List of pre-requisites for implementation of WebSAMS in new schools

Internet connection
1. The school has subscribed an Internet connection with a broadband line (or equivalent) from an ISP.
2. There is a gateway (eg, router, firewall, proxy) connecting the Internet and ITED network. The gateway has to be capable to perform Network Address Translation (NAT).

Testing PC
1. There are two client PCs for WebSAMS testing purpose. One is an ITED client PC, another one is a WebSAMS client PC.
2. The PC has to be a MS Window machine, preferably Window 2000 professional.
3. The web browser has to be IE 5.5 or above, or Netscape 6.2 or above.
4. The PC has MS Office 2000, an Zip compression software (such as WinZIP), and Acrobat Reader installed.

ITED network
1. The school has an ITED network with at least a switch and a router connecting to WebSAMS network.
2. The vendor has performed default installation in HTTP server. The server is connected to the ITED network and can surf the Web.

WebSAMS network
1. The school has a WebSAMS network with at least a switch and a router (the same router described in “ITED network”) connecting to ITED network.
2. The vendor has performed basic installation in WebSAMS server. The server is connected to the WebSAMS network and can surf the Web.

IP address and domain names
1. For each WebSAMS installation, WebSAMS application needs a private IP in ITED network, a private IP in WebSAMS network, and a public IP for Internet access. The block of public IPs is allocated by ISP, while that of the private IPs is assigned by ED. The school has to reserve the IP addresses.
2. WebSAMS is accessible through a web browser with a URL address. The school has to register the domain name (URL) in the Internet. Usually, ISP could help to register the domain name.
Hints on drawing network diagrams for WebSAMS:
1. PCs need not be included in the diagrams.
2. State clearly what is your Internet Gateway. An Internet Gateway is a network device that provides connectivity between the school network and the Internet. It can be a router, a firewall, a proxy server, or a server with two network interface cards.
3. State clearly the IP configuration and other functions (such as NAT, proxy) of your Internet Gateway.
4. State clearly the network number, subnet mask, and default gateway of the ITBD segment and WebSAMS segment.

Sample school network diagram:
- Internet Gateway
  - Internal interface: 10.10.10.1
  - Subnet mask: 255.255.255.0
  - Subnet mask: 255.255.255.64

- ITBD Segment
  - Network: 10.10.10.0
  - Subnet mask: 255.255.255.0
  - Default Gateway: 10.10.10.1
  - Other ITBD equipments

- WebSAMS Segment
  - Network: 10.10.20.0
  - Subnet mask: 255.255.255.0
  - Default Gateway: 10.10.20.1

- HTTP Server
  - (Red Hat Linux)

- WebSAMS Router
  - (Cisco 2001)

- WebSAMS Switch
  - (Red Hat Linux)

- WebSAMS Switch
  - (Windows 2000 Server)