

# **ASA Deep Dive**



# Policy Maps & Class Maps



## Policy Maps & Class Maps

- ▶ Class Maps are used to match traffic at Layer 3, Layer ¾ or at Layer 7.
- ▶ Policy Maps are used to take action for certain types of traffic.
- ▶ ASA supports 2 types of class maps. (Layer 3/4 and Layer 7)
- ► ASA supports 2 types of policy maps. (Layer 3/4 and Layer 7)
- ▶ Layer 7 Class Maps
  - Used to match traffic at Layer 7 only.
  - It can only be called in a Layer 7 Policy map.
  - Command is class-map type inspect <Service> <Name>
- ▶ Layer 3/4 Class Maps
  - Used to match traffic at Layer 3/4 only.
  - It can only be called in a Layer 3/4 Policy map.
  - Command is class-map <Name>



## Policy Maps & Class Maps

#### ▶ Layer 7 Policy Maps

- Used to apply an action at Layer 7 only.
- It cannot be applied to interface.
- It is applied to Layer 3/4 Policy map.
- Command is policy-map type inspect <Service> <Name>

#### ► Layer 3/4 Policy Maps

- Used to apply an action at Layer 3/4 only.
- It is be applied to interface.
- Command is policy-map <Name>



### BGP through ASA

### **BGP** pre-requisites

- Reachability to neighbor
- Randomization of TCP sequence number should be disabled.
- Option 19 must be allowed.

• TCP port 179 needs to be permitted from lower security-level to higher security-

level.





### BGP through ASA

### **▶** BGP through ASA

Example 1

```
class-map BGP
match port tcp eq bgp
```

```
tcp-map TMAP
  tcp-options range 19 19 allow
```

```
policy-map P-Outside
  class BGP
  set connection random-sequence-number disable
  set connection advanced-options TMAP
```

service-policy P-Outside interface OUTSIDE

