ENI (Elastic Network Interface)

➢ By default, eth0 is the primary network interface.
➢ You can't move or detach the primary (eth0) interface from an instance.
➢ You can add more interfaces to your EC2 instance (no. of additional interface is determined by the instance family/type).
➢ You can create ONLY ONE Additional Ethernet interface (eth1) when launching an EC2 instance. (But no public IPV4 add assigned to eth0, you need to assign elastic IP Address).
➢ An ENI is bound to an AZ.
➢ You can specify which AZ you want the additional ENI be added in.
➢ You can specify exactly which IP address in the subnet to be configured on your instances, Else AWS will assign one automatically from the available subnet IP Address.
➢ SG apply to ENI's and not to individual Ips on the interface, hence all IP add are subject to the ENI'S Security Group.
➢ Attaching ENI when the instance is running is called "HOT Attach"
➢ Attaching ENI when the instance is stopped is called "WARM ATTACH"
➢ Attaching ENI when the instance is Launched is called "COLD ATTACH"
➢ By default, ENI created "Automatically" during EC2 instance launch by AWS console, it is auto terminated when the instance is terminated.
➢ Does not include eth1 that you can add during launch (manually added)
➢ Default behaviour can be changed by changing the "termination behaviour" of ENI