



# Network Access Control

THREAT MANAGEMENT

## Network Access Control (NAC)

 Limits network access to only authorized individuals and systems

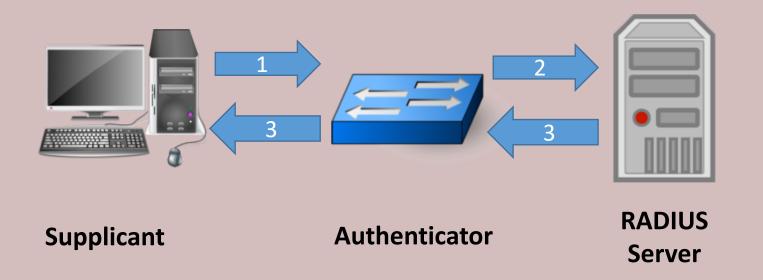
 Ensures the systems connecting to the network meet basic security requirements

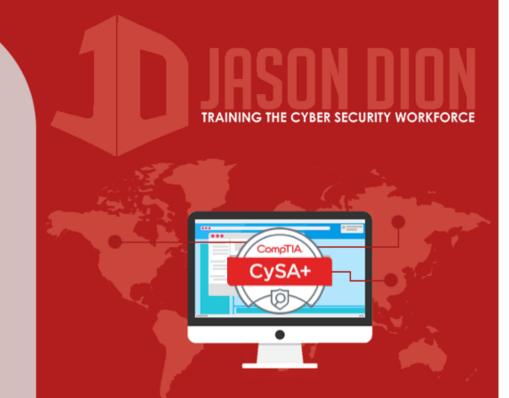


#### 802.1x

 802.1x protocol is most common standard utilized for NAC

Works for wired and wireless networks





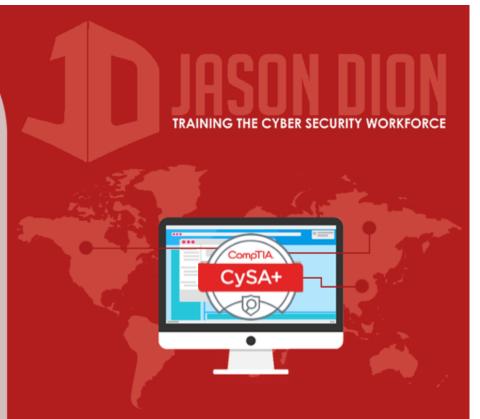
### Agent-based and Agentless

- Agent-based
  - Requires the device requesting access to have special software to communicate with NAC service (such as 802.1x)
- Agentless
  - NAC authentication is conducted in a web browser and doesn't need special software (such as Wireless at a hotel)



#### In-Band and Out-of-Band

- In-Band
  - Uses dedicated appliances placed between the devices and the services they are requesting
    - Example: Hotel networks that require you to enter your name and room number before gaining access
- Out-of-Band
  - Relies on existing network and has device communicate to authentication servers (like 802.1x)



### NAC Approval Criteria

Time of Day

- Role of the user
  - Admins can access datacenter only when inside datacenter
- Location of the user
  - User must be in datacenter to access

- System health status
  - Anti-virus up to date, security patches installed, host firewall enabled, etc.

