AWS Project: send a message to a queue (AWS SQS) from an EC2 instance in a private subnet using a VPC Interface Endpoint. The EC2 instance does not use the public internet to access the bucket, but instead uses the AWS backbone network. This means that traffic from the EC2 instance in the private subnet to the SQS queue is private.

The EC2 instance in the private subnet needs to be given a role that has a permission policy authorizing the role to send messages to the SQS queue.

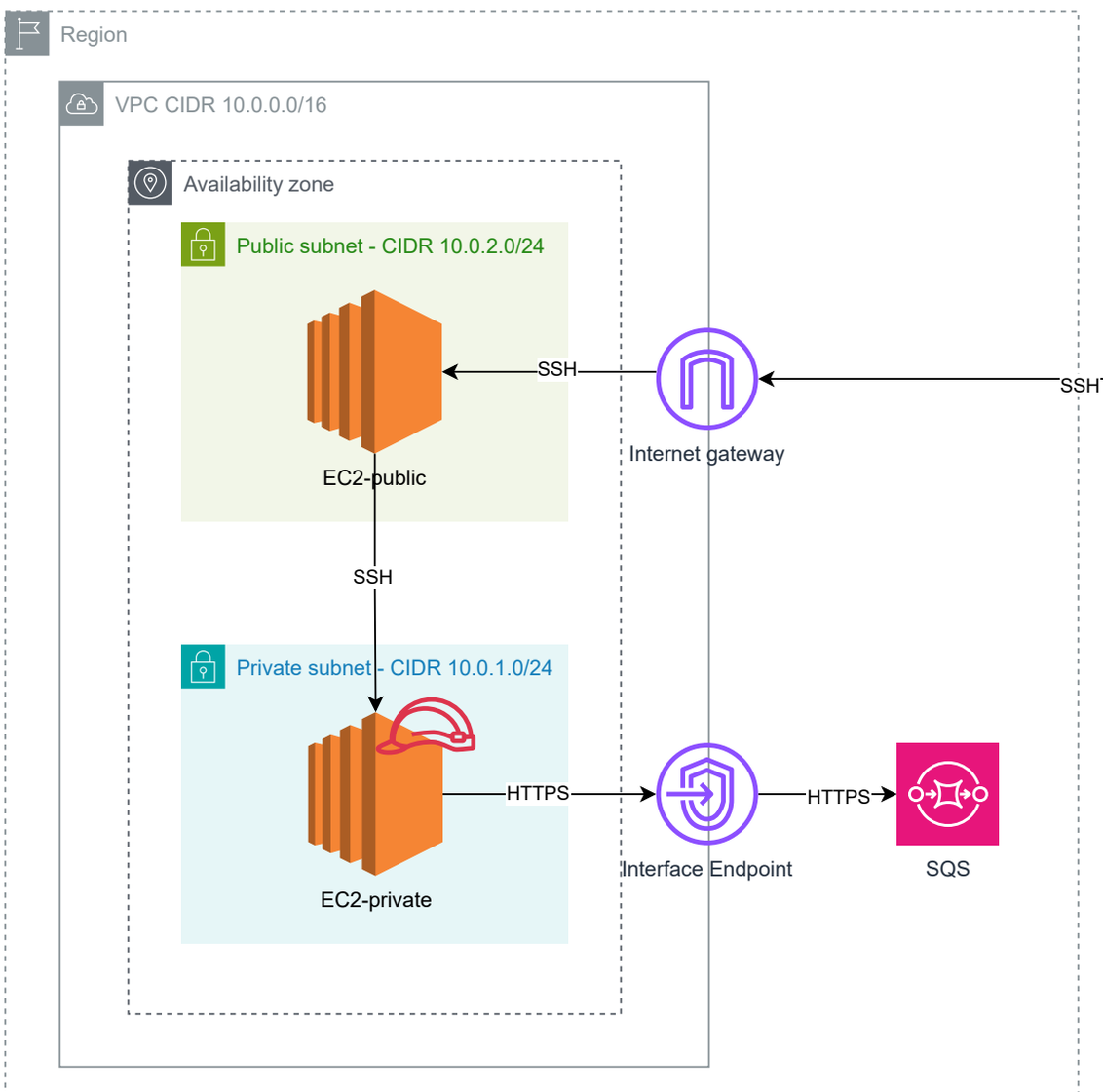
Within the VPC settings DNS hostnames need to be enabled.

A security group with inbound rule allowing HTTPS traffic from the private subnet CIDR range (or entire VPC CIDR range, depending on your needs) needs to be created. It has to be attached to the Interface Endpoint.

Upon creation of the Interface Endpoint, within the section "Type" the Endpoint needs to be given the type "AWS services". Within section "Services" the service "...sqs" of type "Interface" needs to be selected.

An interface endpoint in an AWS VPC is implemented via an endpoint network interface (ENI) that is created in one or more specified subnets within your VPC. This ENI is assigned a private IP address from the CIDR range of the corresponding subnet, which, by definition, is part of the VPC's CIDR range. All this to say that no extra route needs to be added to the route table of the private subnet because it falls within "local" because it is a "local" IP address.

Once the infrastructure described above has been set up, the following command can be sent from EC2-private:
aws sqs send-message --queue-url https://sqs.etc.yoursqsqueue --message-body "Dit is een testmessage"



Public Subnet Route table	
Destination	**Target**
0.0.0.0/0	internet gateway (igw-etc.)
10.0.0.0/16	local

Private Subnet Route table	
Destination	**Target**
10.0.0.0/16	local