



ANNEX A:

VIRTUALIZATION OF MIDAS CENTRAL SERVER (VMWARE VSPHERE 6)

Below are some of the requirements for the virtualization activity;

- **Compatibility:** Virtualization software should be compatible with *physical server's* hardware and *Microsoft Windows Server operating systems* and other existing third-party management tools.
- **Scalability:** The software should allow for scalability i.e. its ability to grow, or retract, as needed. It is important that this virtualization software enables and empowers the Nigeria Immigration Service (NIS)'s current and future business plans.
- **Performance:** The software should provide strong performance on both host and guest machines.
- **Cost:** Considering the return on investment (ROI) NIS can anticipate, and based on the software's features and capabilities, NIS will consider the type of licensing agreements being proffered.
- **Centralization:** The software should be centralized deployment and management, to help reduce the costs and time associated with these tasks.
- **Ease of Installation:** It is recommended that the proffered virtualization platform(s) be simple, and include an easy installation process, wizards, and/or a simplified VM creation processes, via simplified server configuration and deployment.
- **High Availability:** It is vital that administrators can access the virtual environment whenever and wherever they need it. To achieve this, High availability is, therefore, a critical component of the proffered virtualization solution.
- **Security:** The platform should present built-in security features — such as password-protection, strong authentication, and guest isolation — which are designed to help protect the corporate network, data and data center(s). These features complement other security initiatives.
- **Support:** Guaranteed prompt and thorough support whenever/ or as needed. Provision of availability of additional tools such as capacity-planning tools is an added advantage.
- **Backup and Replication:** proffered solution should incorporate an easy backup and replication methodology.
- **Software:** Microsoft Windows Server 2016 installed and configured to be compatible with vSphere Hypervisor and VM (Web Server) that supports MS SQL database.



Other working parameters:

- a. Procure, install, configure and test VMware hypervisor. Also aid in the transfer of applications to the hypervisor.
- b. Compatibility with already installed routers and firewalls for Security management.
- c. Available to provide Level-2/3 support and troubleshooting on an L3 resolution timeline, to resolve issues.
- d. Produce detailed documentation on installation, troubleshooting and general management of the VM, following defined procedures/ processes;
- e. Liaise with prescribed NIS/ IOM IT personnel for future problem resolution.
- f. Transfer knowledge by way of collaboration with NIS/ IOM staff, documents and direct trainings.

PHYSICAL SERVER SPECIFICATIONS FOR VIRTUALIZATION

- Intel Xeon-Platinum 8270 (2.7 GHz/26-core/205 W) x 2 processor kits
- 2GB L3 Cache
- 256GB of RAM
- Windows Server 2016
- Smart Array P816i-a SR Gen10 (16 internal lanes/ 4GB Cache/ SmartCache) 12G SAS modular controller
- 2 x 300GB 15k rpm Hard Drives for Operating System (RAID 1)
- 6 x 1TB 10k rpm SFF Hard Drives for data (RAID 5)
- Embedded Gigabit Ethernet (Gbe) Adapter
- Dual, Hot-plug, Redundant Power Supply
- 3 years warranty