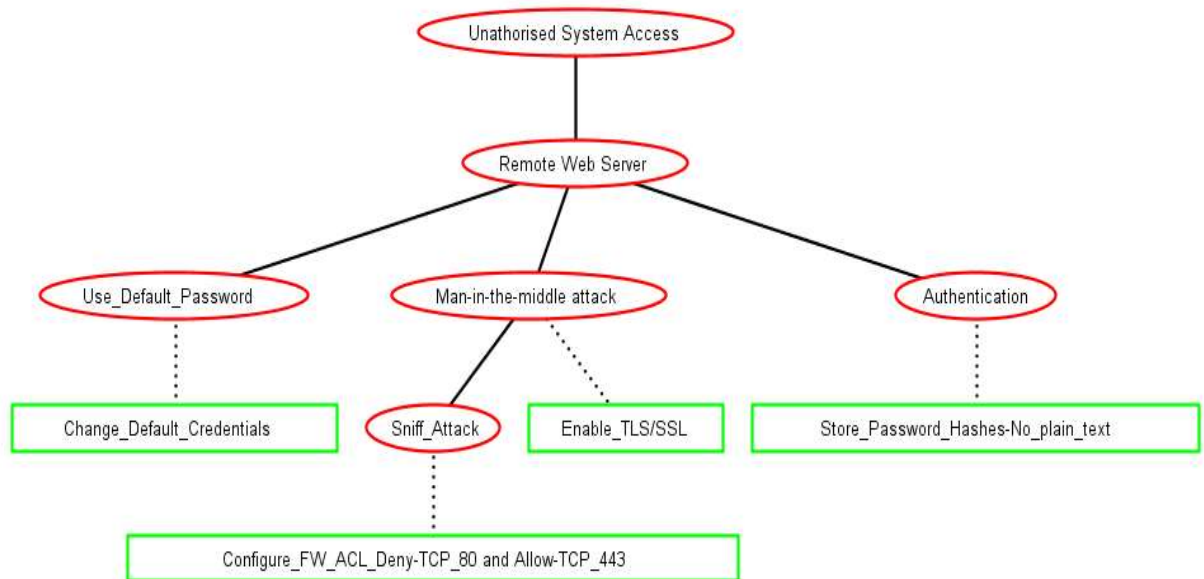Closed Circuit Television (CCTV) System Attack-Defence Tree.


Internet Protocol(IP) cameras can host a web application for the management of the devices. The web application hosted on the cameras has a similar attack surface as the one hosted on a web server. The risk ratings on the vulnerabilities associated with the web application hosted are as follows:

Risk Rating.

1. Default Password: High Risk (Ease of exploiting: High, Capability Required: Low.)
2. Man-in-the-Middle Attack: Medium Risk (Ease of exploitation: Medium , Capability Required: Medium)
3. Theft of credentials(authentication): High Risk (Ease of exploitation: High, Capability Required: Medium)

Network Attached Storage(NAS) Attack-Defense Tree.
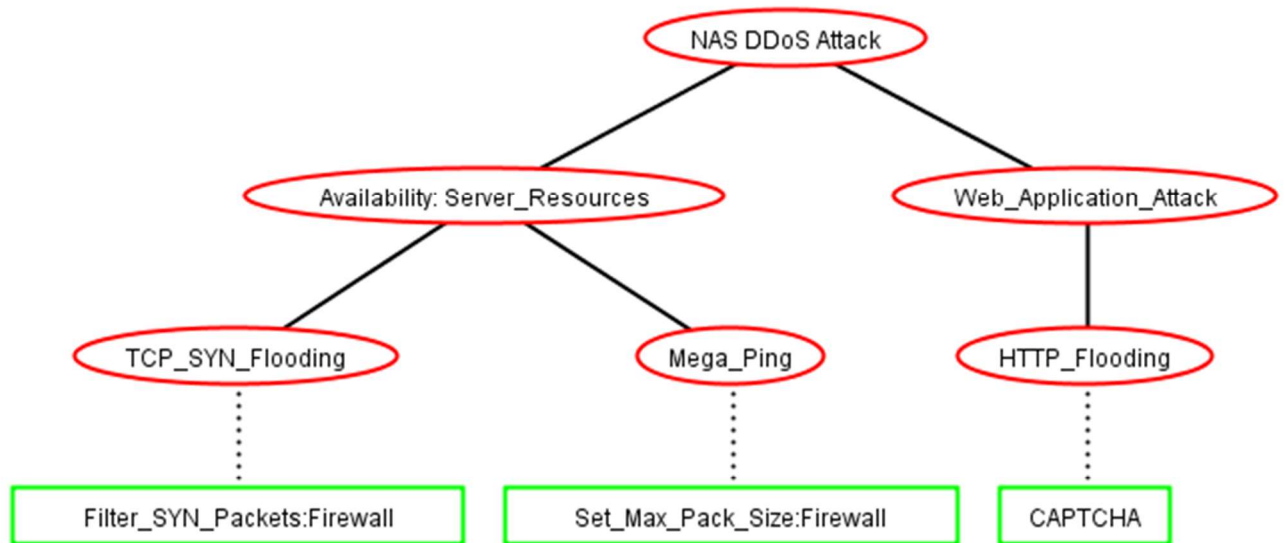
Network Attached Storage is accessible through several protocols such as SSH and HTTP/S for management and stored content access. One of the attacks that can be carried out against the NAS is Denial-of-Service(DoS). The risk ratings of some of the elements of the attack surface are as follows:

1. TCP_SYN Flooding: High Risk (Ease of exploitation: High, Capability required: Low)
2. Ping-of-Death: High Risk (Ease of exploitation: High, Capability required: Low)
3. HTTP Flooding: High Risk (Ease of exploitation: High, Capability required: Low)