You can choose to use any scripting language to automate (great if you could do in Ansible/ Terraform). Use the free-tier resources from AWS. Feel free to comment your code and/or put detailed information in the instructions. The exercise will be 2.5 hours.

Following is the goals of the exercise:
1. Demonstrate your hands-on skills, you can code for building cloud hosted solution
2. Demonstrate that you can think of other cross-cutting-concerns like security
3. A nice segue to our discussion after you submit the code

What we are expecting:
1. A link to github repo (or a zip/tarball) with code that accomplishes:
a) Brings up an AWS instance
b) Installs ElasticSearch configured in a way that requires credentials and provides encrypted communication
c) Demonstrates that it is functioning
2. Instructions with:
a) A short description of your solution describing your choices and why did you make them
b) Resources, if any, that you consulted to arrive at the final solution
c) How long did you spend on the exercise, and if possible, short feedback about the exercise
3. Must use AWS free tier, however, if you're using any additional services, please mention them in the instructions
4. ElasticSearch access and communication must be secure

Bonus if you extend your code to create a cluster of 3 ElasticSearch nodes

Some answers we are looking:
1. What did you choose to automate the provisioning and bootstrapping of the instance? Why?
2. How did you choose to secure ElasticSearch? Why?
3. How would you monitor this instance? What metrics would you monitor?
4. Could you extend your solution to launch a secure cluster of ElasticSearch nodes? What would need to change to support this use case?
5. Could you extend your solution to replace a running ElasticSearch instance with little or no downtime? How?
6. Was it a priority to make your code well structured, extensible, and reusable?
7. What sacrifices did you make due to time?