



# ClusterLion

## for SAP HANA



# Integration API

## Technical Documentation

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# 1 Introduction

With the **Integration API** the ClusterLion can be integrated in existing automation processes. The provided HTTP endpoints allow to take control over the ClusterLion's modes of operation and trigger actions for each configured SAP HANA system.

## 1.1 ClusterLion Modes of Operation

ClusterLion has three modes of operation:

1. **Operating Mode:** The HANA system is being monitored actively, and a failover is performed in case of a disaster.
2. **Maintenance Mode:** This mode ensures that the ClusterLion does not execute any actions automatically. Especially while maintenance tasks are performed on the host machine, this mode shall be activated to prevent against unwanted failovers based on the fetched information.
3. **Disabled Mode:** The status value fetching for the HANA system is deactivated. No action or rule can be executed in this mode.

Actions like Takeover or Switchback can only be executed while the ClusterLion Maintenance Mode for the given HANA system is activated.

# 2 Endpoints

## 2.1 Rule Processing Status

Every executable action is implemented as a process-rule in the quorum service.

You cannot change the mode of operation nor trigger any other action while another rule is being processed.

**It is very important to check that the processing status is 0 before an action is triggered via the API!**

**Method:** GET

**URL:** `http://[config-portal]/api/[sid]/processing`

**Mandatory Header:** `x-access-token=LuNz5qxDjaA3Pw1O4B2ZcI5XaFO5rW1M`

**Parameters:**

config-portal	IP address where the ClusterLion configuration portal is reachable.
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sid	SID of the HANA system
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#### Success

**Response code:** 200

**Example response:**

```
{  
  "status": 0  
}
```

*status: 0 ..... no rule processing active*

*status: 1 ..... rule processing active*

#### Error

**Response code:** 400

**Content:** No token provided

**Response code:** 401

**Content:** Unauthorized access

**Response code:** 500

**Content:** Could not fetch processing information

## 2.2 Maintenance Mode Status

Use this endpoint to check if the maintenance mode for a HANA system is activated.

**Method:** GET

**URL:** http://[config-portal]/api/[sid]/maintenance

**Mandatory Header:** x-access-token=LuNz5qxDjaA3Pw1O4B2ZcI5XaFO5rW1M

**Parameters:**

config-portal	IP address where the ClusterLion configuration portal is reachable.
sid	SID of the HANA system

#### Success

**Response code:** 200

**Example response:**

```
{  
  "maintenanceMode": 0  
}
```

```
}  
}
```

*maintenanceMode: 0 ..... Maintenance Mode not active*

*maintenanceMode: 1 ..... Maintenance Mode active*

### Error

**Response code:** 400

**Content:** No token provided

**Response code:** 400

**Content:** Status could not be fetched from agents

**Response code:** 401

**Content:** Unauthorized access

**Response code:** 500

**Content:** ERROR

## 2.3 Change Maintenance Mode

Activate or deactivate the ClusterLion Maintenance Mode for a HANA system.

**Method:** POST

**URL:** http://[config-portal]/api/[sid]/maintenance

**Mandatory Header:** x-access-token=LuNz5qxDjaA3PwlO4B2ZcI5XaFO5rW1M

**Parameters:**

config-portal	IP address where the ClusterLion configuration portal is reachable.
sid	SID of the HANA system

**Example body:**

```
{  
  "status": 0  
}
```

*status: 0 ..... deactivate Maintenance Mode*

*status: 1 ..... activate Maintenance Mode*

### Success Code

**Response code:** 200

**Example response:**

```
{  
  "maintenanceMode": 0  
}
```

*maintenanceMode: 0 ..... Maintenance Mode not active*

*maintenanceMode: 1 ..... Maintenance Mode active*

### Error

**Response code:** 400

**Content:** No token provided

**Response code:** 401

**Content:** Unauthorized access

**Response code:** 404

**Content:** CL-Agent not reachable

**Response code:** 404

**Content:** Could not set Maintenance Mode

**Response code:** 404

**Content:** Could not unset Maintenance Mode

**Response code:** 500

**Content:** ERROR

## 2.4 Trigger TAKEOVER

**This can only be executed if the ClusterLion Maintenance Mode is active for the HANA system!**

**Method:** POST

**URL:** http://[config-portal]/api/[sid]/takeover

**Mandatory Header:** x-access-token=LuNz5qxDjaA3Pw1O4B2ZcI5XaFO5rW1M

**Parameters:**

config-portal	IP address where the ClusterLion configuration portal is reachable.
sid	SID of the HANA system

**Body:**

```
{  
  "status": 1  
}
```

*Success Code*

**Response code:** 200

**Example response:**

```
{  
  "takeover": true  
}
```

*Error*

**Response code:** 400

**Content:** No token provided

**Response code:** 401

**Content:** Unauthorized access

**Response code:** 404

**Content:** CL-Agent not reachable

**Response code:** 500

**Content:** ERROR

## 2.5 Trigger SWITCHBACK

**This can only be executed if the ClusterLion Maintenance Mode is active for the HANA system!**

**Method:** POST

**URL:** http://[config-portal]/api/[sid]/switchback

**Mandatory Header:** x-access-token=LuNz5qxDjaA3Pw104B2ZcI5XaFO5rW1M

**Parameters:**

config-portal	IP address where the ClusterLion configuration portal is reachable.
sid	SID of the HANA system

**Body:**

```
{  
  "status": 1  
}
```

*Success Code*

**Response code:** 200

**Example response:**

```
{  
  "switchback": true  
}
```

*Error*

**Response code:** 400

**Content:** No token provided

**Response code:** 401

**Content:** Unauthorized access

**Response code:** 404

**Content:** CL-Agent not reachable

**Response code:** 500

**Content:** ERROR



ProLion GmbH  
Maierhöfen 8/3  
2813 Lichtenegg  
Austria  
office@prolion.com

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[prolion.com](http://prolion.com)