**System Engineer Handover Document**

**Date:** 11 June 2025  
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**Purpose:** To document the infrastructure overview, tooling, services, access management, and open queries gathered during the initial and ongoing handover sessions.

**1. SYSTEM OVERVIEW**

**1.1 SCVMM (System Center Virtual Machine Manager)**

* **Hostname/IP:** 10.7.16.200
* **Access Method:** CyberArk
* **Function:** Central tool to manage Hyper-V virtual infrastructure. It displays running VMs, physical hosts, and cluster details.
* **Monitoring:** Integrated with **SCOM**.
* **Weekly Inventory Emails:** Sent automatically to SysEng DL.
* **Known Issue:** Cluster pause issue observed every Monday.

**Understanding:** SCVMM acts as the central pane for virtualization management. All cluster-related VM and physical host actions are performed here.

## 2. VIRTUAL INFRASTRUCTURE – CLUSTER LAYOUT

The following clusters are available inside SCVMM:

| **Cluster Name** | **Description** |
| --- | --- |
| LIPRODCL01 | LI Office's production cluster, includes 20C and SCCM DP VMs. |
| NJPCORPCL01 | Hosts RPA and other CORP domain-related VMs. |
| NJPFPLANCL01 | Contains all database servers related to FPLAN. |
| NJPHVCL01 | Initially used for tools (SCVMM, SCCM); now repurposed to host Linux servers. |
| NJPPRODCL01 & 02 | Host Windows-based virtual machines (2012/2016/2019 OS). |
| NJPPRODLINUX01/02/83 | Clusters solely dedicated to Linux VMs. |

**Pending Question:** What is the functional or architectural difference between NJPHVCL01 and the Linux-only clusters?

## 3. PHYSICAL INFRASTRUCTURE (FABRIC VIEW IN SCVMM)

* **Fabric Tab** displays physical hosts where virtual machines are deployed.
* **VM and Services Tab** allows:
  + Viewing the list of VMs.
  + Checking VM state (on/off).
  + Performing power operations (Restart, Shutdown, Pause, Reset).

**Understanding:** SCVMM provides a full lifecycle view of VMs and physical host infrastructure. Independent standalone servers (approx. 15–20) are also visible here.

**Asked & Documented:** How to create a VM in SCVMM?  
**Answer:** Use the 'Create Virtual Machine' wizard → define OS, vCPU, memory, storage → assign to cluster/host → deploy.

**4. DOMAIN CONTROLLERS & SERVICES**

The following domains are in active use:

| **Domain** | **Description** |
| --- | --- |
| CORP | All employee workstations are joined to this domain. |
| FPLAN | All database-related servers are managed here. |
| TOOLS | Includes all internal tooling servers (e.g., SCVMM, SCCM). |
| DMZ | Public-facing production servers and web servers reside here. |
| SECLAN | All information security (INFOSEC) related systems are managed under this domain. |

**Understanding:** Domains are logically separated for better access control, GPO management, and isolation of services.

## 5. HPE ONEVIEW – HARDWARE MANAGEMENT

* **Appliance IP:** 10.7.254.50
* **Role:** Centralized management of HPE physical infrastructure.
* **Components Managed:**
  + **8 chassis** with **11 blades each** (Total: 88 blade servers).
  + **~90 server profiles** configured.

### Key Functions:

* Server reboot, shutdown, and power operations.
* Hardware monitoring and alert integration with SCOM.

**Asked & Documented:**

* What is a Chassis? → A physical enclosure for multiple blade servers.
* What is a Blade? → A modular physical server housed in a chassis.
* What is a Standalone Server? → A physical server not part of any chassis.
* What is a Profile? → Template for firmware, BIOS, storage, and network settings applied to a blade.
* What is ILO? → Integrated Lights-Out: remote management interface for individual physical servers.

**Understanding:** OneView functions like a large-scale ILO dashboard, allowing centralized lifecycle control for all hardware servers.

**Critical Note:** Rebooting or modifying physical servers through OneView should be done with caution. IAM approval is required for access.

**6. STORAGE INFRASTRUCTURE**

We currently manage four storage systems:

**Unity Storage:**

| **System** | **IP** | **Capacity** | **Used** | **Notes** |
| --- | --- | --- | --- | --- |
| Unity 2 | 10.1.3.95 | 148 TB | 71% | 25.4 TB free; snapshot reserve |
| Unity 3 | 10.1.3.96 | ~TBD | ~33 TB free | - |

**Hitachi Storage:**

| **System** | **IP** | **Capacity** | **Used** | **Notes** |
| --- | --- | --- | --- | --- |
| Hitachi E590 | 10.7.251.29 | 233.82 TB | 137.79 TB | Primary VSP |
| Hitachi B26 | 10.7.251.26 | 188.59 TB | 34.77 TB (estimated) | Migration in progress |

* **Storage Pools**: Logical allocations used to provision storage for Hyper-V clusters via LUNs.

**Asked & Documented:** How is storage mapped to physical/virtual infrastructure?  
**Answer:** Through predefined storage pools → mapped to Hyper-V clusters or servers via LUN assignment and naming conventions.

**Pending Question:** What is our specific role in daily storage monitoring, alert triage, and provisioning tasks?

## 7. ACCESS & CREDENTIALS

* **Credential Manager:** Keeper Vault  
  URL: [https://keepersecurity.com/vault/#](https://keepersecurity.com/vault/)
* **Remote Access Tool:** CyberArk
* **IAM Team:** Responsible for granting system access.  
  Primary Contact: Mohinder Sir

All passwords, infrastructure secrets, and documentation references are stored securely in Keeper Vault. IAM approval is mandatory for access.

## 8. DOCUMENTATION & CHANGE MANAGEMENT

| **Resource** | **Location** |
| --- | --- |
| SOPs/Runbooks | OneNote |
| Architecture Diagrams | CIO SharePoint |
| Change Requests | Connect IT Portal |
| OneView Docs | Hosted inside the OneView platform |

**9. PENDING TASKS & OPEN ISSUES**

| **Item** | **Status** |
| --- | --- |
| Cluster pause issue (recurring) | Weekly occurrence (Mondays) |
| OneView Composer Upgrade | Pending |
| HPE New Chassis Installation | Not started |
| Hitachi B26 Storage Migration | Ongoing |

**10. OPEN QUESTIONS (To Be Addressed)**

| **Question** | **Status** |
| --- | --- |
| What’s the difference between NJPHVCL01 and the Linux clusters? | To be asked |
| What is our role in daily storage operations, alerting, and snapshots? | To be asked |
| What actions are manual vs automated in provisioning via OneView? | To be asked |
| Do we handle backup errors manually or escalate? | To be asked |
| Where are storage logs and alerts monitored (dashboard, email, etc.)? | To be asked |

## 11. SUMMARY

This document provides an operational handover of key infrastructure components managed by the System Engineering team, covering virtualization (SCVMM), hardware (HPE OneView), domain services, storage, pipelines, access control, and ongoing issues. Follow-up sessions are required to address pending architecture questions and confirm team responsibilities in daily tasks.