

URL: <https://ec2-18-224-246-127.us-east-2.compute.amazonaws.com:8080/api/ENDPOINT>

## Add:

add\_device:

- **Parameters:**
  - (String) **device:** **d\_name**
- **ENDPOINT:**
  - add\_device?**device=d\_name**
- **Return Values:**
  - (Message string) 'Device added successfully.'
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Missing device name.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **d\_name** was not set
  - (Message string) 'Invalid device name.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **d\_name** contained invalid characters or exceeded 64 characters
  - (Message string) 'Device already exists in database.'
    - **Status:** **ERROR**
    - **Action:** list\_devices
    - **Cause:** A device with **d\_name** is already present in the database
  - (Message string) 'QUERY\_FAILED: \$message.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** SQL query failed

add\_manufacturer:

- **Parameters:**
  - (String) **manufacturer:** **m\_name**
- **ENDPOINT:**
  - add\_manufacturer?**manufacturer=m\_name**
- **Return Values:**
  - (Message string) 'Manufacturer added successfully.'
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Missing manufacturer name.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **m\_name** was not set
  - (Message string) 'Invalid device name.'
    - **Status:** **ERROR**

- **Action:** None
  - **Cause:** **m\_name** contained invalid characters or exceeded 64 characters
- (Message string) 'Manufacturer already exists in database.'
  - **Status:** **ERROR**
  - **Action:** list\_manufacturers
  - **Cause:** A manufacturer with **m\_name** is already present in the database
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

add\_equipment:

- **Parameters:**
  - (Int) **did:** **device\_id**
  - (Int) **mid:** **manufacturer\_id**
  - (String) **sn:** **serial\_number**
- **ENDPOINT:**
  - add\_equipment?**did=device\_id&mid=manufacturer\_id&sn=serial\_number**
- **Return Values:**
  - (Message string) 'Equipment added successfully.'
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Missing device id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **device\_id** was not set
  - (Message string) 'Missing manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was not set
  - (Message string) 'Missing serial number.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **serial\_number** was not set
  - (Message string) 'Invalid device id.'
    - **Status:** **ERROR**
    - **Action:** query\_device
    - **Cause:** **device\_id** was set but not an integer
  - (Message string) 'Invalid manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was set but not an integer
  - (Message string) 'Equipment already exists in database.'
    - **Status:** **ERROR**
    - **Action:** query\_serial

- **Cause:** Equipment with **serial\_number** is already present in the database
- (Message string) 'Invalid serial number.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **serial\_number** contained invalid characters or exceeded 64 characters
- (Message string) 'Inactive device.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** Cannot add equipment with an inactive device
- (Message string) 'Inactive manufacturer.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** Cannot add equipment with an inactive manufacturer
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

## List:

list\_devices:

- **Parameters:**
  - (Optional string) **include\_inactive:** **include\_inactive** ('yes')
- **ENDPOINT:**
  - list\_devices?**include\_inactive=include\_inactive**
- **Return Values:**
  - (JSON) Array [device\_id, device\_name, status]
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'No devices found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'QUERY\_FAILED: \$message.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** SQL query failed

list\_manufacturers:

- **Parameters:**
  - (Optional string) **include\_inactive:** **include\_inactive** ('yes')
- **ENDPOINT:**
  - list\_manufacturers?**include\_inactive=include\_inactive**

- **Return Values:**
  - (JSON) Array [manufacturer\_id, manufacturer\_name, status]
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'No manufacturers found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'QUERY\_FAILED: \$message.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** SQL query failed

## Modify:

modify\_device:

- **Parameters:**
  - (Int) **did:** **device\_id**
  - (String) **device:** **d\_name**
  - (String) **status:** **status**
- **ENDPOINT:**
  - modify\_device?did=**device\_id**&device=**d\_name**&status=**status**
- **Return Values:**
  - (Message string) 'Device modified successfully.'
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Missing device id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **device\_id** was not set
  - (Message string) 'Missing device name.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **d\_name** was not set
  - (Message string) 'Missing status.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **status** was not set
  - (Message string) Invalid device id.'

- **Status:** **ERROR**
  - **Action:** query\_device
  - **Cause:** **device\_id** was set but not an integer
- (Message string) 'Invalid device name.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **d\_name** contained invalid characters or exceeded 64 characters
- (Message string) 'Invalid status.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **status** contained invalid characters or exceeded 64 characters
- (Message string) 'Device already exists in database.'
  - **Status:** **ERROR**
  - **Action:** list\_devices
  - **Cause:** a device with **d\_name** is already present in the database
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

modify\_manufacturer:

- **Parameters:**
  - (Int) **mid:** **manufacturer\_id**
  - (String) **manufacturer:** **m\_name**
  - (String) **status:** **status**
- **ENDPOINT:**
  - modify\_device?mid=**manufacturer\_id**&manufacturer=**m\_name**&status=**status**
- **Return Values:**
  - (Message string) 'Manufacturer modified successfully.'
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Missing manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was not set
  - (Message string) 'Missing manufacturer name.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **m\_name** was not set
  - (Message string) 'Missing status.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **status** was not set
  - (Message string) 'Invalid manufacturer id.'
    - **Status:** **ERROR**

- **Action:** query\_manufacturers
  - **Cause:** **manufacturer\_id** was set but not an integer
- (Message string) 'Invalid manufacturer name.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **m\_name** contained invalid characters or exceeded 64 characters
- (Message string) 'Invalid status.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **status** contained invalid characters or exceeded 64 characters
- (Message string) 'Manufacturer already exists in database.'
  - **Status:** **ERROR**
  - **Action:** list\_manufacturers
  - **Cause:** a manufacturer with **m\_name** is already present in the database
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

modify\_equipment:

- **Parameters:**
  - (Int) **eid:** **equipment\_id**
  - (Int) **did:** **device\_id**
  - (Int) **mid:** **manufacturer\_id**
  - (String) **sn:** **serial\_number**
  - (String) **status:** **status**
- **ENDPOINT:**
  - modify\_device?**eid=equipment\_id&did=device\_id&mid=manufacturer\_id&sn=serial\_number&status=status**
- **Return Values:**
  - (Message string) Equipment modified successfully.
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Missing equipment id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **equipment\_id** was not set
  - (Message string) 'Missing device id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **device\_id** was not set
  - (Message string) 'Missing manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was not set

- (Message string) 'Missing serial number.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **serial\_number** was not set
- (Message string) 'Missing status.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **status** was not set
- (Message string) Invalid equipment id.'
  - **Status:** **ERROR**
  - **Action:** query\_id
  - **Cause:** **equipment\_id** was set but not an integer
- (Message string) Invalid device id.'
  - **Status:** **ERROR**
  - **Action:** query\_device
  - **Cause:** **device\_id** was set but not an integer
- (Message string) Invalid manufacturer id.'
  - **Status:** **ERROR**
  - **Action:** query\_manufacturer
  - **Cause:** **manufacturer\_id** was set but not an integer
- (Message string) 'Invalid serial number.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **serial\_number** contained invalid characters or exceeded 64 characters
- (Message string) 'Invalid status.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **status** contained invalid characters or exceeded 64 characters
- (Message string) Equipment already exists in database.'
  - **Status:** **ERROR**
  - **Action:** query\_serial
  - **Cause:** equipment with **serial\_number** is already present in the database
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

## Query:

query\_device:

- **Parameters:**

- (Int) **did:** **device\_id**
- **ENDPOINT:**
  - query\_device?**did=device\_id**
- **Return Values:**
  - (JSON) Single {device\_id, device\_name, status}
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Device not found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'Missing device id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **device\_id** was not set
  - (Message string) 'Invalid device id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **device\_id** was set but not an integer
  - (Message string) 'QUERY\_FAILED: \$message.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** SQL query failed

query\_manufacturer:

- **Parameters:**
  - (Int) **mid:** **manufacturer\_id**
- **ENDPOINT:**
  - query\_manufacturer?**mid=manufacturer\_id**
- **Return Values:**
  - (JSON) Single {manufacturer\_id, manufacturer\_name, status}
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Manufacturer not found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'Missing manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was not set
  - (Message string) 'Invalid manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was set but not an integer



- (Message string) 'QUERY\_FAILED: \$message.'
- **Status:** **ERROR**
- **Action:** None
- **Cause:** SQL query failed

query\_id:

- **Parameters:**
  - (Int) eid: **equipment\_id**
- **ENDPOINT:**
  - query\_id?eid=**equipment\_id**
- **Return Values:**
  - (JSON) Single {equipment\_id, device\_id, manufacturer\_id, serial\_number, status}
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Equipment not found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'Missing equipment id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **equipment\_id** was not set
  - (Message string) 'Invalid equipment id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **equipment\_id** was set but not an integer
  - (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

query\_serial:

- **Parameters:**
  - (Int) sn: **serial\_number**
- **ENDPOINT:**
  - query\_id?sn=**serial\_number**
- **Return Values:**
  - (JSON) Single {equipment\_id, device\_id, manufacturer\_id, serial\_number, status}
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'Equipment not found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'Missing serial number.'
    - **Status:** **ERROR**

- **Action:** None
  - **Cause:** **serial\_number** was not set
- (Message string) 'Invalid serial number.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** **serial\_number** contained invalid characters or exceeded 64 characters
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed

## Search:

search\_devices:

- **Parameters:**
  - (Optional int) **did:** **device\_id**
  - (Optional int) **mid:** **manufacturer\_id**
  - (Optional string) **sn:** **serial\_number**
  - (Optional string) **include\_inactive:** **include\_inactive**
- **ENDPOINT:**
  - add\_equipment?**did=device\_id&mid=manufacturer\_id&sn=serial\_number&include\_inactive=include\_inactive**
- **Return Values:**
  - (JSON) Array [equipment\_id, device\_id, manufacturer\_id, serial\_number, status]
    - **Status:** **SUCCESS**
    - **Action:** None
  - (Message string) 'No equipment found.'
    - **Status:** **SUCCESS**
    - **Action:** None
    - **Cause:** Query was successful but returned no results
  - (Message string) 'Invalid device id.'
    - **Status:** **ERROR**
    - **Action:** query\_device
    - **Cause:** **device\_id** was set but not an integer
  - (Message string) 'Invalid manufacturer id.'
    - **Status:** **ERROR**
    - **Action:** None
    - **Cause:** **manufacturer\_id** was set but not an integer
  - (Message string) 'Invalid serial number.'
    - **Status:** **ERROR**
    - **Action:** None

- **Cause:** **serial\_number** contained invalid characters or exceeded 64 characters
- (Message string) 'QUERY\_FAILED: \$message.'
  - **Status:** **ERROR**
  - **Action:** None
  - **Cause:** SQL query failed