ASA Deep Dive

Clustering

Individual VS Spanned

- **Clustering** lets you group multiple ASA's together as a single logical device.
- A Cluster provides all the convenience of a single device (management, integration into a network) while achieving the increased throughput and redundancy of multiple devices.
- When you combine multiple units into a cluster, you can expect a performance of approximately:
  - 70% of the combined throughput.
  - 60% of maximum connections.
  - 50% of connections per second.
  - For example, for throughput, the ASA 5585-X with SSP-40 can handle approximately 10 Gbps of real world firewall traffic when running alone. For a cluster of 8 units, the maximum combined throughput will be approximately 70% of 80 Gbps (8units x 10 Gbps) = 56 Gbps.
- The cluster consists of multiple ASA's acting as a single unit. To act as a cluster, the ASA's need the following infrastructure:
  - Isolated, high-speed backplane network for intra-cluster communication, known as the cluster control link.
  - Management access to each ASA for configuration and monitoring.

Individual VS Spanned

- In Individual mode all devices will have its own IP address.
- In spanned mode only the master will have an IP address.
- One member of the cluster is the master unit and all other devices are slaves.
- The master unit is determined by the priority setting in the bootstrap configuration; the priority is set between 1 and 100, where 1 is the highest priority. All other members are slave units. Typically, when you first create a cluster, the first unit you add becomes the master unit simply because it is the only unit in the cluster so far.
- Spanned mode is the recommended method for clustering.
- Roles in Clustering
  - Owner
  - Director
  - Forwarder

Individual VS Spanned