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Software standards
UNFPA has obtained global licenses for Microsoft Office (for UNFPA Country Offices please contact your respective Regional or Sub-Regional Offices) and Symantec EndPoint antivirus software - these software’s are licensed for installation in all UNFPA user computers. Following is a listing of officially supported versions of current software’s:

Operating System: Windows 10 Professional (64 bit)
Office Suite: Microsoft Office 2013 Professional (Word, Excel, PowerPoint, Outlook)
Email client: Outlook
Browsers: Google Chrome 39 (Higher), Mozilla Firefox 30 (Higher) and Internet Explorer 11 (Higher)
PDF Reader: Adobe Acrobat Reader XI (Higher)
Antivirus: Symantec EndPoint 12.x (Higher) Consult MIS
Runtimes: Flash 15.0, Silverlight 5.1, Adobe Air 15.0, Adobe Shockwave 12.1, Java 7, Java X64 7, Apple QuickTime 7.x
Communications: Google Hangouts, Skype 7.0 (Higher)

Minimum standards for desktop personal computers
UNFPA has standardized on Windows computers, the current versions of which use Core 2 Duo class processors. UNFPA does not prohibit the use of processors made by other manufacturers such as AMD as long as they are fully compatible with Intel chips.

Processor: 5th Gen Intel Core i5 or equivalent
Front Side Bus: 2.7 GHz
RAM: 8GB, NON-ECC, 1600MHZ DDR3, 2DIMM. Systems developers and power users may need computers with larger RAM
Hard Disk: 500GB 7200rpm (Keep Your Hard Drive, 3 Year)
CD-ROM: 16X DVD+-RW
External Ports: 4 USB 2.0/ 3.0
Graphics: Integrated, up to 256MB shared
Sound: Integrated
Monitor: 21" WXGA LCD
Keyboards: 101 key-enhanced keyboard
Mouse: 2 button digital mouse with scroll
Operating System: Windows 7 Professional (64 bit)
Network Capability: Integrated 10/100/1000 Ethernet card
Certification: Must be certified for compatibility with Windows 7 Professional or Windows 8.1 Professional 64-bit Operating Systems
Warranty: 3 Years onsite (next business day recommended)
Brands: Lenovo, Dell, Hewlett-Packard. Actual brand selection depends on cost, availability of service and maintenance facilities in the country/city
Maximum Cost: $900 (HQ) / $1,300 (Field)

Standards for printers
Network LaserJet Color Printer: HP LaserJet Enterprise 500 color M551dn or Lexmark X79x Series
Network LaserJet Printer: HP LaserJet 3015dn or Lexmark MS610DE
Multifunction Network Printer: HP LaserJet Enterprise M4555h MFP or Lexmark X646DE (B/W)

Maximum standards for Personal Printers
Resolution: 2400 x 600; Black and White; Wired/USB/Wireless; Media Size Maximum 8.5 x 14 inch;
Double-Sided Printing; Max Print speed: Black White 27 pages per minute; Printer Technology: Laser;
Maximum Paper Tray Capacity: 250-sheet;Maximum Memory: 8 MB; Minimum Hi-Speed USB 2.0
interface support. Compatible preferred with: Windows 10 / Windows 8 / Server 2012 R2/ 2008 R2; Mac
OS X 10.4.11, 10.5.x, 10.6.x

Minimum standards for portable computers
UNFPA does not technically endorse the use of the Apple Computers. Though excellent devices
for personal use, Apple tablets and computers do not meet organizational requirements. Specifically: it
does not run all corporate applications; it does not connect to a wired network; all additional applications
install via a personal iTunes account (credit card information is required); and Apple operating system
support will be required of UNFPA IT. Basic tablets do not replace user laptops but are an additional
device. Therefore, such devices will substantially increase costs to the organization.

**Tablet specifications are available on request through your LAN Manager following
consultations with MIS**

UNFPA has standardized on Windows laptops, the current versions of which use Core 2 Duo class
processors.

Processor: 5th Gen Intel Core i5 or equivalent
RAM: 8GB DDR3. Systems developers and power users may need computers with larger
RAM
Hard Disk: 5000 GB 7200rpm (Keep Your Hard Drive, 3 Year) or 512 GB SSD/PCIe drive
CD-ROM: Optional/8X DVD+-RW
External Accessories: 1 SD Card Slot; 2 USB 2.0/3.0; 21” WXGA LCD, in conjunction with docking
station; 101 key-enhanced keyboard; 2 button digital mouse with scroll
Graphics: Integrated
Sound: Integrated. Light Sensitive Webcam and Noise Cancelling Digital Array Mic
Display: 13” WXGA Active Matrix / Touch Screen
Modem: Optional
Network Capability: Integrated 10/100/1000 Ethernet card
Wireless Capability: Integrated 802.11b/g/n
Battery: Lithium-Ion 6-cell
Power Supply: Universal, auto-sensing (100-240 Volts/50-60Mhz)
Operating System: Windows 10 Professional (64 bit)
Warranty: 3 Years onsite / accidental damage coverage
Brands: Lenovo, HP, Dell, Toshiba, and Sony. Actual brand selection depends on cost,
availability of service and maintenance facilities in the country/city
Maximum Cost: $1,700 (HQ) / $2,200 (field)

**Minimum standards for Thin Clients**

All Thin Clients should have VMware Horizon and be compatible with VMware vSphere. It is recommended that the Thin Client must have listed below configurations:

- **Network:** Integrated 10/100/1000BaseT Ethernet card Network
- **Hard Disk:** 8GB or less
- **Chassis:** Mountable behind the monitor
- **Monitor:** 22 inch diagonal
- **USB Connections:** Minimum 4 USB ports.
- **Sound:** Built in Speakers with headset capabilities
- **Video:** VGA connectivity but Digital is recommended

**Minimum standards for computer projectors**

- **Lumens:** 2500 lumens
- **Supported Resolutions:** WXGA, XGA, SVGA
- **Bulb life:** 3000 hours

**Recommended Brands:** Boxlight, Dell, Epson, and Infocus. Actual brand selection depends on cost, availability of service and maintenance facilities in the country/city

**Minimum standards for network file servers and application servers**

The exact configuration of network file or application servers depends on the intended use of the server and the number of users. However, the following configuration provides a general minimum guideline for selecting servers:

- **Processor:** Intel® Xeon® E5 2.4 GHz (minimum of 4 cores) or equivalent, dual processor capable. The exact configuration depends on the number of users and applications.
- **Front Side Bus:** 2.7 GHz
- **RAM:** 32 GB for server using Windows 2012 Standard R2 (64 bit). Maximum memory should be upgradable to at least 96GB. The exact configuration and amount of RAM depends on the number of users, applications and workload.
- **Controller:** SAS/SATA internal RAID adapter, RAID 1/ 5 configurable
- **Hard Disk:** 1TB SATA upgradable to 3TB internally. Minimum 2 hot pluggable drives
- **Chassis:** Rack mountable
- **CD-ROM:** 16X DVD-ROM, internal.
- **External Ports:** 2 USB; 1 Keyboard port; 1 Mouse port
- **Graphics:** Integrated 64-bit graphics accelerator
- **Monitor:** 19” LCD (optional)
- **Keyboards:** 101 Key enhanced keyboard (optional)
- **Mouse:** 2 button digital mouse (optional)
- **Network capability:** Integrated 10/100/1000BaseT Ethernet card Network
Certification: Must be certified for compatibility with Microsoft Windows 2008 R2 and Windows Server 2012 R2 network operating systems.

Recommended Brands: Dell, and Hewlett-Packard. The actual brand selected should depend on the cost and availability of service and maintenance facilities in the country/city.

**Minimum standards for wireless access points**

<table>
<thead>
<tr>
<th>Wireless Standard:</th>
<th>802.11ac, 802.11n, 802.11g</th>
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<tbody>
<tr>
<td>SSID:</td>
<td>SSID Broadcast Enable/Disable supported</td>
</tr>
<tr>
<td>Security:</td>
<td>WEP 64bit, WPA-TKIP, WPA2-AES, WPA-Enterprise, and WPA2-Enterprise</td>
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Recommended Brands: Cisco, Aruba Networks, Netgear, Belkin, DLink. Actual brand selection depends on cost, availability of service and maintenance facilities in the country/city.