|  |  |  |  |
| --- | --- | --- | --- |
| **Device name** | **Technical specifications** | **Amount** | **Cost (May 2024)** |
| **The Cisco 1941 Router** | **Product Code:** CISCO1941/K9  **Rack Units:** 2 RU  **Interfaces:** 2 integrated 10/100/1000 Ethernet ports: GE0/0&GE0/1  **Expansion Slot(s):**   * 2 enhanced High-Speed WAN Interface Card slots * 1 Internal Services Module slot   **RAM:** 512 MB (installed) / 2 GB (max)  **Flash Memory:** 256 MB (installed) / 8 GB (max)  **Dimensions:** 34.3 cm x 29.2 cm x 8.9 cm  **Package Weight:** 10.48 Kg | 06 | $3,482 |
| **Cisco WS-C2960-24TT L Switch** | **Product Code:** Cisco WS-C2960-24TT-L **Ports:** 24 Ethernet 10/100 ports **Uplinks:** 2 Ethernet 10/100/1000 ports **VLAN IDs:** 4000  **Dimensions (H x W x D):** 4.4 x 44.5 x 23.6 cm **Weight:** 3.6 kg **Rack Height:** 1 RU | 15 | $2,869 |
| **Cisco ASA5506-BUN-k 9 Firewall** | **Firewall Users:** 10 **Maximum firewall throughput (Mbps):** 150 **Maximum connections:** 10,000 **Maximum connections/second:** 3,000 **Packets per second (64 byte):** 85,000 **Integrated ports:** 8 port 10/100 switch with 2 Power over Ethernet ports  **Maximum virtual interfaces (VLANs):** 3 (trunking disabled) | 1 | $595 |
| **Linksys Cloud Managed AX3600 WiFi 6 Indoor Wireless Access Point** | * Dual-Band 802.11AX (2.4GHz + 5GHz) * 4x4:4 Internal Antennas for AX3600 Speeds (1200Mbps + 2400Mbps) * UL/DL OFDMA, 1024-QAM, Target Wake Time * BSS Coloring, Tx Beamforming * 802.3at PoE+ Support * Limited Lifetime Cloud Management * TAA Compliant | 1 | $399.99 |
| **Optical fiber cable & Copper cable supporting GigabitEthernet** |  |  |  |
| **Optical fiber cable & Copper cable supporting FastEthernet** |  |  |  |
| **Servers & Workstations** | Selected by the hospital. |  |  |

**IP Addressing plan.**

The connection between the IT cable room of the the Main Site and the firewall is 10.0.0.0/24

For **private network**, all *hosts* have IP address format as:  
192.168.[VLAN].[host]  
where,  
[VLAN] ranges from 1.. 254  
[host] ranges from 2 .. 254  
Additional rule:  
● Networking devices: **first** available addresses within the range  
● Hosts: **last** available addresses within the range  
● All hosts in the Company private network are assigned with a static IP address.  
  
There are special IP addresses and VLANs used for **routing and network management**:  
1. Network 10.0.1.0/24 is for WAN communication on leased DSL between Main Site and the Auxiliary Site 1.  
2. Network 10.0.2.0/24 is for WAN communication on leased DSL between Main Site  
and the Auxiliary Site 2.  
3. Network 12.12.12.0/24 is for communication between the hospital and the firewall.  
4. Network 8.8.8.0/24 is for communication between the firewall and  
Internet Gateway.

**List of Access VLANs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **VLAN** | **Network IP address** | **Default Gateway** |
| Main Site | 002 | 192.168.1.0/24 | 192.168.1.1/24 |
| Main Site | 003 | 192.168.2.0/24 | 192.168.2.1/24 |
| Main Site | 004 | 192.168.10.0/24 | 192.168.10.1/24 |
| Main Site | 005 | 192.168.11.0/24 | 192.168.11.1/24 |
| Auxiliary 1 | 006 | 192.168.6.0/24 | 192.168.6.1/24 |
| Auxiliary 1 | 007 | 192.168.7.0/24 | 192.168.7.1/24 |
| Auxiliary 2 | 008 | 192.168.8.0/24 | 192.168.8.1/24 |
| Auxiliary 2 | 009 | 192.168.9.0/24 | 192.168.9.1/24 |
| IT Cable Room (Main Site) | 010 | 10.0.0.0/24 | 10.0.0.1/24 |