SHRINE 4.1.0 Chapter 8.2.1 - Configuring a Hub for AWS SQS

Preliminaries

Create two IAM accounts as described in SHRINE 4.1.0 Chapter 8 - SHRINE's Configuration .

Configure the Hub's shrine.conf

In tomcat's shrine.conf in the hub, turn off the in-tomcat messaging by setting shrine.hub.messagequeue.blockingWebApi.enabled to it's default false value by removing it from the hub block:

```
shrine.conf

shrine {
...
hub {
   create = true
}//hub
...
}//shrine
```

Tomcat will need the hub's AWS SQS credentials to send and receive messages. Add your access ID and secret to tomcat's password.conf:

```
password.conf

shrine.aws.accessKeyId = "HUBAWSKEYID" //the hub's AWS access key id - usually all capitals and numbers
shrine.aws.secretAccessKey = "hubAwsSecretKey" //the hub's AWS secret key - very long, mixed case letters and
numbers
```

Configure shrineNetworkLifecycle

The shrineNetworkLifecycle needs the admin AWS credentials to create, modify, and delete AWS SQS Queues. Add that to the shrineNetworkLifecycle's conf/password.conf:

```
password.conf

shrine.aws.accessKeyId = "ADMINAWSKEYID" //the admin AWS access key id - usually all capitals and numbers
shrine.aws.secretAccessKey = "AdminAwsSecretKey" //the admin AWS secret key - very long, mixed case letters and numbers
```

network.conf

To use AWS SQS: in network.conf, specify an aws.sqs section with the specifics to share with downstream nodes:

```
shrine {
 network {
   network {
     name = "Network Name"
     hubQueueName = "hub"
     adminEmail = "yourEmail@yourhospital.edu"
     momId = "arn:aws:iam::1234567890:user/your-hub"
     aws.sqs = {
       queueOwnerAWSAccountId = "1234567890" //Digits
       networkPrefix = "best-network"
       region = "us-east-1"
    }
   nodes = [
     {
       name = "Hub's node"
       key = "hub-node"
       userDomainName = "network-hub"
       queueName = "hubNode"
       sendQueries = "false"
       adminEmail = "yourEmail@yourhospital.edu"
       momId = "arn:aws:iam::1234567890:user/your-hub"
 }
}
```

The hub owns all of the AWS SQS queues. Find the queue owner's account ID - all digits - in the upper right corner of the AWS IAM console page.

Choose a network prefix. This will be prepended to queue names to allow managing multiple networks in the same AWS account.

Use AWS IAM identity names of the account to receive the messages for the momId. Find this on the AWS IAM > Users > user page.

Note that the network's momld is the same as hub's node momld. Each downstream node will have its own AWS AIM identity from its own AWS account.