

802.1X Components:

- o The IEEE 802.1x framework defines three roles in the authentication process:

Supplicant (Client or Host):

- o Supplicant is the user or device that wants access the wireless or wire network.
- o Supplicant, client or host is the end device or user requiring the authentication.
- o Supplicant is also known the Client or Host as 802.1x Port-Based Authentication.
- o Supplicant is the Workstation that is connected through Network Access Switch.
- o Supplicant is workstation request for accessing the computer network resources.
- o Supplicant is the Workstation; PC or Client must be using 802.1x Client software.
- o Supplicant could be an end-user device, a printer, Fax machine, PC or an IP phone.
- o The supplicant is the 802.1x software, that runs on the endpoint or end Device.
- o All Windows Operating System has own native supplicant for the wired networks.

Authentication Server:

- o Authentication Server is a device that processes authentication such as RADIUS.
- o Authentication Server is the device that authenticates the Supplicant or the client.
- o The entity that validates the identity of the supplicant and notifies the authenticator.
- o Authentication Server notifies authenticator to allow or deny the client request.
- o For example, RADIUS server, such as ACS, can provide authentication server services.

Authenticator (Switch, AP):

- o Device between supplicant & authentication server that facilitates authentication.
- o The client, user or supplicant is normally directly connected to the authenticator.
- o For example, switch or wireless access point provide authenticator services to clients.
- o Authenticator is the network device that is acting as a “gatekeeper” to the network.
- o Authenticator is typically a Cisco Layer 2 or 3 Switch or Wireless LAN Controller (WLC).

