Amazon ElasticSearch Demo

Create Amazon ES Domain using below steps:

1. Go to https://aws.amazon.com, and then choose Sign In to the Console.
2. Under Analytics, choose Elasticsearch Service.
3. Choose Create a new domain.
4. On the Create Elasticsearch domain page, choose Development and testing.
5. For Elasticsearch version, choose the latest version and Next.
6. Enter a name for the domain. In this exercise, we will use the domain name **Weblogs**.
7. For now, you can ignore Custom endpoint.
8. For Data nodes, choose the **c5.large**.elasticsearch instance type. Use the default value of 1 instance.
9. For Data nodes storage, use the default values.
10. For now, you can ignore the Dedicated master nodes, UltraWarm data nodes, Snapshot configuration, and Optional Elasticsearch cluster settings sections.
11. Choose Next.
12. For simplicity in this exercise, we recommend a public access domain. For Network configuration, choose Public access.
13. For Fine-grained access control, choose Create master user. Specify a username and password as **ESKarthik and Admin1234$$**
    (it will be needed with the CURL Commands to ingest and search data from ES and to login to Kibana)
14. For now, you can ignore SAML authentication and Amazon Cognito Authentication.
15. For Access policy, choose Allow open access to the domain. In this exercise, fine-grained access control handles authentication, not the domain access policy.
16. Leave the encryption settings at their default values, and choose Next.
17. On the Review page, double-check your configuration and choose Confirm. New domains typically take 15-30 minutes to initialize,but can take longer depending on the configuration. After your domain initializes, make note of your own endpoint and use your endpoint for the below commands.

Endpoint :

https://search-weblogskarthik-wtnsclemyfecm3suqf3nbdqqki.us-east-1.es.amazonaws.com

Command to upload JSON data on ES (use Cygwin)

curl -XPUT -u 'ESKarthik:Admin1234$$' 'https://search-weblogskarthik-wtnsclemyfecm3suqf3nbdqqki.us-east-1.es.amazonaws.com/movies/_doc/1' -d '{"director": "Burton, Tim", "genre": ["Comedy","Sci-Fi"], "year": 1996, "actor": ["Jack Nicholson","Pierce Brosnan","Sarah Jessica Parker"], "title": "Mars Attacks!"}' -H 'Content-Type: application/json'

Command to search on ES for mars:

curl -XGET -u 'ESKarthik:Admin1234$$' 'https://search-weblogskarthik-wtnsclemyfecm3suqf3nbdqqki.us-east-1.es.amazonaws.com/movies/_search?q=mars'

Contents of movies.json file (leave blank line at the end while creating json file) :

Cat > movies.json

{ "index" : { "_index": "movies", "_id" : "2" } }

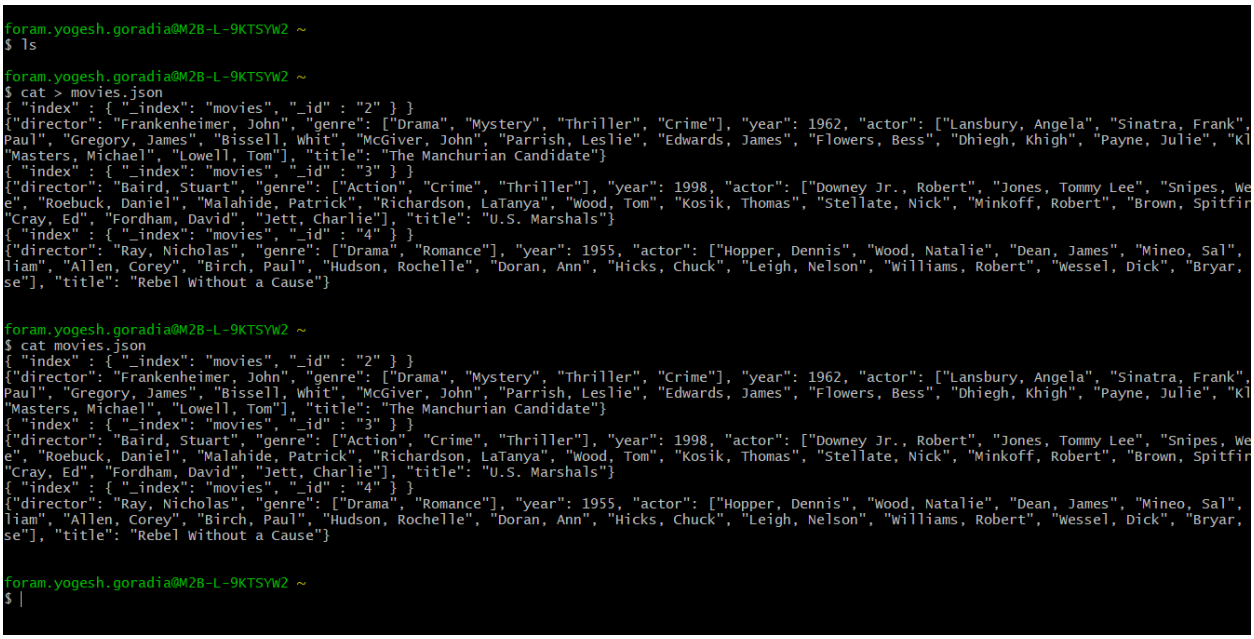
{"director": "Frankenheimer, John", "genre": ["Drama", "Mystery", "Thriller", "Crime"], "year": 1962, "actor": ["Lansbury, Angela", "Sinatra, Frank", "Leigh, Janet", "Harvey, Laurence", "Silva, Henry", "Frees, Paul", "Gregory, James", "Bissell, Whit", "McGiver, John", "Parrish, Leslie", "Edwards, James", "Flowers, Bess", "Dhiegh, Khigh", "Payne, Julie", "Kleeb, Helen", "Gray, Joe", "Nalder, Reggie", "Stevens, Bert", "Masters, Michael", "Lowell, Tom"], "title": "The Manchurian Candidate"}

{ "index" : { "_index": "movies", "_id" : "3" } }

{"director": "Baird, Stuart", "genre": ["Action", "Crime", "Thriller"], "year": 1998, "actor": ["Downey Jr., Robert", "Jones, Tommy Lee", "Snipes, Wesley", "Pantoliano, Joe", "Jacob, Ir\u00e8ne", "Nelligan, Kate", "Roebuck, Daniel", "Malahide, Patrick", "Richardson, LaTanya", "Wood, Tom", "Kosik, Thomas", "Stellate, Nick", "Minkoff, Robert", "Brown, Spitfire", "Foster, Reese", "Spielbauer, Bruce", "Mukherji, Kevin", "Cray, Ed", "Fordham, David", "Jett, Charlie"], "title": "U.S. Marshals"}

{ "index" : { "_index": "movies", "_id" : "4" } }

{"director": "Ray, Nicholas", "genre": ["Drama", "Romance"], "year": 1955, "actor": ["Hopper, Dennis", "Wood, Natalie", "Dean, James", "Mineo, Sal", "Backus, Jim", "Platt, Edward", "Ray, Nicholas", "Hopper, William", "Allen, Corey", "Birch, Paul", "Hudson, Rochelle", "Doran, Ann", "Hicks, Chuck", "Leigh, Nelson", "Williams, Robert", "Wessel, Dick", "Bryar, Paul", "Sessions, Almira", "McMahon, David", "Peters Jr., House"], "title": "Rebel Without a Cause"}



Command to upload movies.json file:

curl -XPOST -u 'ESKarthik:Admin1234$$' 'https://search-weblogskarthik-wtnsclemyfecm3suqf3nbdqqki.us-east-1.es.amazonaws.com/_bulk' --data-binary @movies.json -H 'Content-Type: application/json'

Command to search for rebel:

curl -XGET -u 'ESKarthik:Admin1234$$' 'https://search-weblogskarthik-wtnsclemyfecm3suqf3nbdqqki.us-east-1.es.amazonaws.com/movies/_search?q=rebel'

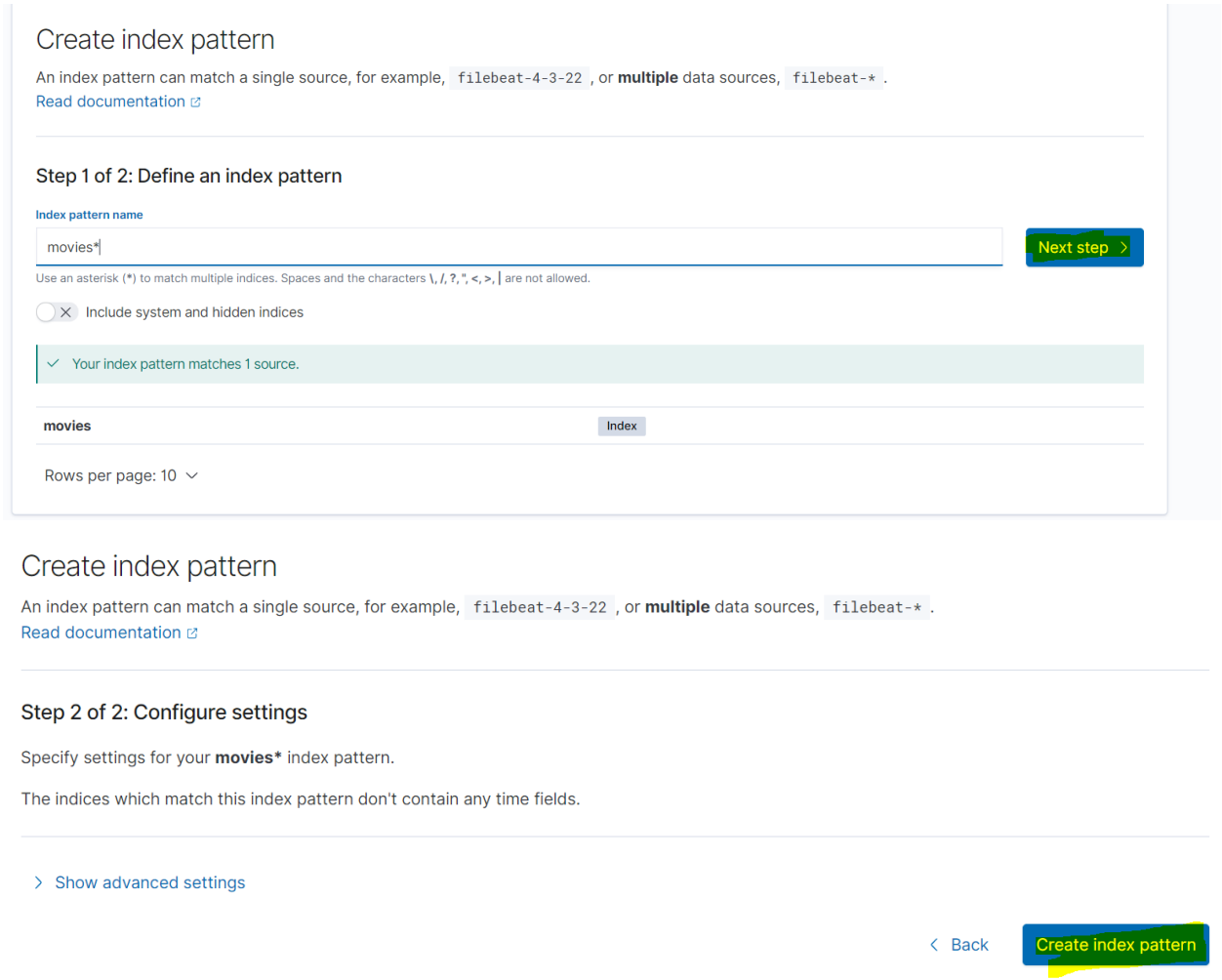
To search documents from an Amazon ES domain by using Kibana

1. Point your browser to the Kibana plugin for your Amazon ES domain. You can find the Kibana endpoint on your domain dashboard on the Amazon ES console. The URL follows this format:

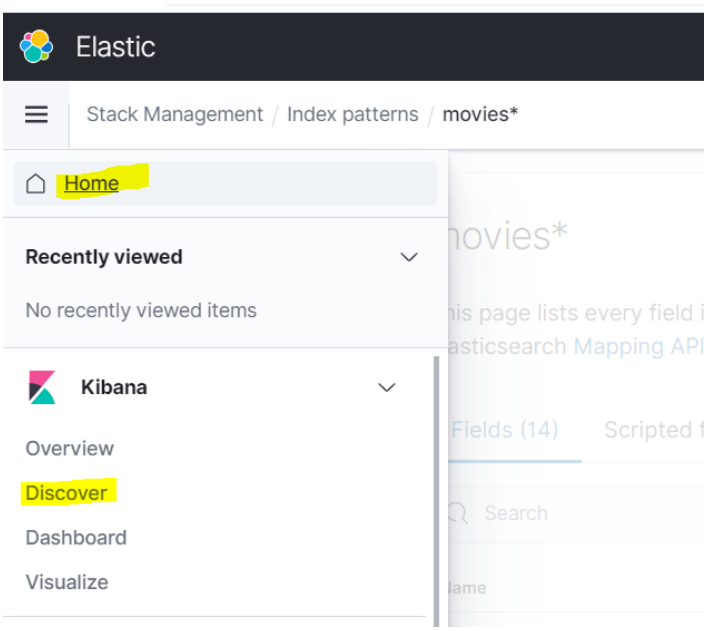
domain-endpoint/_plugin/kibana/

2. Log in using your master username and password.

3. To use Kibana, you must configure at least one index pattern. Kibana uses these patterns to identify which indices you want to analyze.Click on “DISCOVER” ->”create an index pattern” For this tutorial, enter *movies**, and then click”NEXT STEP”.



4. The **Index Patterns** page shows your various document fields, such as actor and director. For now, choose **Discover** to search your data.



In the search bar, enter *mars*, and then press **Enter**.

Then u can click on “Visualize” below “Discover” to make various visualisations