

4.1.x Auto-scaling Policy Resource Definition

An auto-scaling policy defines the threshold values pertaining to scaling up and scaling down decisions. Autoscaler will refer to the auto-scaling policy that is defined by DevOps. A sample auto-scaling policy definition, together with information on all the properties that can be added in an auto-scaling policy definition JSON are as follows:

- [Sample auto-scaling policy definition JSON](#)
- [Property definitions](#)

Sample auto-scaling policy definition JSON

The following are sample configurations that can be used to define an auto-scaling policy:

```
{
  "id": "autoscaling-policy-1",
  "loadThresholds": {
    "requestsInFlight": {
      "threshold": 50
    },
    "memoryConsumption": {
      "threshold": 40
    },
    "loadAverage": {
      "threshold": 40
    }
  }
}
```

Property definitions

All the properties that correspond to the auto-scaling resource are explained as follows:

- `id`
- `displayName`
- `description`
- `loadThresholds`
 - `requestsInFlight`
 - `threshold`
 - `memoryConsumption`
 - `threshold`
 - `loadAverage`
 - `threshold`

Main property definitions

Property	Writable	Readable	Updatable	Description	Required		Data Type	Example

JSON	UI						Default Value		
id	Auto Scal e polic y ID				Unique ID of the autoscaling policy	Yes	N/A	String	economy
displ ayName						No	N/A	String	
descr iption	Desc ription				A summarized description of the auto-scaling policy	No	N/A	String	Values for economy auto-scaling policy.
loadT hresh olds	Load Thre shol ds				The autoscaling load threshold is determined based on the requests in flight, memory consumption, and load average. For more information on the sub-properties, see loadThresholds .	Yes	N/A	LoadT hreshol ds	N/A

Sub-property definitions

loadThresholds

Property		Writable	Readable	Updatable	Description	Required	Default Value	Data Type
JSON	UI							
reque stsIn Fligh t	Req uest s In Flig ht				The number of requests the load balancer received, but are yet to be processed. For more information on the sub-properties, see requestsInFlight . <i>i</i> This property is only required if the deployed cartridge is using a load balancer.	No	N/A	reques tsInFli ght

memoryConsumption	Memory Consumption				The memory usage of a cartridge process, which is considered as a percentage of the total available RAM. This is a percentage and cannot go beyond 100, since a process cannot take more than total physical memory. For more information on the sub-properties, see memoryConsumption. i The formula used to calculate this is: $((\text{usedMemory} - \text{cachedMemory}) / \text{totalMemory}) * 100$ In the above formula, usedMemory refers to the amount of current memory usage, cacheMemory refers to the amount of memory available in the Cache and totalMemory refers to the total amount of memory available in the instance used.	Yes	N/A	memoryConsumption
loadAverage	Load Average				The average system load over a period of time. (System load is a measure of the amount of computational work that a computer system performs.) This a percentage and it can go beyond 100%. For more information on the sub-properties, see loadAverage. i The formula used to calculate this is: $(\text{loadAvg} / \text{cores}) * 100$ In the above formula, loadAvg refers to the load average of the instance and cores refers to the number of CPU cores of the instance.	Yes	N/A	loadAverage

requestsInFlight

Property		Writable	Readable	Updatable	Description	Required	Default Value	Data Type	Example
JSON	UI								
threshold	Threshold				The maximum requests in-flight limit.	No	N/A	Float	30

memoryConsumption

Property		Writable	Readable	Updatable	Description	Required	Default Value	Data type	Example
JSON	UI								

threshold	Threshold				The maximum memory usage limit.	No	N/A	Float	80
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loadAverage

Property		Writable	Readable	Updatable	Description	Required	Default Value	Data Type	Example
JSON	UI								
threshold	Threshold				The maximum limit of an average system load over a period of time.	Yes	N/A	Float	100