



**INNOVATION  
CELL**

**ENTERPRISE CHALLENGE:  
Enhanced Virtualized Desktop**

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## **ENTERPRISE CHALLENGE: Enhanced Virtualized Desktop**

### **DESCRIPTION OF NEED/PROBLEM**

The U.S. Navy Next Generation Enterprise Network (NGEN) currently offers a virtual application and desktop delivery through Hosted Virtual Desktop (HVD). The HVD is an alternative enterprise service delivery for Navy Marine Corp Internet (NMCI) services under a limited pilot with approximately 2,200 users and a 7,500 seat capacity. The goal of the virtual application and desktop delivery has been to provide flexibility, mobility, productivity, and security to users both inside and outside of the NMCI network.

The previous pilot approach provided the opportunity to identify lessons learned:

- Savings were realized in infrastructure and field services support and not necessarily in the “per-seat” costs
- Need to simplify setup for personal devices
- Need for modular and expandable architecture
- Must integrate with Network Access Control (NAC) for thin clients
- Need a seamless and secure external access
- End-to-end management tools are necessary for operational insights and sustainment initiatives
- Highlighted the importance of robust network connectivity

The following goals need to be sustained from the initial pilot:

- Allow user access to virtual applications, desktops, and files stored on the network from any Common Access Card (CAC) enabled device

- Centralized security patching and updating
- Secure, non-persistent operating environment for Government Furnished Equipment (GFE) as well as non-GFE

### **VIRTUALIZED DESKTOP SOLUTION CHALLENGE**

Provide NGEN users with a virtual application and desktop environment with an equal or better end-user experience both inside and outside the NMCI network.

Characteristics of a high level solution are as follows:

- Scalable to an estimated 119 thousand user base across multiple geographic locations.
  - Minimum personal file storage of 30GB per user
- Customizable to support various user profiles
  - Configurable access to applications and general user privileges
  - Automated replication of user sessions across architecture
- Wide array of end-user devices, including Bring Your Own Device (BYOD)
  - Thick, thin, phones and tablets
- Compliant with Navy security requirements

Solutions will be required to conform to standards as defined by the Federal Information Security Act (FISMA), DoDI 8500, DoD 8510 DIACAP, and STIG.

### **CONSIDERATIONS**

NGEN is specifically looking for new products/architecture approaches and/or optimizations and improvements of current architecture. Examples of Industry Submission considerations include:

- Increased Wide Area Network (WAN) desktop storage capacity
- Ability to collect end-to-end performance metrics
- Virtual and streaming applications for thick client users
- Self-service application requests and provisioning
- Enterprise software license business model to support as-a-service model

### **REFERENCES**

FISMA

DoDI 8500

STIG



**TO RESPOND TO THIS ENTERPRISE CHALLENGE**

1. Download the **“Respond to an Enterprise Challenge” pdf form**, available on the Innovation Cell website
2. Complete the form then submit it via email to **PEOEISInnovationCell@navy.mil**