Project: Deploying ELK Stack on Docker Container.

WriteUp:

1. Install Elastic search.
2. Install java
3. Start server.
4. Install kibana
5. Install Plugins
6. Instance creation.

Elastic Search Check-

{

  "status" : 200,

  "name" : "Harry Leland",

  "cluster_name" : "elasticsearch",

  "version" : {

   "number" : "1.7.2",

   "build_hash" : "e43676b1385b8125d647f593f7202acbd816e8ec",

   "build_timestamp" : "2015-09-14T09:49:53Z",

   "build_snapshot" : false,

   "lucene_version" : "4.10.4"

  },

  "tagline" : "You Know, for Search"

}

Node Cluster Info-

{

"name": "Harry Leland",

"transport_address": "inet[/172.31.82.162:9300]",

"host": "ip-172-31-82-162.ec2.internal",

"ip": "172.31.82.162",

"version": "1.7.2",

"build": "e43676b",

"http_address": "inet[/172.31.82.162:9200]",

"settings": {

"pidfile": "/var/run/elasticsearch/elasticsearch.pid",

"path": {

"conf": "/etc/elasticsearch",

"data": "/var/lib/elasticsearch",

"logs": "/var/log/elasticsearch",

"home": "/usr/share/elasticsearch"

},

"cluster": {

"name": "elasticsearch"

},

"name": "Harry Leland",

"client": {

"type": "node"

},

"foreground": "yes",

"config.ignore_system_properties": "true",

"config": "/etc/elasticsearch/elasticsearch.yml"

},

"os": {

"refresh_interval_in_millis": 1000,

"available_processors": 1,

"cpu": {

"vendor": "Intel",

"model": "Xeon",

"mhz": 2399,

"total_cores": 1,

"total_sockets": 1,

"cores_per_socket": 1,

"cache_size_in_bytes": 30720

},

"mem": {

"total_in_bytes": 1012666368

},

"swap": {

"total_in_bytes": 0

}

},

"process": {

"refresh_interval_in_millis": 1000,

"id": 5729,

"max_file_descriptors": 65535,

"mlockall": false

},

"jvm": {

"pid": 5729,

"version": "1.8.0_342",

"vm_name": "OpenJDK 64-Bit Server VM",

"vm_version": "25.342-b07",

"vm_vendor": "Red Hat, Inc.",

"start_time_in_millis": 1665404527266,

"mem": {

"heap_init_in_bytes": 268435456,

"heap_max_in_bytes": 1065025536,

"non_heap_init_in_bytes": 2555904,

"non_heap_max_in_bytes": 0,

"direct_max_in_bytes": 1065025536

},

"gc_collectors": [

"ParNew"

,

"ConcurrentMarkSweep"

],

"memory_pools": [

"Code Cache"

,

"Metaspace"

,

"Compressed Class Space"

,

"Par Eden Space"

,

"Par Survivor Space"

,

"CMS Old Gen"

]

},

"thread_pool": {

"percolate": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": "1k"

},

"fetch_shard_started": {

"type": "scaling",

"min": 1,

"max": 2,

"keep_alive": "5m",

"queue_size": -1

},

"listener": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": -1

},

"index": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": "200"

},

"refresh": {

"type": "scaling",

"min": 1,

"max": 1,

"keep_alive": "5m",

"queue_size": -1

},

"suggest": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": "1k"

},

"generic": {

"type": "cached",

"keep_alive": "30s",

"queue_size": -1

},

"warmer": {

"type": "scaling",

"min": 1,

"max": 1,

"keep_alive": "5m",

"queue_size": -1

},

"search": {

"type": "fixed",

"min": 2,

"max": 2,

"queue_size": "1k"

},

"flush": {

"type": "scaling",

"min": 1,

"max": 1,

"keep_alive": "5m",

"queue_size": -1

},

"optimize": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": -1

},

"fetch_shard_store": {

"type": "scaling",

"min": 1,

"max": 2,

"keep_alive": "5m",

"queue_size": -1

},

"management": {

"type": "scaling",

"min": 1,

"max": 5,

"keep_alive": "5m",

"queue_size": -1

},

"get": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": "1k"

},

"merge": {

"type": "scaling",

"min": 1,

"max": 1,

```json
"keep_alive": "5m",

"queue_size": -1

},

"bulk": {

"type": "fixed",

"min": 1,

"max": 1,

"queue_size": "50"

},

"snapshot": {

"type": "scaling",

"min": 1,

"max": 1,

"keep_alive": "5m",

"queue_size": -1

}

},

"network": {

"refresh_interval_in_millis": 5000,

"primary_interface": {

"address": "172.31.82.162",

"name": "eth0",

"mac_address": "12:79:50:71:61:29"

}

},

"transport": {

"bound_address": "inet[/0:0:0:0:0:0:0:0:9300]",

"publish_address": "inet[/172.31.82.162:9300]",

"profiles": { }
```

},

"http": {

"bound_address": "inet[/0:0:0:0:0:0:0:0:9200]",

"publish_address": "inet[/172.31.82.162:9200]",

"max_content_length_in_bytes": 104857600

},

"plugins": [

{

"name": "head",

"version": "NA",

"description": "No description found.",

"url": "/_plugin/head/",

"jvm": false,

"site": true

}

,

{

"name": "bigdesk",

"version": "NA",

"description": "No description found.",

"url": "/_plugin/bigdesk/",

"jvm": false,

"site": true

}

]

}

Node stats-

{

"timestamp": 1665406322308,

"name": "Harry Leland",

"transport_address": "inet[/172.31.82.162:9300]",

"host": "ip-172-31-82-162.ec2.internal",

"ip": [

"inet[/172.31.82.162:9300]"

,

"NONE"

],

"indices": {

"docs": {

"count": 0,

"deleted": 0

},

"store": {

"size_in_bytes": 0,

"throttle_time_in_millis": 0

},

"indexing": {

"index_total": 0,

"index_time_in_millis": 0,

"index_current": 0,

"delete_total": 0,

"delete_time_in_millis": 0,

"delete_current": 0,

"noop_update_total": 0,

"is_throttled": false,

"throttle_time_in_millis": 0

},

"get": {

"total": 0,

"time_in_millis": 0,

"exists_total": 0,

"exists_time_in_millis": 0,

"missing_total": 0,

"missing_time_in_millis": 0,

"current": 0

},

"search": {

"open_contexts": 0,

"query_total": 0,

"query_time_in_millis": 0,

"query_current": 0,

"fetch_total": 0,

"fetch_time_in_millis": 0,

"fetch_current": 0

},

"merges": {

"current": 0,

"current_docs": 0,

"current_size_in_bytes": 0,

"total": 0,

"total_time_in_millis": 0,

"total_docs": 0,

"total_size_in_bytes": 0

},

"refresh": {

"total": 0,

"total_time_in_millis": 0

},

"flush": {

"total": 0,

"total_time_in_millis": 0

},

"warmer": {

"current": 0,

"total": 0,

"total_time_in_millis": 0

},

"filter_cache": {

"memory_size_in_bytes": 0,

"evictions": 0

},

"id_cache": {

"memory_size_in_bytes": 0

},

"fielddata": {

"memory_size_in_bytes": 0,

"evictions": 0

},

"percolate": {

"total": 0,

"time_in_millis": 0,

"current": 0,

"memory_size_in_bytes": -1,

"memory_size": "-1b",

"queries": 0

},

"completion": {

"size_in_bytes": 0

},

"segments": {

"count": 0,

"memory_in_bytes": 0,

"index_writer_memory_in_bytes": 0,

"index_writer_max_memory_in_bytes": 0,

"version_map_memory_in_bytes": 0,

"fixed_bit_set_memory_in_bytes": 0

},

"translog": {

"operations": 0,

"size_in_bytes": 0

},

"suggest": {

"total": 0,

"time_in_millis": 0,

"current": 0

},

"query_cache": {

"memory_size_in_bytes": 0,

"evictions": 0,

"hit_count": 0,

"miss_count": 0

},

"recovery": {

"current_as_source": 0,

"current_as_target": 0,

"throttle_time_in_millis": 0

}

},

"os": {

"timestamp": 1665406322087,

"uptime_in_millis": 2216,

"load_average": [

0

,

0

,

0

],

"cpu": {

"sys": 0,

"user": 0,

"idle": 99,

"usage": 0,

"stolen": 0

},

"mem": {

"free_in_bytes": 77430784,

"used_in_bytes": 935235584,

"free_percent": 58,

"used_percent": 41,

"actual_free_in_bytes": 589975552,

"actual_used_in_bytes": 422690816

},

"swap": {

"used_in_bytes": 0,

"free_in_bytes": 0

}

},

"process": {

"timestamp": 1665406322088,

"open_file_descriptors": 105,

"cpu": {

"percent": 0,

"sys_in_millis": 630,

"user_in_millis": 11720,

"total_in_millis": 12350

},

"mem": {

"resident_in_bytes": 247959552,

"share_in_bytes": 19894272,

"total_virtual_in_bytes": 3160223744

}

},

"jvm": {

"timestamp": 1665406322088,

"uptime_in_millis": 1794866,

"mem": {

"heap_used_in_bytes": 79959656,

"heap_used_percent": 7,

"heap_committed_in_bytes": 259719168,

"heap_max_in_bytes": 1065025536,

"non_heap_used_in_bytes": 46422784,

"non_heap_committed_in_bytes": 47243264,

"pools": {

"young": {

"used_in_bytes": 53970296,

"max_in_bytes": 69795840,

"peak_used_in_bytes": 69795840,

"peak_max_in_bytes": 69795840

},

"survivor": {

"used_in_bytes": 8716280,

"max_in_bytes": 8716288,

"peak_used_in_bytes": 8716280,

"peak_max_in_bytes": 8716288

},

"old": {

"used_in_bytes": 17273080,

"max_in_bytes": 986513408,

"peak_used_in_bytes": 17273080,

"peak_max_in_bytes": 986513408

}

}

},

"threads": {

"count": 26,

"peak_count": 26

},

"gc": {

"collectors": {

"young": {

"collection_count": 2,

"collection_time_in_millis": 112

},

"old": {

"collection_count": 1,

"collection_time_in_millis": 52

}

}

},

"buffer_pools": {

"direct": {

"count": 17,

"used_in_bytes": 4570616,

"total_capacity_in_bytes": 4570616

},

"mapped": {

"count": 0,

"used_in_bytes": 0,

"total_capacity_in_bytes": 0

}

}

},

"thread_pool": {

"percolate": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"fetch_shard_started": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"listener": {

"threads": 1,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 1,

"completed": 771

},

"index": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"refresh": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"suggest": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"generic": {

"threads": 1,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 2,

"completed": 188

},

"warmer": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

```json
"search": {
"threads": 0,
"queue": 0,
"active": 0,
"rejected": 0,
"largest": 0,
"completed": 0
},
"flush": {
"threads": 0,
"queue": 0,
"active": 0,
"rejected": 0,
"largest": 0,
"completed": 0
},
"optimize": {
"threads": 0,
"queue": 0,
"active": 0,
"rejected": 0,
"largest": 0,
"completed": 0
},
"fetch_shard_store": {
"threads": 0,
"queue": 0,
"active": 0,
"rejected": 0,
```

"largest": 0,

"completed": 0

},

"management": {

"threads": 2,

"queue": 0,

"active": 1,

"rejected": 0,

"largest": 2,

"completed": 455

},

"get": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"merge": {

"threads": 0,

"queue": 0,

"active": 0,

"rejected": 0,

"largest": 0,

"completed": 0

},

"bulk": {

"threads": 0,

```json
        "queue": 0,

        "active": 0,

        "rejected": 0,

        "largest": 0,

        "completed": 0

      },

      "snapshot": {

        "threads": 0,

        "queue": 0,

        "active": 0,

        "rejected": 0,

        "largest": 0,

        "completed": 0

      }

    },

    "network": {

      "tcp": {

        "active_opens": 149,

        "passive_opens": 336,

        "curr_estab": 35,

        "in_segs": 24561,

        "out_segs": 20760,

        "retrans_segs": 5,

        "estab_resets": 7,

        "attempt_fails": 0,

        "in_errs": 0,

        "out_rsts": 22

      }

    },
```

"fs": {

"timestamp": 1665406322088,

"total": {

"total_in_bytes": 17167265792,

"free_in_bytes": 15209512960,

"available_in_bytes": 15209512960,

"disk_reads": 8101,

"disk_writes": 11741,

"disk_io_op": 19842,

"disk_read_size_in_bytes": 227481088,

"disk_write_size_in_bytes": 807566336,

"disk_io_size_in_bytes": 1035047424,

"disk_queue": "0",

"disk_service_time": "0"

},

"data": [

{

"path": "/var/lib/elasticsearch/elasticsearch/nodes/0",

"mount": "/",

"dev": "/dev/xvda1",

"type": "xfs",

"total_in_bytes": 17167265792,

"free_in_bytes": 15209512960,

"available_in_bytes": 15209512960,

"disk_reads": 8101,

"disk_writes": 11741,

"disk_io_op": 19842,

"disk_read_size_in_bytes": 227481088,

"disk_write_size_in_bytes": 807566336,

"disk_io_size_in_bytes": 1035047424,

"disk_queue": "0",

"disk_service_time": "0"

}

]

},

"transport": {

"server_open": 13,

"rx_count": 6,

"rx_size_in_bytes": 1716,

"tx_count": 6,

"tx_size_in_bytes": 1716

},

"http": {

"current_open": 7,

"total_opened": 322

},

"breakers": {

"fielddata": {

"limit_size_in_bytes": 639015321,

"limit_size": "609.4mb",

"estimated_size_in_bytes": 0,

"estimated_size": "0b",

"overhead": 1.03,

"tripped": 0

},

"request": {

"limit_size_in_bytes": 426010214,

"limit_size": "406.2mb",

"estimated_size_in_bytes": 0,

"estimated_size": "0b",

"overhead": 1,

"tripped": 0

},

"parent": {

"limit_size_in_bytes": 745517875,

"limit_size": "710.9mb",

"estimated_size_in_bytes": 0,

"estimated_size": "0b",

"overhead": 1,

"tripped": 0

}

}

}