AWS re:Invent

ANT210-R

Best practices: Amazon Elasticsearch Service

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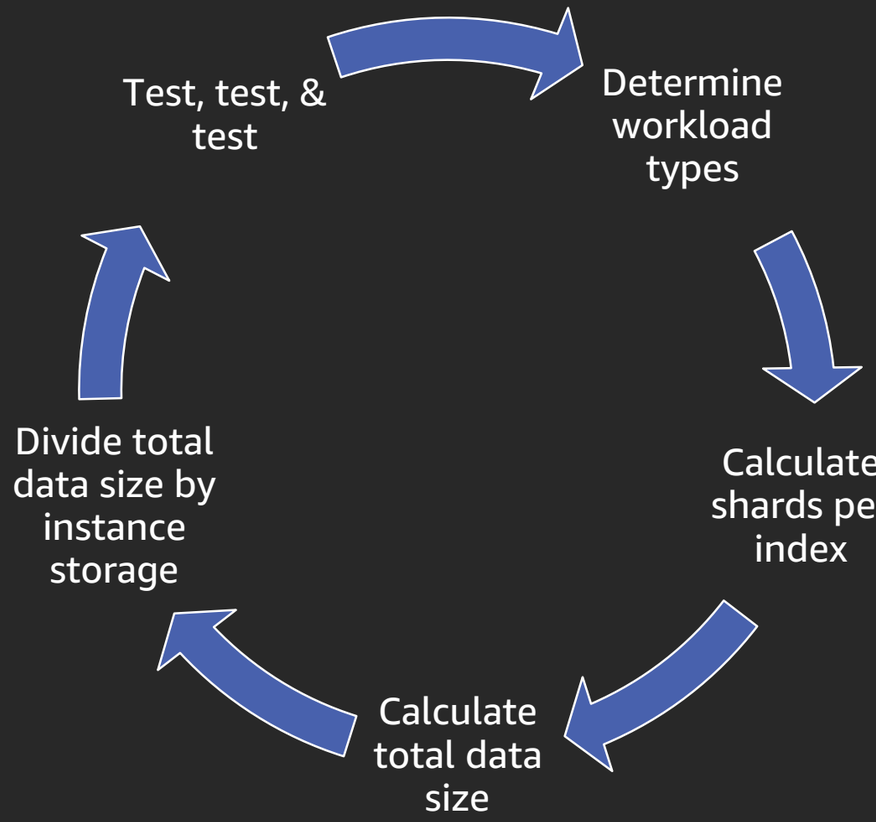
Amazon Web Services

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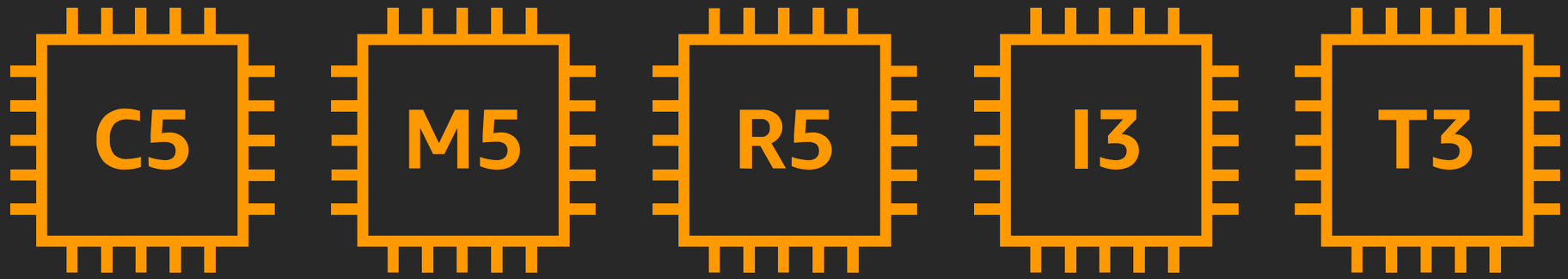
Planning and sizing a domain



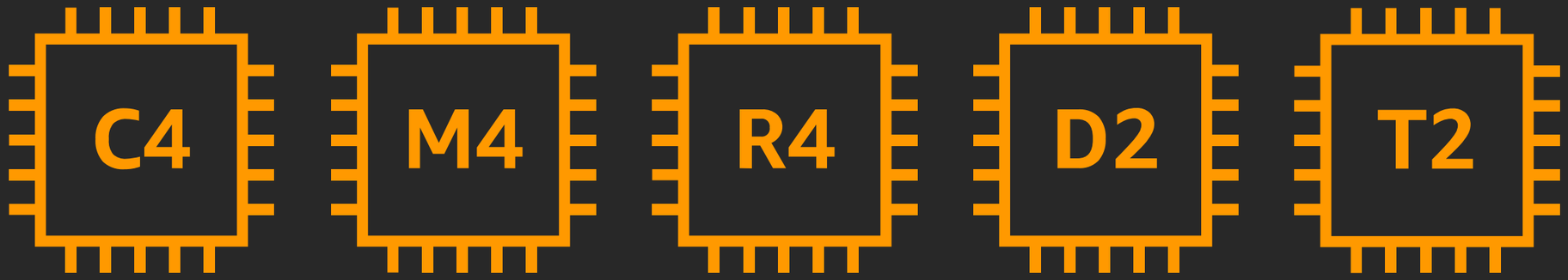
Blog post: https://aws.amazon.com/blogs/database/get-started-with-amazon-elasticsearch-service-t-shirt-size-your-domain/

Instance family selection

Latest-generation instances

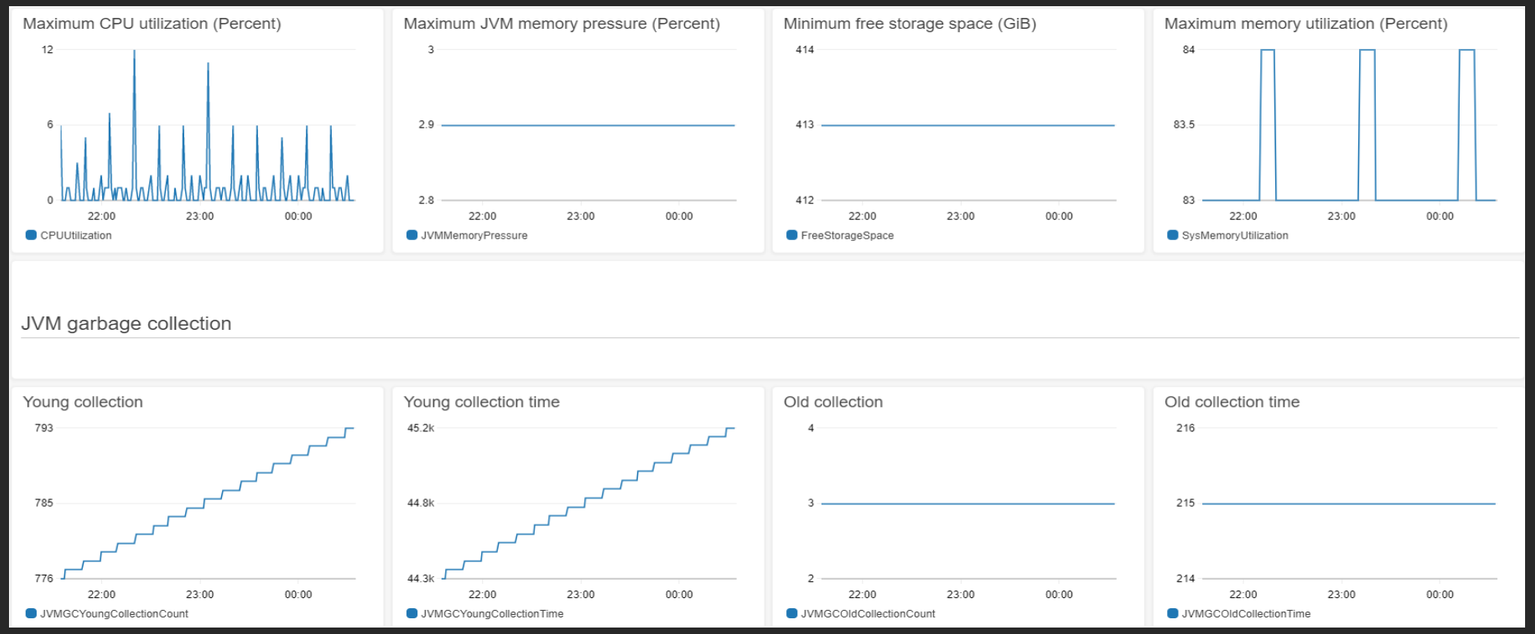


Prior-generation instances



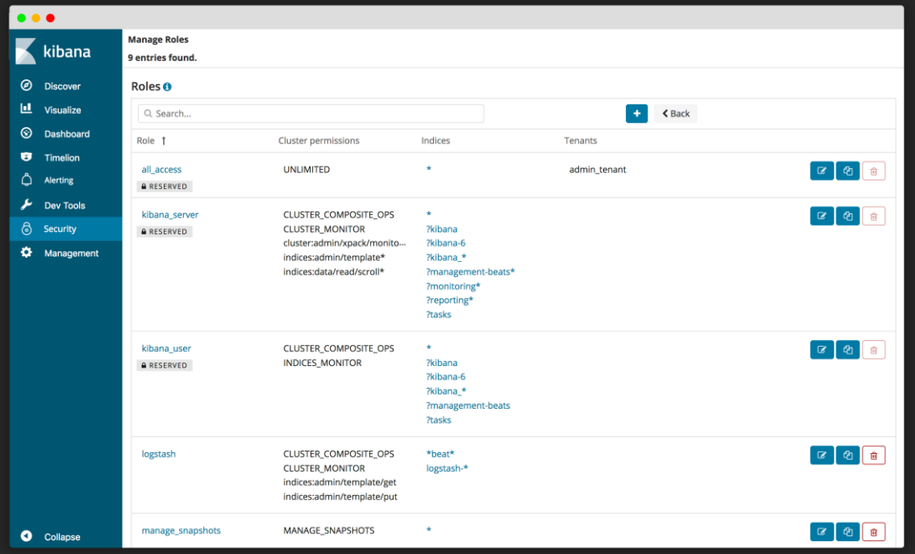
Domain monitoring





Domain security






```
audit_cluster_name: “security_demo”,
-
audit_transport_request_type: “SearchRequest”,
audit_category: “MISSING_PRIVILEGES”,
audit_request_origin: “REST”,
audit_request_body: “{”query”:{”match”;{Designation”:
{”auto-generate-synonyms-phrase_query”:true,”query”:”CEO”,”zero-terms-query”:”
NONE”,”fuzzy_transpositions“;true,”boost”:1.0,”prefix_length”:o,”operator”;”OR’,
’lenient’:false,”max_expansions”:50}}}}”,
-
audit_request-layer: “TRANSPORT”,
audit_request_effective_user:”jdoe”’
audit_trace_resolved_indices: [
  humanresources”
]
```


HIPAA ISO PCI

Securing your Amazon Elasticsearch Domain

Access control to Amazon Elasticsearch domain

- Resource based policy
- Identity based policy
- IP based policy

VPC Support

- VPC resources required for domain creation
- Service linked role for ENI creation

Securing your Amazon Elasticsearch Domain

Encryption

- Encryption at rest
  - AWS KMS key
  - Additional encryption for manual snapshot and error/slow logs in CloudWatch logs
- Encryption in flight
- Domain endpoint security (HTTPS enforcement and TLS version)

Amazon Cognito authentication for Kibana

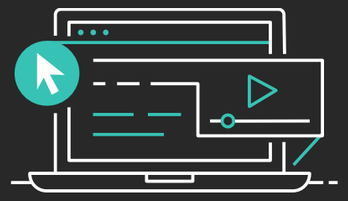
- User pool
- Identity pool
- IAM role for service to create/manage Cognito resources
- External Identity provider
  - Social (Facebook , Google+, Twitter, Apple, Login with Amazon)
  - SAML
  - OpenID and other custom auth provider

Buffering data



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Thank you!

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