**OTHELLO PHARMA NETWORK**

**Overview**

* **Purpose**: Outline the goal of the network to support pharmacy operations like inventory management, prescription processing, and secure payment transactions.
* **Scope**: It describes the network size and limitations, e.g., "Single-site pharmacy with 15 users, supporting POS, inventory systems, and internet browsing."

**2. Network Diagram**

* **Visual Representation**:
* Used Visio software to create a diagram showing:
  + Devices (routers, switches, firewalls, access points, servers, workstations, POS systems).
  + Connections (wired and wireless links).
  + IP addressing and VLANs (if applicable).
* **Legend**: Include symbols and their meanings for clarity.

**3. Hardware Inventory**

List all physical and virtual devices with details:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Device** | **Model** | **Role** | **Serial Number** | **Location** | **Warranty** |
| Router | Cisco RV340 | Internet Gateway | XYZ123456 | Server Room | 12/2025 |
| Switch | Cisco SG250-26 | Core Switch | ABC789012 | Server Room | 01/2026 |
| Firewall | Fortinet FG-60F | Network Security | DEF345678 | Server Room | 03/2025 |
| Access Point | Ubiquiti UAP-AC | Wireless Coverage | GHI901234 | Throughout | 05/2026 |

**4. Network Topology**

* **Physical Topology**: Describe physical connections between devices (cabling and locations).
* **Logical Topology**: Document VLANs, subnets, and routing policies.

**5. IP Addressing Scheme**

Define IP addresses for all devices:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Device** | **Function** | **IP Address** | **Subnet** | **Gateway** |
|  |  |  |  |  |
| Router | WAN Interface | 192.168.1.1 | 255.255.255.0 | ISP-provided |
| POS System 1 | Sales Terminal | 192.168.1.101 | 255.255.255.0 | 192.168.1.1 |
| Workstation 1 | Admin PC | 192.168.1.102 | 255.255.255.0 | 192.168.1.1 |

**6. Security Configurations**

* **Firewall Rules**: Describe rules implemented for inbound and outbound traffic.
* **WIFI Security**: Document SSID, encryption type (e.g., WPA3), and passwords.
* **User Authentication**: Outline methods (e.g., Active Directory, local accounts).
* **Monitoring**: Mention tools like NMS or logging systems in place.

**7. Backup and Recovery**

* **Device Configurations**: Detail where and how device configurations are backed up.
* **Data Backup**: Explain the backup schedule and storage for critical data like patient records.
* **Recovery Plan**: Steps to restore services during a failure.

**8. Maintenance Plan**

* **Routine Tasks**: E.g., firmware updates, log reviews, and hardware checks.
* **Service Contracts**: Include information on third-party support agreements.

**9. Troubleshooting Guidelines**

* **Common Issues**: Document known issues and their resolutions (e.g., "WiFi not connecting—restart access point").
* **Escalation Plan**: List contacts for advanced support.

**10. Contact Information**

Provide the contact details of IT support and vendors:

* **Internal IT Staff**: Name, phone, and email.
* **ISP Support**: Contact details for internet-related issues.
* **Hardware Vendors**: For warranty claims and replacements.

**11. Change Log**

Track changes made to the network or documentation:

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Change** | **Author** | **Remarks** |
| **2024-12-30** | **Added firewall FG-60F** | **A. Rashid** | **Improved network security.** |