

Tech Preview: AIM for a Fully Automated Cluster

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Automated Index Management (AIM) is used to automatically manage indices to your needs based on index stats.

AIM Installation

We're excited to introduce AIM (Automated Index Management) installation. AIM is set to revolutionize automated index management within your organization, offering unparalleled control and efficiency in handling your data repositories.

Key Features:

- **Bundled Module:** AIM is poised to become an integral part of Search Guard FLX, bundled as a flexible module for seamless integration.
- **Technical Preview:** While AIM is currently available as a separate [download](#), please note that it is in the technical preview phase. As such, we advise against using it in production environments as breaking changes may be introduced in subsequent versions.
- **Continuous Development:** Our team is dedicated to refining AIM, incorporating user feedback, and enhancing its functionality to meet evolving security needs. Please connect with us on the [forum](#).

Get Started with AIM

Ready to experience the future of access control? Download AIM preview [here](#) and embark on a journey towards fortified security measures within your organization.

Stay tuned for more updates and insights as we continue to innovate in the realm of digital security with AIM.

Setting up a Policy

Policies consist of an array of *steps* each step consists of a *name*, an array of *conditions* and an array of *actions*. Each condition and action has a *type* and some have additional parameters.

Lets create a simple policy that automates the following index tasks:

- when the index gets bigger than 10GB the index should be rolled over
- when the index is rolled over it should be set to read only mode
- when the index is older than 30 days it gets deleted

```
PUT /_aim/policy/my_policy
{
  "steps": [
    {
      "name": "active",
      "conditions": [
        {
          "type": "size",
          "max_size": "10gb"
        }
      ],
      "actions": [
        {
          "type": "rollover"
        },
        {
          "type": "set_read_only"
        }
      ]
    },
    {
      "name": "cold",
      "conditions": [
        {
          "type": "age",
          "max_age": "30d"
        }
      ],
      "actions": [
        {
          "type": "delete"
        }
      ]
    }
  ]
}
```

Setting up a Managed Index Template

Since AIM works best with index templates, lets create a template and apply the just created policy to it. Additionally we need to add a rollover alias because our policy defines a rollover.

```
PUT /_index_template/my_template
{
  "index_patterns": [
    "my_index*"
  ],
  "template": {
    "settings": {
      "index.aim.policy_name": "my_policy",
      "index.aim.rollover_alias": "my_index_write_alias"
    }
  }
}
```

Setting up a Managed Index

Now lets apply the index template by creating an index that uses the template.

```
PUT /my_index-000001
{
  "aliases": {
    "my_index_write_alias": {
      "is_write_index": true
    }
  }
}
```

By requesting the current status of the index, we can see, that the policy has been applied:

```
GET /_aim/status/my_index-000001
```

```
{
  "status": 200,
  "data": {
    "policy_name": "my_policy",
    "status": "WAITING",
    "current_step": "active",
    "last_executed_step": {
      "name": "active",
      "start_time": "2024-01-09T11:03:21.973097Z",
      "retry_count": 0
    },
    "last_executed_condition": {
      "type": "size",
      "start_time": "2024-01-09T11:03:21.973110Z",
      "result": false
    }
  }
}
```

Next Steps

Please install the Tech Preview [here](#) and let us know how you get on in the [forum](#).

This article was published on the Search Guard blog: <https://search-guard.com/blog/elasticsearch-index-management-tech-preview/>

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