

JUSTIFICATION
FOR AN EXCEPTION TO FAIR OPPORTUNITY

1. Contracting Activity: Department of Veterans Affairs (VA)
Office of Acquisition Operations
Technology Acquisition Center
23 Christopher Way
Eatontown, New Jersey 07724
2. Description of Action: The proposed action is to include brand name specifications in a firm-fixed-price task order to be issued under the National Aeronautics and Space Administration (NASA) Solutions for Enterprise-Wide Procurement (SEWP) V Governmentwide Acquisition Contract (GWAC).

3. Description of Supplies or Services: VA Office of Information and Technology, Service Delivery and Engineering (SDE), Enterprise Operations (EO), Enterprise Infrastructure Support, is in the process of expanding the existing VMware virtualization farm at the Capital Region Readiness Center, Data Center in Martinsburg, West Virginia. This expansion requires 72 VMware vSphere 6 Enterprise Plus licenses for 36 servers awaiting deployment into the expanded farm; and 72 Support/Subscription VMware vSphere 6 Enterprise Plus for one year; and 8 VMware vRealize Operations 6 Advanced (25 Operating System Instance (OSI) Pack); and 8 Support/Subscription VMware vRealize Operations 6 Advanced (25 OSI Pack) for one year. VMware vSphere is an industry leading virtualization platform and allows EO to continue the virtualization first policy required by VA. EO has standardized the VMware platform across all data centers allowing a highly available, resilient, on-demand infrastructure with enhanced scalability, management and support. This software allows multiple Operating Systems (OS) to share a single hardware host. VA runs mission critical software applications and OS on these virtual machines (VM), eliminating the need for dedicated physical hardware and software for each VA software application by allowing multiple VA applications to share hardware resources (i.e. Central Processing Unit (CPU), Random Access Memory (RAM), shared storage, networking). The hypervisor not only creates and runs VM, but even as users and VMs per physical host increases it continues to provide high-performance throughput in a heavily virtualized environment.

VMware vSphere Enterprise Plus makes VMs operate like physical machines, (i.e. virtualized x86 systems), and facilitates the maximizing of VMs that the physical hardware can support by more intelligently managing VM memory use. By combining several VMware exclusive technologies, VMware vSphere Enterprise Plus supports the highest efficiency of memory utilization with minimal performance impact. The period of performance is 12 months from date of award. The total estimated value of the proposed action is

4. Statutory Authority: The statutory authority permitting an exception to fair opportunity is Section 41 U.S.C. 4106(c) (2) as implemented by the Federal Acquisition Regulation (FAR) Subpart 16.505(b)(2)(i)(B), entitled "Only one awardee is capable of providing the supplies or services required at the level of quality required because the supplies or services ordered are unique or highly specialized."

5. Rationale Supporting Use of Authority Cited Above: This is a brand name justification in accordance with FAR 11.105, Items Peculiar to One Manufacturer. Based on extensive market research, as described in section 8 of this document, it was determined that limited competition is available for the aforementioned brand name software and maintenance. VMware platform is currently operating on 92 percent of VA's Virtualized Infrastructure. No other product can provide the same VM interoperability, compatibility, and functionality within EO, and maintain compatibility and consistency with non-VMs operating in the VA system. The VMware vSphere 6 Enterprise plus software and maintenance being procured is unique in the operation of VMware software and this procurement is to expand a pre-existing VMware infrastructure. This acquisition is to add to an existing VMware management suite infrastructure and due to the proprietary source code required by the existing infrastructure; no other brand name item is interoperable or compatible with the currently fielded VMware infrastructure. Specifically, if another brand name software was introduced into the currently fielded VMware infrastructure, it would not be able to communicate with the existing infrastructure. The present SDE EO VM infrastructure prohibits the use of a management suite outside of the present vendor. Replacing the present management suite will cause SDE EO to procure a different virtual infrastructure. This would cause the organization to replace all of the present management architecture. Software and maintenance being procured is unique in the operation of VMware software and this procurement is to expand a pre-existing VMware infrastructure. Only VMWare vSphere 6 Enterprise Plus provides a seamless live migration for disaster recovery and shared storage. One of the critical requirements of the EO procurement is to have an infrastructure that, in compliance with the VA Disaster Recovery (DR) policies to provide a seamless DR capability through live migration between the EO data centers.

VMWare vSphere Enterprise Plus is the only hypervisor available that provides live workload migrations and data center maintenance with zero downtime, zero data loss, and continuous availability of hosted software applications and without the cost and complexity of traditional hardware or software clustering solutions. VMWare is also the only hypervisor available that supports Personal Identification Verification (PIV) Security Compatibility. It supports PIV user access requirements by allowing Serial Ports (up to four) or connecting serial devices such as smart card and eToken readers. It also uniquely provides for the EO requirement of PIV user access, and the virtualization software must support connecting VA smart card (i.e. PIV, eToken) readers to multiple VMs, which can then be used for authentication to VMs. EO requires VM administrators to be able to scale VMs by adding or removing virtual compute, storage and networking resources (i.e. CPU, RAM, disk storage, networking) to VMs without interruption to the VM, operating system, or software application running over it. This is the only hypervisor available that provides the "hot add" capability to add the virtual resources without operational interruption to the VM.

6. Efforts to Obtain Competition: Market research was conducted, details of which are in section 8 of this justification. This effort did not yield any additional sources that can meet the Government's requirements. It was determined that limited competition is viable among authorized resellers for this brand name effort. In accordance with FAR

5.301 and 16.505(b)(2)(ii)(D), this action will be synopsisized and the justification will be made publicly available within 14 days of award on the Federal Business Opportunities Page. In accordance with FAR 16.505(a)(4)(iii)(A), the justification will be posted with the request for quote on the NASA SEWP V GWAC.

7. Actions to Increase Competition: The Government will continue to conduct market research to ascertain if there are changes in the market place that would enable future actions to be competed. As new applications are developed and technology is refreshed, the Government will strive to eliminate this brand name requirement.

8. Market Research: Market research was conducted between April and May 2015 by reviewing Gartner reports, to include its Solution Comparison of x86 Server Virtualization Platforms. VA technical experts also spoke with vendors about product capabilities, conducted internet searches, and reviewed technical data for similar software provided by Red Hat, Oracle and Microsoft. Red Hat Enterprise Virtualization (RHEV) live migration for disaster recovery is not seamless. It requires RHEV supported third party disk replication software and, when the sites are on different IP subnets, additional configuration is required. When PIV/Controlled Access Card is used to log on, the serial ports in RHEV can be configured but there is no interface to access the ports, making PIV connected cards unusable in certain applications. VA requires full support of PIV across the software stack. RHEV cannot "hot add" memory or change memory reservations in a hot mode, which is a critical requirement for this procurement.

Oracle VirtualBox 3.2 live migration scalability is limited to one VM per server pair at a time and storage live migration is not supported. Therefore, there are no capabilities to seamlessly move VMs from the public cloud to Oracle VM environments, or vice versa. This shortfall does not meet VA's requirement for live migration within EO data centers. VirtualBox supports some serial ports usage, and they cannot be directly connected to the host. This inability to connect directly significantly limits the intended PIV use of VMs under certain situations of this requirement. VirtualBox has limited "hot add" capability. VirtualBox's hot add limitations do not fulfill the VA's "hot add" requirements. Gartner's reviews of Microsoft Windows Server 2012 R2 Hyper-V Gartner strongly advises that organizations should not deploy Windows Server 2012 R2 Hyper-V when seamless migration to and from non-Microsoft public cloud providers such as Amazon Web Services and VMware Cloud Hybrid Service is required. With Microsoft Windows Server 2012 R2 Hyper-V, Information Technology (IT) administrators cannot add virtual CPUs or virtual network interfaces to running VMs which is an EO requirement. Due to the above research VMWare vSphere Enterprise Plus the only product to meet the government's requirement for reliability, maintainability, functionality, scalability, performance and security and is VA's standard for the virtualization environment.

Additional market research was conducted by Government representatives in June 2015 utilizing the NASA SEWP V Provider Lookup Tool and identified numerous potential sources on the NASA SEWP V GWAC. Additionally, the NASA SEWP V GWAC is a dynamic IT contract in which products can be added to vendor catalogs

VMWare vSphere 6 Enterprise Plus Software

based on customer requests on as frequent as a daily basis, so long as the required item or service is within scope of the NASA SEWP V GWAC. As a result, there is reasonable expectation that limited competition exists on the NASA SEWP V GWAC for the VMWare vSphere 6 Enterprise Plus software.

9. Other Facts: None.

10. Technical and Requirements Certification: I certify that the supporting data under my cognizance, which are included in this justification, are accurate and complete to the best of my knowledge and belief.

Date: _____

Systems Analyst

Signature: _____

11. Fair and Reasonable Cost Determination: I hereby determine that the anticipated price to the Government for this contract action will be fair and reasonable based on anticipated competition. Additionally, NASA SEWP V has already determined the prices on contract to be fair and reasonable. Finally, the successful quote will be compared with the Independent Government Cost Estimate.

Date: __

Procuring Contracting Officer

Signature: _____

12. Procuring Contracting Officer Certification: I certify that this justification is accurate and complete to the best of my knowledge and belief. As this contract action does not exceed \$650,000, the certification below required by FAR 16.505(b)(2)(ii)(C)(1) serves as approval.

Date: _

Procuring Contracting Officer

Signature: _____