

## **Scope of Work for Server Virtualization and VDI Support**

### **Synonyms**

DC=Datacenter	OEM=Original Equipment Manufacturer
SOW=Scope of Work	SI= System Integrator
DR=Disaster Recovery	SLA=Service Level Agreement
HO=Head Office (Natraj)	RCA=Root Cause Analysis.
OS=Operating System	SCD= Secured Configuration Document
SBIL=SBI Life Insurance	VA= Vulnerability Assessment

### **Objective**

To manage VMware and VDI Infrastructure Support operation of SBI Life Insurance Co. Ltd., from Belapur location. To ensure optimal performance and desired level of availability of all IT VMware and VDI Infrastructure components. The service shall ensure a reliable and end to end management of Storage Infrastructure setup located at DC-Belapur, HO-Andheri-Seawoods & DR- Hyderabad.

### **BRIEF DESCRIPTION**

- 1) Availability, Performance and Capacity Management**
- 2) Change Management**
- 3) Incident & Problem & Fault Management**
- 4) Service Management**
  - a) VMware Management L1 Support**
  - b) Skill Set for VMware L1**
  - c) VMware Management L2 Support**
  - d) Skill Set for VMware L2**
  - e) VDI Infrastructure Management**
  - f) VDI Infra Skill Set**
  - h) Team Structure & Service Windows**

#### **1. Availability, Performance and Capacity Management**

- ⇒ Ensure 99.9 % uptime & availability of VMware and VDI Infrastructure at DC, DR & HO locations
- ⇒ Monitoring of the Critical Parameters related to VMware/VDI Infrastructure.
- ⇒ Monitoring of Critical Parameters of Server OS (ESXi), Applications of Virtual Infra and DB.
- ⇒ Service Ticket lodge with OEM like VMware Related Incidents and Follow-ups with OEM / SI until issue is been resolved
- ⇒ Notifying the concerned server owner upon receiving alert during monitoring
- ⇒ Follow-up with respective server owner until alert is been resolved.
- ⇒ Coordination with respective OEM of the Virtual Infra related events, firmware update, upgradation and Troubleshooting.

- ⇒ Corrective & Preventive actions to be taken to avoid future failures.

Vendor will make all efforts to ensure that there is 99.99% up time calculated on monthly basis for HA related servers and services and 99.50% for Non-HA components mentioned in SOW. The downtime however will not be in effect under the following conditions:

- ✓ Downtime due to Network failure.
- ✓ Downtime due to any other infrastructure failure.
- ✓ Planned downtime scheduled by SBIL for Activity like Patch management, DR Drill, Maintenance Downtime

## **2. Change Management**

- ⇒ Perform “Impact Analysis” of proposed Change Management
- ⇒ Preparing “Change Management” forms and implementing approved configuration changes for Changes related to Virtual Infrastructure/VDI Infra.
- ⇒ Configuration backup where necessary prior to implementation of configuration changes.
- ⇒ The Entire change management should be in adherence with the ISO 27001:2019 ISMS guidelines.
- ⇒ Rollback configuration when and if required with Maintenance and Configuration Activity.

## **3. Incident & Problem & Fault Management**

- ⇒ This activity includes coordination between SBIL and its IT related vendors to follow up for resolution of problems related vendor supplied IT software and hardware and to verify timely OEM/AMC/ Warranty
- ⇒ Support for vendor provided services.
- ⇒ Log calls with vendors and follow up for the resolution of the same.
- ⇒ Adherence to escalation matrix of OEM TAC and AMC vendors for all downtime and Troubleshooting activities related to Hardware or Services.

## **4. Service Management**

### **a) VMware Management L1 Support**

- ⇒ Installation of ESXi Hypervisor, Guest Operating systems
- ⇒ Daily works to manage/upgrade/troubleshoot of VMware Infra
- ⇒ Ensure 99.9 % uptime & availability of VMware Infra DC, DR & HO locations
- ⇒ Configurations/Monitoring/Alert of VMware Infra
- ⇒ Ensure timely implementation of secure configuration document (SCD)
- ⇒ Ensure timely implementation of patches released by OEM as per patch management cycle
- ⇒ Follow daily checklist as defined
- ⇒ Follow the process as per defined SoP & update in SoP if any change/modification in process
- ⇒ Update & maintain VMware Infra Inventory with all relevant details
- ⇒ Ensure execution of DR drill process
- ⇒ Take follow-up with security team (IST) for SCD, VA & PT point closure
- ⇒ Submit monthly report to reporting manager
- ⇒ To work on root cause analysis (RCA) for incident occurred & document preparation
- ⇒ Timely coordinate & follow-up with OEM (VMware) for open cases
- ⇒ Ensure to follow handover process with teammate and team leader
- ⇒ Coordinate with SOC team for security alerts closure

**b) Skill Set for VMware L1**

- ⇒ Good interpersonal, written & oral communication skills.
- ⇒ Expert & knowledge of ESXi
- ⇒ Problem solving & Troubleshooting skill set
- ⇒ Basic/Fundamental knowledge of VROPs
- ⇒ Basic/Fundamental knowledge of VMware STD and DVS Switches
- ⇒ Basic/fundamental knowledge of HCI
- ⇒ Basic/fundamental knowledge of VSAN
- ⇒ Basic/fundamental knowledge of Storage

**c) VMware Management L2 Support**

**1) Information security and compliance as per SBIL defined scope.**

- ⇒ To ensure timely implementation of secure configuration document (SCD), Vulnerability Assessment (VA) & Penetrating Testing (PT) on all VMware Product if applicable in SBIL environment
- ⇒ To review and ensure timely closure of all SCD, VA & PT points opened by Information security Team (IST)
- ⇒ To submit weekly status reports for all opened/WIP/ closed points under SOW

**2) VMware Product upgrade and Patch Management**

- ⇒ Upgrade ESXi Version to higher/latest version of VMware compatibility matrix to maintain Lifecycle of Hypervisor.
- ⇒ To identify and deploy patches released by OEM (VMware) as per patch management cycle defined by SBIL SOP
- ⇒ To help onsite VMware (L1) support team to troubleshoot the issues on daily basis
- ⇒ To Work on root cause analysis (RCA) for reported incidences during issue/break fix at VMware Infrastructure, ensure maintaining document of RCA and Incidences

**d) Skill Set for VMware L2**

- ⇒ Good interpersonal, written & oral communication skills.
- ⇒ Expert & knowledge of ESXi
- ⇒ Problem solving & Troubleshooting skill set
- ⇒ Advance knowledge of VROPs
- ⇒ Advance knowledge of VMware STD and DVS Switches
- ⇒ Advance knowledge of HCI
- ⇒ Advance knowledge of VSAN
- ⇒ Advance knowledge of Storage
- ⇒ Ability to handle L2/L3 level escalation

**e) VDI Infrastructure Management**

- ⇒ Installation, Configurations of RDSH, VDI Machine as per requirements
- ⇒ Ensure 99.9 % uptime & availability of VDI Infrastructure
- ⇒ Ensure timely implementation of patches released by OEM as per patch management cycle
- ⇒ Follow daily checklist as defined
- ⇒ Ensure timely implementation of secure configuration document (SCD)
- ⇒ Preparation and Update in SoP if any change/modification in process
- ⇒ Update & maintain VDI Infrastructure Inventory with all relevant details
- ⇒ Should have hands on experience on VDI version upgrades.

- ⇒ Good practical knowledge on UAG, DEM, Workspace one, VMware Horizon.
- ⇒ Take follow-up with security team for SCD,VA & PT point closure
- ⇒ VDI Capacity Planning
- ⇒ Submit monthly report to reporting manager
- ⇒ To work on root cause analysis (RCA) for incident occurred & document/SOP preparation
- ⇒ Timely coordinate & follow-up with OEM VMware for open tickets
- ⇒ Ensure to follow handover process with teammate and team leader
- ⇒ Coordinate with SOC team for security alerts closure related to VDI
- ⇒ Good interpersonal, written & oral communication skills.
- ⇒ Good knowledge on VMware vSphere & VMware Horizon administration experience.
- ⇒ Technically strong on VMware VDI, vSphere, VDI File Server, Thin client management and strong understanding DHCP, DNS, AD & GPO.
- ⇒ Excellent troubleshooting skills on vSphere, VDI, Horizon, workspace one, Unified access gateway.
- ⇒ Problem solving & Troubleshooting skill set

**f) VDI Infra Skill Set**

- ⇒ Good knowledge on VMware vSphere & VMware Horizon.
- ⇒ Provide expert level build of virtual desktop/images, up gradation of images.

**g) Team Structure & Service Windows**

Profile	No of Resources	Location	Service Windows
VMware Admin L1	4	Belapur	24 X 7
VMware Admin L2	1	Belapur	9 x 5
VDI Support L1	2	Belapur	8 AM to 8 PM

**Note: The above lists of activities are to be carried out by the resources but not limited to the above.**

**Note: list of activities mentioned in all above table is exhaustive but not comprehensive.**