consolidated technical library for MHS and VA applications.

Technical Specifications

Systems

HP ProLiant servers and blades.

Operating Systems

Windows, Linux, OpenVMS, and HP-UX.

Computing Capability

Over 600 processor cores, with dynamic resource balancing and seamless failover of high-availability hosted resources. NIPRNet/commercial networks.

Storage

Over 400 TB FC disk.

Memory

3.92 TB physical RAM.

This project is managed by the Pacific Joint Information Technology Center, which focuses on rapidly researching, testing, and developing warfighter medical solutions and products through pilots or prototypes.

Hardware